CHAPTER SIX: RBOCs INTERNATIONAL INVESTMENT.

6.1 INTRODUCTION.

The widespread liberalisation of telecommunications markets provided the RBOCs with the opportunity to expand outside the United States. In doing so the RBOCs have entered an environment that they have no prior experience of. Yet all of the RBOCs welcomed the opportunity laid before them, not least because they would be able to expand free from regulatory interference. There are two sides, however, to international expansion. Whilst it may offer the RBOCs the possibility of expansion and financial success, it is equally as possible that the international expansion undertaken may be a costly and embarrassing failure for the company. In other words, international expansion offers both rewards as well penalties.

Notwithstanding the potential for failure this chapter shows that all of the RBOCs have expanded internationally. In doing so they have actively invested in a wide array of businesses, not only in terms of the location of these investments but also in terms of the lines-of-business as well. Investments have been made as far apart as Thailand and Lithuania and in lines-of-business as diverse as international gateway provision, financial services and undersea cables. Over the course of the international expansion some of the RBOCs have faired better than others have done. Geographically this difference has meant that some of the RBOCs like Pacific Telesis have experienced de-internationalisation, whilst operationally several of the RBOCs have exited certain lines-of-business because, for example, they did not possess the necessary skills and competencies. Financially, the success or failure of the various international forays is hard to categorically determine. Whilst it is clear that one or two of the RBOCs, in particular Ameritech and SBC, have enjoyed financial success internationally this has been largely due to appreciating stock markets and the repeated under-valuating of privatisations. Bell Atlantic has been fortunate enough to invested in a sufficiently wide range of international investments that the financial successes have offset the failures.

At one time of another all of the RBOCs have suffered a setback in their international expansion plans. The 'ups and down' evident demonstrate that presence of risk and uncertainty in the international telecommunications industry. The mitigation of the impact of risk and uncertainty will lead to success, whilst conversely an unwillingness or inability to accommodate these in the course of international investment activity will lead to failure. This and the next two chapters examine the international expansion of the RBOCs since 1984, and explicitly draw attention to how the presence of risk and uncertainty within the international environment has influenced RBOCs strategies. This chapter adopts a longitudinal case study methodology to ascertain how the RBOCs have faired in the uncertain environment in which they operate. Such an approach is advantageous as it focuses the analysis at the RBOCs level whilst enabling individual investments to be commented on in depth by way of illustration. The approach is also dynamic in nature as the case studies chronicle the changes in strategies between 1984 and 1998.

The individual accounts of RBOCs international investment activity are presented in the same order as the previous chapter. That is, BellSouth then US West, Nynex, Bell Atlantic, Ameritech, SBC Communications and finally Pacific Telesis. The final section presents a summary of the similarities and differences evident in the international forays of the RBOCs.

6.2 BellSouth Corporation.

From as early as 1985 BellSouth has had an international dimension to its post-divestiture strategy. In June 1985 the RBOCs formed BellSouth International as a wholly owned subsidiary of BellSouth Enterprises, the holding company charged with managing the group's unregulated subsidiaries. More recently, in the 1996 Annual Report, BellSouth has stated that international expansion is one of the its three core strategies:

> *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.[1]

This section is organised into three sub-sections. The first of these recounts the geographical scope and scale of BellSouth's international operations, whilst the second examines the operational aspects of such investments. The third sub-section recounts the financial dimension of BellSouth's international investment activity. Conclusions are then drawn.

6.2.1 Geographical criteria.

There are two ways through which the geographical character of BellSouth's international strategy can be evaluated. The first of these is the absolute number of countries that the RBOCs operates in, whilst the second is the determination whether any of these investments are clustered in anyway.

6.2.1.1 Number of countries.

From Table 6.1 (over) the initial impression gained is that BellSouth operates in a wide range of countries across four different continents. Additionally, the impression is also gained of a rapid increase in the number of countries where BellSouth International operates in one shape or another.

Once the initial investment foray was made the company rapidly increased the number of countries in which it operated. This suggests that the company saw internationalisation as both a priority and that the risks inherent in such a vigorous effort were within acceptable limits. In the 1990s the number of different countries in which BellSouth International has operations has stabilised at around fifteen.

Hence, if internationalisation is to be judged in terms of the number of countries that BellSouth International operates within then it has been a success. Not only has the number of countries

[1] BellSouth, 1996c, pg26f.

increased but the company has also been able to operate overseas in the same location for extended periods. The latter point indicates that the RBOCs have been able to overcome to some extent the difficulties encountered when operating in a foreign location. Such difficulties arise due to the presence of psychic distance between the host country and the inward investor, in this case BellSouth. As already noted psychic distance is defined as "factors preventing or disturbing the flow of information between potential or actual suppliers and customers."[2]

Table 6.1: BellSouth's geographical expansion

Year	Expansion details
1985	Opens Hong Kong office in October.
1986	Claims operations in 12 overseas locations.
1987	International ventures in France, Italy, Guatemala, India and Australia. Chinese agreement signed
1988	Operations in Argentina, Australia, China, France, India, Italy, Thailand and UK. Bonn office opened.
1990	NZ.
1991	Operations in Denmark, UK, Australia, NZ, Mexico, Argentina, Chile, Uruguay, Venezuela, Belgium, Spain, Hong Kong, Germany, China, France and India.[1]
1993	Singapore, Belgium and Germany
1995	Business development offices in Brussels and Beijing. Operations in Argentina, Australia, Belgium, Chile, China, Denmark, France, Germany, India, Israel, Netherlands, NZ, Singapore, UK, Uruguay and Venezuela.
1996	Panama
1997	Brazil, Peru
1998	

Note: 1. All are not ventures, some are offices. *Source:* various annual reports, BellSouth; Telecoms Publishing Group, 1996; Global Telecoms Business 1994.

6.2.1.2 Geographical clustering.

Drawing on Table 6.1 (above) it is possible to group the various international investments of BellSouth into three geographical clusters. Before detailing and commenting on these clusters it is necessary to briefly state what is meant by 'geographical cluster' in this chapter. The concept of geographical clustering of international investments is derived from a common definition of a region. Regions are delineated on the basis of maximum heterogeneity between regions and maximum homogeneity within. Adopting such a definition enables regions such as Central and Eastern Europe (CEE), Latin America and the European Union (EU) to be identified. By mapping out the international investments of the various RBOCs, in this case BellSouth, it is possible to

[2] Nordstrom & Vahlne, 1992 cited in O'Grady & Lane, 1996, pg311.

ascertain whether or not the investments overlap with any discernible region. In this way it is possible to identify if the RBOCs in question has geographically clustered its investment activity.

Using the above definition, and the information contained within Table 6.1 (above) it is possible to state that BellSouth has clustered its international investment activity in three regions: Asia/Pacific Rim, Latin America and Europe. (See Tables 6.2, 6.3 and 6.4 respectively below). From examining the international investments that can be identified several observations can be offered.

Table 6.2: Asia/Pacific Rim investment cluster

Country	Investment	Details[1]
Australia	BellSouth Mobile Data Australia Pty Ltd[2,5] Optus Communications Optus Vision Link Telecoms Instapage Pty Ltd Page Alert Pty Ltd	100% Mobile data. 1987 24.5% PTO. 1991 Cable-TV. 46.5% Cellular. 1995. 100%. Paging. 1987 100% Paging. 1995 100% Paging. 1995.
Singapore	ST Mobile Data[2]	25% Mobile data. 1995
NZ	BellSouth New Zealand	100% Cellular. 1993
China	BellSouth Shanghai Centre Ltd Beijing Ji Tong BellSouth China Unicom	Service provision. 1987 Infrastructure development. 1994 Long and wireless networks. 1995
India	TCIL BellSouth Ltd Skycell	40% Software development. 1988 24.5% Cellular. 1995

Notes: 1. Operational rather than license award date. 2. Held through BellSouth Mobile Data Inc. 3. Renamed BellSouth Communicaciones after 100% was acquired by BellSouth in 1991. 4. Trades under the Movicom brand name. 5. *Sources:* Global Telecoms Business, 1994a; BellSouth, 1996b; BellSouth, 1996g.

Table 6.3: Latin American investment cluster

Country	Investment	Details
Uruguay	Abitar[4]	35% Cellular. 1991
Chile	BellSouth Chile SA Cidrom SA[3]	100% Cellular 1989 100% Cellular. 1989
Argentina	CRM SA[4]	42.5% Cellular. 1989
Panama	BSC de Panama	41.5% Cellular. 1996
Peru	Tele2000	57% Cellular. 1990
Brazil	BCP BSE	Cellular 1997 Cellular 1997
Nicaragua	Niacel	49% Cellular. 1997
Ecuador	OTECEL	61% Cellular. 1997
Venezuela	Telcel Celular CA	53.3% Cellular. 1991

Notes: 1. Operational rather than license award date. 2. Held through BellSouth Mobile Data Inc. 3. Renamed BellSouth Communicaciones after 100% was acquired by BellSouth in 1991. 4. Trades under the Movicom brand name. 5. *Sources:* Global Telecoms Business, 1994a; BellSouth, 1996b; BellSouth, 1996g.

Table 6.4: European investment cluster

Country	Investment	Details
Belgium	RAM Mobile Data Belgium SCS[2]	80% Mobile data. 1985
Denmark	Dansk MobilTelefon I/S	29% Cellular. 1992
France	Frances Telecom Mobiles Data	12.5% Mobile data. 1993
Germany	E-Plus Gesellschaft fur Datenfunk Gmbh	21.4% Cellular. 1994 6% Mobile data. 1995
Netherlands	RAM Mobile Data CV[2]	66% Mobile data. 1993
Israel	Cellrom Israel Ltd	30.8% Cellular 1994
UK	RAM Mobile Data Ltd[2] AirCall Communications	72.5% Mobile data. 1992 Cellular. 1989

Notes: 1. Operational rather than license award date. 2. Held through BellSouth Mobile Data Inc.
Sources: Global Telecoms Business, 1994a; BellSouth, 1996b; BellSouth, 1996g.

Firstly, overall the investments made by BellSouth International over the years are approximately equally divided between the three clusters. It is, however, noticeable that this has not always been the case, for in recent years the emphasis has progressively shifted away from Asia/Pacific Rim initially towards Europe and then Latin America. Interestingly, of the fourteen Asia/Pacific Rim investments half of these were made prior to 1992. In contrast, nearly all of the Latin American and European investments were made during or after 1991.

Furthermore, the speed with which the company has increased its international commitments has quickened over the years. Between 1985 and 1990 the company amassed 10 international investments, but by the end of 1993 this had nearly doubled to 19. By 1995 Bell Atlantic had 26 international investments, a figure which had increased to 31 by the end of 1998.

Investment clustering can be found both within (intra) countries as well as between (inter) countries. Intra-country clusters represent a deepening of the commitment displayed by BellSouth International to the given location and would appear to suggest that the initial investment has acted as a market intelligence / familiarisation mechanism. Once the initial investment has been made the company is able to collect market specific information - previously unavailable - thereby enabling the firm to assess the commitment that it has made and so ascertain whether subsequent investments are warranted. Intra-county clusters are to be found in Australia, China and Chile.

Inter-country commitment clustering can be explained by the desire of the company to expand the geographical scope of its existing operations. In doing so the company gains economies of scale and scope as well as the ability to offer "roaming" to its customers.[3] Within both the Latin American and European clusters efforts have been made by BellSouth International to integrate together its investments so that roaming can be offered. The extension of networks by roaming enables BellSouth International to capture rent from its customers that would otherwise be foregone.

It can therefore be observed that, contrary to the assertion by Global Telecoms Business (1994a), that "[g]eographic focus is very loosely defined...,"[4] a discernible pattern can be identified. It is increasingly the case that BellSouth International investments are concentrated in two clusters where subsequent commitments are being made to expand the geographical service scope offered. These additional commitments to the Latin American and European clusters are creating proto pan-regional networks. If these commitments are subsequently integrated with one another, as frequently alluded to by the company, the de jure pan-regional networks that result will ensure that BellSouth International is advantageously placed to benefit from the cross border trade generated by closer economic ties within Latin America and Europe.

6.2.2 The mechanisms of international expansion.

According to Global Telecoms Business (1994a) the "game plan" of BellSouth regarding its international investments is one of strategic absence. This is misleading as it ignores three themes that can be identified within the numerous international investments that BellSouth has made since 1985. These three themes also provide another way through which the investments in the three aforementioned geographical clusters can be understood.

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[3] Roaming is the facility by which customers of one particular network can use their cellular phones in the territory of another compatible network. Due to this the geographical scope of usage is extended.

[4] Global Telecoms Business, 1994a, pg17.

6.2.2.1 Cellular investments.

The first of the three identifiable themes is that BellSouth has favoured cellular investments over other lines-of-business. A substantial proportion of the capital investment overseas has been in cellular investments. In terms of absolute numbers cellular investments are the single largest group among the thirty-one investments that BellSouth has made. As shown in Table 6.5 (over) cellular investments account for sixteen investments in all. Furthermore, nearly half of the cellular investments are located within the Latin America cluster, with the remainder spread more or less between the other two geographical clusters.

Although recent investment decisions have broadened the operational scope of BellSouth's international portfolio to include mobile data, it remains heavily skewed in favour of cellular over other lines-of-business.

Table 6.5: International investment by line-of-business

Year	Line-of-business					
	Cellular	Cable-TV	Full service providers	Paging	Data	Other
To 1990	4	-	-	3	1	2
1991 – 1995	7	1	1	-	5	2
1995 – 1998	5	-	-	-	-	-
Total	16	1	1	3	6	4

Source: various annual reports, BellSouth; Wasden, 1993.

6.2.2.2 Start-ups.

The second of the identifiable themes is the preference of BellSouth International for start-ups over other market entry routes. In contrast to many other internationalising telecommunications operators BellSouth International has ignored privatisation issues that it describes as costly.[5] Instead BellSouth International has favoured start-up investments as the mechanism with which market entry can be effected. Allied with this has been the company's careful and purposeful choice and use of partners. Coe (President, BellSouth International) says that:

[5] BellSouth, 1996b.

> [i]f it's important to form good partnerships domestically, it's absolutely critical to form them internationally. We believe BellSouth brings our partnerships as much expertise as anyone in mobile communications and network infrastructure. So we want to team up with partners who have exceptional complementary skills and local knowledge.[6]

Other comments, in a similar vein, can be found within the literature published by BellSouth. Collectively these comments emphasis the need for the partners to supply local market knowledge to overcome the deficiency that BellSouth would naturally have in this area. By acquiring such information the company is able to assess the market conditions, especially its long term commercial viability, with which it is faced. The more information at the disposal of the inward investor the better positioned it is to judge the risks that arise from operating in a foreign market.

However, the frequent use of partners and start-ups by BellSouth International does not mean that acquisitions have not been utilised as a means of market entry. Acquisitions have been relatively few and far between: Aussat, a series of small Australian paging companies, Cidrom and Tele 2000. Two of these merit further comment. The purchase of Aussat by Optus in 1991 enabled BellSouth to gain valuable experience of establishing a second carrier against a strongly entrenched incumbent. BellSouth International also came into contact with Cable & Wireless, an experienced international operator, from whom it could learn.

Likewise the purchase of Cidrom enabled the company from 1994 onwards to gain experience, through a wholly owned subsidiary, of running a long distance operator. Experience was also gained of integrating this service with others provided in an holistic fashion. In doing so:

> BellSouth is gaining valuable experience that is positioning us for offering full-scale long distance service in the U.S. in the future.[7]

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[6] Global Finance, 1994.

[7] BellSouth, 1996b.

6.2.2.3 Commitment deepening.

The third and final theme that can be identified is that BellSouth International has on occasion deepened its commitment to certain markets. Probably the most striking example of market commitment deepening is the successive investments by BellSouth International in Australia from 1987 onwards. (See Table 6.6 below).

Table 6.6: Australian investments

Year	Investment	Details
1987	Link Telecommunications	Acquisition - paging and messaging services.
1987	BellSouth Mobile Data Australia Pty Ltd.[1]	Mobile data.
1991	Optus Communications.	Acquisition of Aussat for A\$800m[2] Second general carrier license granted.
1992	cellular services	Start-up. Mobile communications.
1995	Optus Vision	Start-up. Cable network.

Note: 1. Sold during 1995. 2. Aussat was the national satellite company of Australia. A\$800m equates to \$606m. *Source:* BellSouth, 1996b; Global Finance, 1994; Meredith, 1995.

It is openly acknowledged that the initial Australian investment made by the company, in Link Telecommunications, acted as a market intelligence gathering mechanism. The presence gained in the market enabled BellSouth to acquire information that otherwise would not be available to an outside investor. This in turn generated a more acute understanding of the market in which BellSouth was operating. Clendenin (Chairmen, BellSouth) stated that:

> [o]ur presence in Australia is a prime example of how we've *learned from experience.* We anticipated the government would open the market there, which was one of the drivers behind our decision in 1987 to acquire Link Communications, an Australian paging and messaging company. That enables us to learn a lot about the market, the culture, and the players-information that proved to be very valuable while we were planning for the tender for Optus to be the second general carrier in Australia.[8] *(Emphasis added)*

Thus, subsequent investments have built on the experience-understanding gained from operating Link Communications. Similarly the initial Optus Communications investment, which

[8] Global Finance, 1994a.

effectively made the company an alternative public telephone operator, would provide the company with wide ranging experience of the marketplace. In turn this would allow BellSouth to determine whether subsequent investment in the Australian marketplace was warranted. That Optus Vision was launched in 1995 indicates that in the eyes of BellSouth the Australian market was worthy of subsequent investment. The initial and subsequent investments made by BellSouth and its partners through Optus Communications in the Australian market have created a 'one-stop shop' aimed at producing a fully rounded competitor to the incumbent Telstra.

It has been shown that BellSouth's international investments are not as random as some have suggested, and strategic considerations are evident. In particular the company has favoured those segments of the industry where it can demonstrate a competence that distinguishes itself from the indigenous operators. Frequently this has been in cellular activities where the company has been able to deploy modern technologies to relieve pent up demand created by poor PTOs performance. Initial investments within markets have also been employed as a market intelligence gathering and familarisation mechanism enabling the viability of subsequent investments to be assessed.

6.2.3 Financial evaluation.

Regardless of industry or market a company's long term survival is dependent on its ability to generate sufficient cashflow as well as profits to fund competitive advantage enhancing investments in addition to providing shareholders with an attractive return. With this in mind it is possible to evaluate the international commitments amassed by BellSouth International in respect of the contribution that they make to the company's overall profitability.

At a corporate level, excluding extraordinary charges and accounting changes, BellSouth has proved to be capable of earning significant sums even as competitive and regulatory pressures have been mounting. Between 1993 and 1998 net income for the corporation as a whole more than doubled, rising from $1304m in 1993 to $3527m in 1998. More problematic is the determination of the contribution made by the company's international investments to the aforementioned global corporate figures. In the company's most recent filings with the SEC no indication is given as to the proportion of either revenues or profits that are generated by the company's overseas operations. Instead these figures are broken down by the generating segment of the industry, for instance, local service or wireless, rather than by geographical origin. On this basis it could be assumed that no analysis is possible which would categorically determine the contribution of overseas commitments to the group's profitability and revenue levels. This is not the case: an examination is possible but it can only occur by utilising older and incomplete data sources which will detract from the ability to both draw conclusions as well as offer generalisations.

Details are available for selected parts only of the company's extensive international cellular portfolio. From the available data (Table 6.7 below) it is noticeable that revenues have rapidly increased and where profits or cash flow have been indicated these have also improved.

Table 6.7: Selected international operating details, 1992-1998

	Year						
	1992	1993	1994	1995	1996	1997	1998
Total international revenue $m	116	228	300	500	700	1300	2100
International net income $m					(190)	(187)	(62)
Latin American revenues $m	113	194	275	359			
Latin American cashflow $m			125	153	175	223	468
Net earnings from Latin American operations $m	(5)	31	56	49			
All cellular subscribers (equity basis)	77,633	192,181	361,275	654,876	900,000	1,800,000	3,400,000

Note: 1. The presentation of selected income statement and balance sheet information is based on BellSouth's ownership percentage for all international cellular subsidiaries and affiliates, whether or not consolidated for financial statement presentation purposes. 2. Includes population/customers served based on BellSouth's ownership percentage in all markets served. *Source:* BellSouth, 1996k; BellSouth, 1998g; BellSouth, 1998h.

BellSouth International's cellular investments within Latin America have been profitable investments and as such have contributed to the company's overall profitability. However, a caveat is required: earnings from the cellular properties in general, and Latin American in particular, are inconsistent. This arises not due to operational difficulties but because of the increased network build-out that the company has embarked on to take advantage of the pent up demand as well as the instability associated with the international currency markets. To a certain degree currency fluctuations affect all of BellSouth's international investments, but these will be less pronounced for countries with 'hard' currencies than those countries with 'soft' currencies. Painewebber (1996) notes how a $11m Venezuelan devaluation significantly impacted on the overall profitability of the Latin American cellular investments. Both of these impinge on the company's ability to point to the short-term financial gains accruing to the company from its investments, and it is increasingly this type of gain on which stock-market analysts are valuing the company.

According to Painewebber (1996) outside of Latin America investments remain earnings dilutive. When continuing their examination of the EPS (earnings per share) potential of BSI's international portfolio they state that:

> ...BellSouth's other international ventures remain in EPS-dilutive startup mode. 21%-owned E-Plus ... launched in June: we estimate E-Plus covered roughly 70% of the German population at the end of 1995 and that it will reach break-even net income by mid-1997. Chile long distance and 25%-owned Optus (Australia) should reach break-even net income in 1996, although break-even for Optus may be delayed if cable television network build-out is accelerated at Optus Vision (which plans to pass three million homes by 1999). Barring any further currency or economic difficulties, BellSouth's international portfolio could reach near EPS in 1996, as strong growth in EPS-positive Latin American cellular offsets start-up losses elsewhere.[9]

BellSouth International has shown a willingness to endure earnings dilution in the initial period after enterprise start-up. Bear, Stearns & Co (1994) intimate that earnings dilution was acceptable to BellSouth due to their belief that managerial expertise could overcome any short-term problems encountered. From Noda & Bower's (1996) analysis of RBOCs cellular strategies it can be suggested that earnings enhancement from start-up onwards was not the prime motivating force for BellSouth. Noda & Bower (1996) write:

> ... BMI, in contrast, initially agreed with its corporate office on a much less stringent business plan, which was 'being cash positive and net income positive both in five years.'

[9] Painwebber, 1996.

> The corporate office was not as insistent for early profits .... In BellSouth's strategic context, which emphasised 'telecommunications', cellular telephony service was viewed as a small, yet complimentary business to the core local exchange business, and long term growth was considered as much as short-term profitability.[10]

If so it would be expected that the majority of BellSouth International's existing international investments would be net income positive by the end of the century at the latest. That the international portfolio as a whole will be net income positive sometime in 1997 is due to the faster than expected growth within Latin America as well as the contribution of the German and Australian investments. As a consequence it is possible to state that based on the available evidence the international commitments made have been a financial success. Though it should be remembered that the total contribution to BellSouth's global profit levels made by the non-regulated businesses, international included, will remain relatively small when compared to the company's BOCs. It will remain the case that these will remain the principal cash generators within the company and will fund the other commitments entered into by BellSouth.

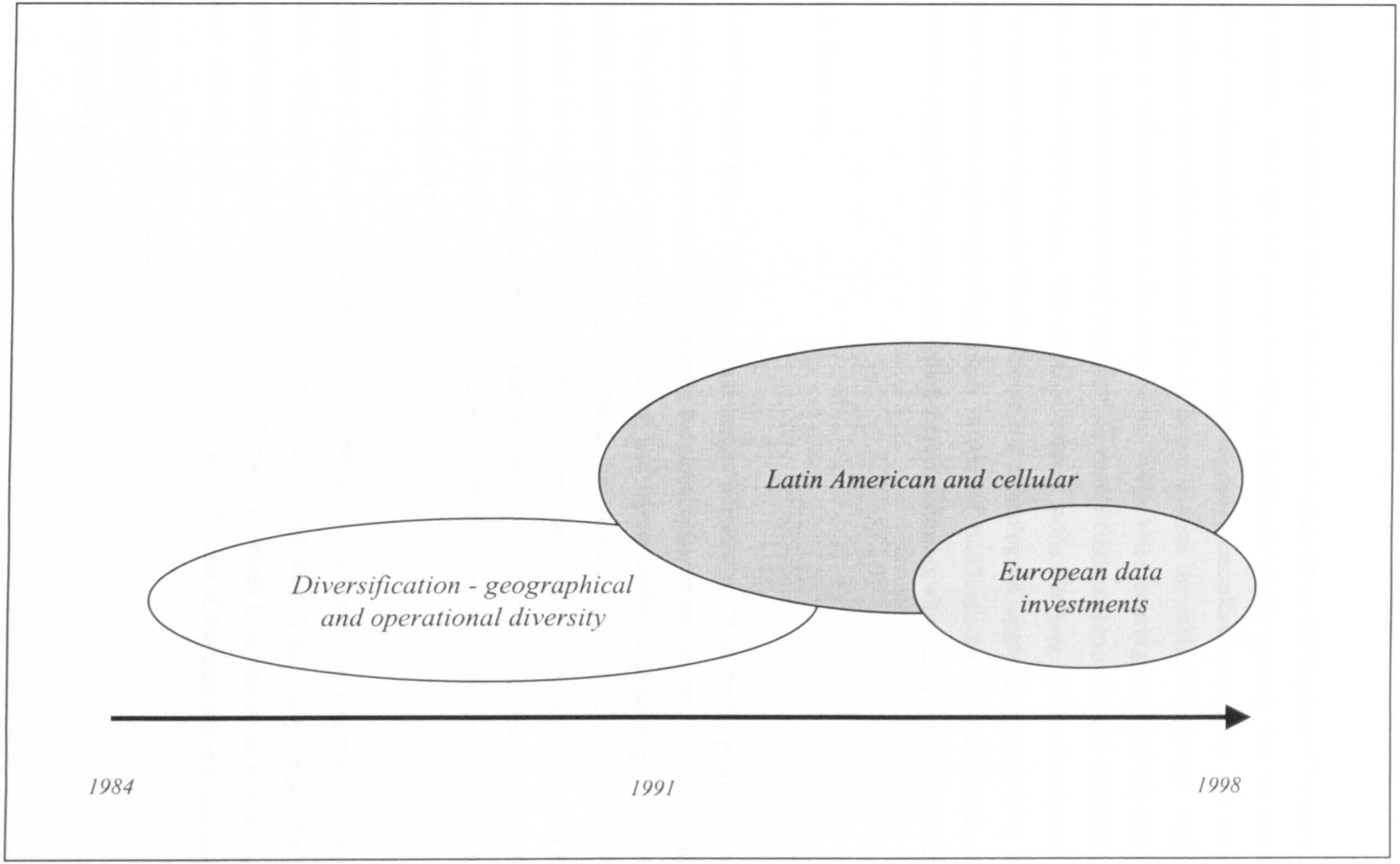
6.2.4 Conclusion.

What conclusions can be drawn regarding the international investment activity of BellSouth? It is clear that geography has played a significant role in shaping the international investment activity of the RBOCs. Figure 6.1 (over) offers a graphical interpretation of the various international strategies undertaken by BellSouth since divestiture. From this figure it is clear that the geographical scope of BellSouth has not remained constant. After geographically diversifying BellSouth has since the start of the 1990s considerably narrowed its geographical scope, focusing on Europe and Latin America.

Geographical economies of scope have encouraged BellSouth to construct regional networks of investments that are, for all intense and purpose, proto-regional or continental networks capable of exploiting the integration of national markets that is underway in both Latin America and Europe. Having said this the concentration of BellSouth on only two regions leaves the RBOCs vulnerable to economic downturns in one or both of these markets. As BellSouth increasingly

[10] Noda & Bower, 1996, pg174.

Figure 6.1:   International strategies of BellSouth



invests in Latin America the currency instability associated with this continent will continue to have an impact on the financial rewards generated by the investments.

Operationally BellSouth has focused its investments largely on an existing line-of-business, that is, on cellular. This has led some to critique BellSouth on the grounds that the RBOCs is peripheral to technological developments within the telecommunications industry. For instance, BellSouth has been widely criticised for its failure to enter the cable-TV industry. This may have been a valid criticism at the start of the 1990s when convergence was the industry's buzzword, but the concentration of BellSouth on mobile communications would seem apt given the role of this industry today. The recent investment in the European mobile data market also help to counter any suggestion that BellSouth is a technological laggard as this market is at the forefront of wireless technological advances. Moreover, BellSouth did invest in both the cable-TV and PTOs markets in Australia and exited these investments when they proved unsatisfactory.

6.3 US WEST INC.

In the 1987 Annual Report US West announced its intention to "strategically position itself in key markets to become a major participant in the global information industry."[11] To this end US West has engaged in geographical diverse and operationally wide-ranging international investment activity that it described in 1994 as "worth billions."[12] This assessment of the international investment activity of US West has not been uncritically accepted. Handford (1994a) for one cites investment analysts that describe this valuation as unrealistic, whilst Global Telecoms Business (1994b) argued that the wide ranging investment activity was likely to be problematic in the future.

The objective of this section is to shed greater light onto the international investment activity of US West. This will done through a structured analysis that initially addresses the geographical aspects of the international expansion of US West, and which then moves on to operational matters. Attention is drawn to the experimental role of some of the international investments

[11] US West 1987.

[12] Handford, 1994a, pg6.

that have been made. The final section draws conclusions as to the nature of US West's international expansion.

6.3.1 The geography of international investments.

It is self evident that geography is at the heart of internationalisation. There are, however, two ways in which the role of geography in international investment activity can be interpreted. The first of these is derived from a literal interpretation of geography and the overseas expansion of US West, that is, in how many countries does the RBOCs operate. The second interpretation recognises that there are advantages to be gained from investing in neighbouring countries. Investments in contiguous cellular systems for instance, allow for economies of scale in the construction of networks, marketing and the possibility of increased revenue from roaming. Both of these interpretations of the role of geography in US West's international investment activity are considered below.

6.3.1.1 The number of countries.

Table 6.8 (over) details those countries where US West has invested at some point since it began to expand overseas in 1989. From this table it can be concluded that US West has been successful in entering foreign markets. The overall trend has been for US West to operate in an increasing number of markets. However, if the location of divested international investments is incorporated into the analysis the picture changes somewhat. Not only does the upward trend show signs of fluctuation, but US West has ceased to operate in some markets altogether. In other words, US West also displays signs of de-internationalisation due to exiting from various markets.

For instance, in 1991 US West bought 46% of Norkabel, a Norwegian cable company. This expanded the geographical scope of the RBOCs into another country. In 1996 US West shed this investment as part of a strategic reorganisation of its international cable portfolio. There is, of course, another dimension to de-internationalisation, that is, the exit from one venture whilst remaining active in the country through another venture. For example, US West has made multiple investments in both Hungary and the UK and has divested some but not all of these investments in the subsequent years.

Table 6.8: The geographical expansion of US West

Year	Countries added	Cumulative number of countries
1989	Hong Kong, UK	2
1990		2
1991	Norway, Russia, Hungary, France, Slovakia, Czech, Sweden	9
1992	Lithuania, Poland	11
1993	Japan	12
1994	Brazil, Australia	14
1995	Holland, Spain, Indonesia, Malaysia	16
1996	Argentina, India, Belgium, Singapore	20
1997		20
1998		20

Source: various annual reports, US West; Wasden, 1993.

6.3.1.2 The clustering of investments.

It is possible to reinterpret the information presented above so that the concept of the geographic clustering of investments can be investigated. Reorganising the information reveals that US West focused its investment attention in three clusters: Asia, west Europe and east Europe. The investments that comprise these clusters are recounted in Tables 6.9, 6.10 and 6.11 (below) respectively.

As each of the three clusters are approximately the same size it cannot be said that US West has favoured one over the other two. Instead it can be argued that the more recent development by US West of the Asian cluster is indicative of a change in strategy by the RBOCs. The chronological overseas investment activity of US West is closely related to the development of the three clusters. Initially the international investment activity of US West was focused towards Eastern Europe, and between 1991 and 1993 US West amassed ten investments in this region. At the same time US West was also investing in Western Europe, but at a slower rate as it took from 1991 to 1996 to accumulate the 13 investments that form the cluster. In contrast the Asian cluster is comparatively younger as the main period of investment only began in 1993. US West has not expanded further into Asia since it made investments in Australia, India and Singapore in 1996.

Table 6.9: The Asian investment cluster

Country	Investment	Details
Australia	Optus Vision Pty Ltd	46.5% Cable-TV 1996
Hong Kong	Hong Kong Cable Communications	25%. Cable-TV 1989
India	BPL/US West Cellular	49% Cellular 1996
Indonesia	PT ARIAWEST	35% Facilities management 1995
	Binariang	20% Wireline 1995
	Binariang Maxis Mobile	20% Cellular 1995
Japan	TWE Japan	12.75%. Cable-TV 1993
	Tu-Ka	2% Cellular. 1994
	Chofu Cable	19.14% Cable-TV 1995
	TITUS	25% Cable-TV 1995
Singapore	Singapore Cablevision	25% Cable-TV 1996

Source: various annual reports, US West; Wasden, 1993.

Table 6.10: The east European investment cluster

Country	Investment	Details
Czech Republic	EuroTel Praha	24.5% Cellular 1991
Hungary	Kablecom	21.70% Cable-TV 1991
Hungary	Westel 450	49% Cellular 1991
Hungary	Westel 900	46.6% Cellular 1993
Lithuania	LINTEL	49% International gateway 1992
Poland	US West Polska	100% Directory publishing 1992
Poland	Polska Telefonia Cyfrowa	22.5% Cellular 1996
Russia	Delta Telecom	28.3% Cellular 1991
Russia	Moscow Cellular Communications	14.6% Cellular 1991
Russia	RTDC	66.5% Holding company 1993
Slovak Republic	EuroTel Bratislava	24.5% Cellular 1991

Source: various annual reports, US West; Wasden, 1993.

Table 6.11: The west European investment cluster

Country	Investment	Details
Belgium	Telenet	28% Cable-TV 1996
France	Lyonnaise Communications	6.7% Cable-TV 1991
France	Bouygues PCN	5% Cellular 1994
Holland	A2000	50% Cable-TV 1995
Norway	Norkabel	46% Cable-TV 1991
Spain	Cable i Televisio de Catalunya (CTC)	20% Cable-TV 1995
Spain	Cable y Television de Madrid (CTM)	Cable-TV 1996
UK	Unitel Limited	Cellular 1989
UK	TeleWest	26.75% Cable-TV 1991
UK	TeleWest Europe Group	50% Holding company 1992
UK	One 2 One	50% Cellular 1993
UK	Thomson Directories	100% Directory publishing 1994
UK	Flextech	6.7% Content 1995

Source: various annual reports, US West; Wasden, 1993

6.3.2 Operational characteristics of international investment activity.

Examining the operational dimension of US West international investment activity it can be readily observed that its investments fall into one of three categories. These are:

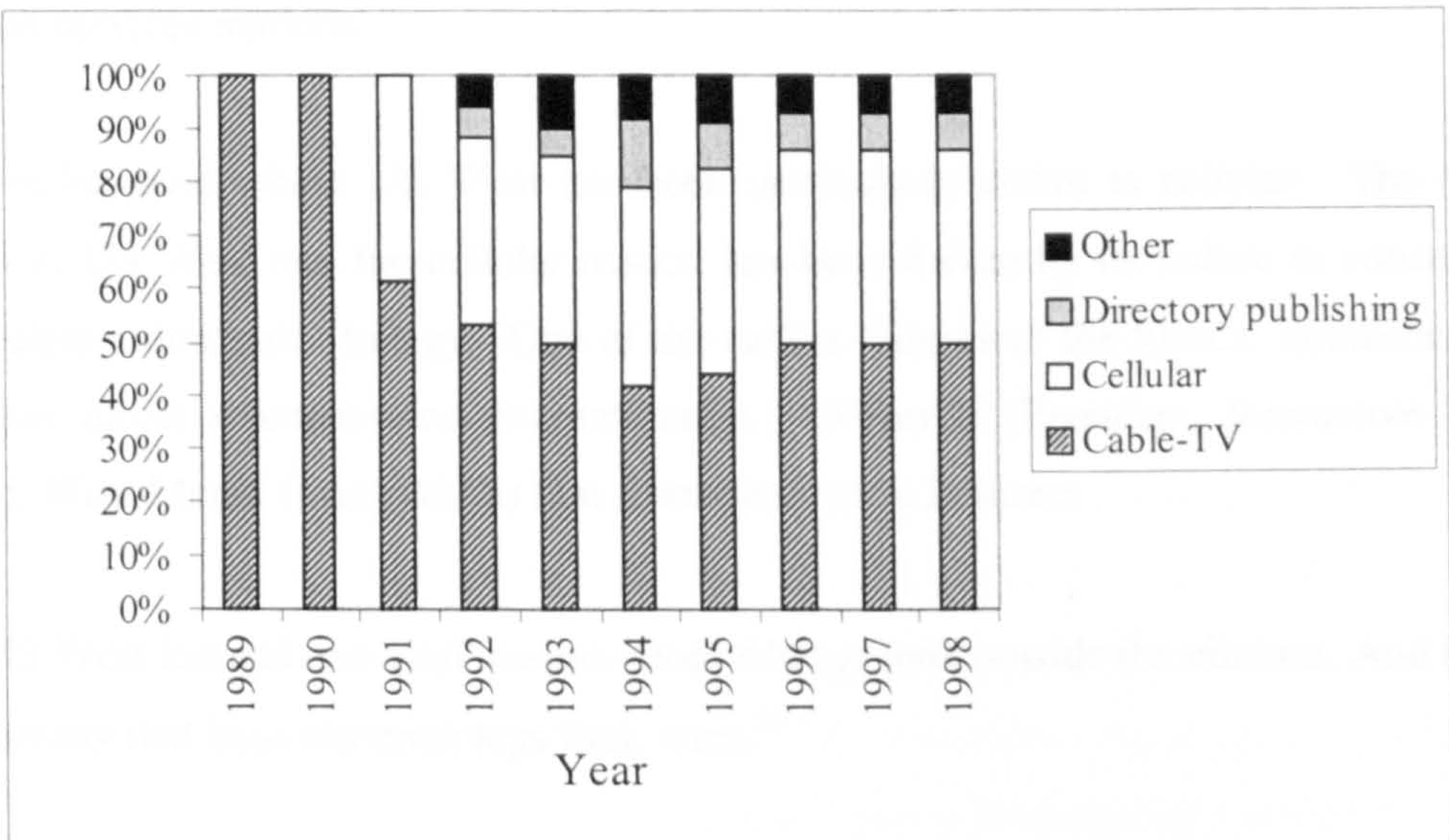
1. *Multiple revenue source networks*. That is, voice telephony, video data and multi-media services delivered over high capacity cable TV networks;
2. *Mobile markets*. Cellular communications that offer voice and data services to subscribers.
3. *Information services* such as directory publishing.

This section will provide an overview of the balance between these three forms of investment in the international portfolio of US West. Moreover, the section will pay particular attention to the cable-TV investments that US West has made and seek to link these into the wider strategic imperatives of the RBOCs.

6.3.2.1 A changing operational focus to the international investments.

The operational focus of US West has not remained constant. Figure 6.2 (below) shows that after initially favouring cable-TV the sectors in which US West invested overseas broadened to include cellular and directory publishing. In addition the RBOCs also made investments in companies that provided international gateway, content and holding company services. However, the balance within the international portfolio of US West has changed as the RBOCs exited certain markets and entered new ones. The Lithuanian international gateway business, LINTEL, was sold and it is speculated that the telecommunications holding companies were liquidated.

Figure 6.2: The changing operational focus of US West



Source: various annual reports, US West; Wasden, 1993.

Perhaps of more interest is the role of directory publishing within the international investment portfolio of US West. Starting in 1992 US West made three investments in companies that provided directory publishing services in the UK, Brazil and Poland. These companies were Thomson Directories, Listel and US West Polska respectively. US West limited its international directory publishing operations to just these three markets because they provided the best growth potential:

> [b]y entering selected international markets with growth potential we'll build the printed directory business while creating a platform to introduce interactive information services.[13]

Thus, these investments would not only provide traditional directory publishing services, such as yellow and white pages but would also provide electronic services as well. However, in 1997 US West sold both US West Polska and Thomson Directories. Ames (CEO, US West International) provides one rationale for the disposals when stating that these companies were be sold because they are no longer compatible with the core strategy of US West to focus on the

[13] US West, 1994c, pg21.

cable-TV and cellular markets.[14] An alternative rationale is that both of these companies had failed to perform as expected, and could not be used as a platform for expansion into new information services markets.

One line-of-business where US West has been particularly active is cellular. The overseas expansion of US West into the cellular market has been driven by its failure to conceive, and then articulate a domestic strategy. One of the earlier failures of the RBOCs' domestic cellular strategy has direct reprecussions internationally. O'Farrell (President, Interactive Services Group, US West Media Group) states that from these early failures:

> ...US West learned two vital lessons. One: Always look outside the obvious. And two: The company that buys the most toys first, wins.[15]

The second lesson guided US West in the initial stages of its international cellular expansion. In 1991 US West made a series of cellular investments in east Europe, and which were complemented over the course of the following years with additional investments. The result was that by the middle of the 1990s US West had extensive cellular operations throughout the three clusters of Asia, east Europe and west Europe.

Two points are of interest here. Firstly, the cellular investments amassed were not evenly spread between these three clusters. More of the investments in the east European cluster are in the cellular rather than other lines-of-business. In contrast the west European cluster has only one long standing cellular investment, that is, One-2-One in the UK. Secondly, most of the cellular investments have been made in markets where US West already operates. In particular, US West already operates a cable-TV network in many of the markets where is also operates a cellular system. For example, in Hungary US West has invested in Kablecom (cable-TV), Westel 450 and Westel 900. The complementarity of the investments is evident in a comment by Callahan (President, US West International):

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[14] Cited in Reguly, 1996, pg31.

[15] *Cited* in Garner, 1996.

> Vodafone and PacTel [Pacific Telesis] think cellular is a phenomenon by itself. We think it's a phenomenon tied to another phenomenon. Mobile is important, but it plays off the end of a fibre node.[16]

Although US West has made 14 cellular investments in all, the subscriber base that this provides is highly skewed in favour of a handful of investments. Moreover, it is one investment in particular, One-2-One that has driven the recent growth in international subscriber numbers. One-2-one has more subscribers than all of the other investments combined. In 1997, the last full year of US West ownership of its overseas investments before the June 1998 divestment, the RBOCs had investments in companies with a total subscriber base of 1.5m. Of this total One-2-One accounted for 620,000 subscribers. Despite widespread growth in subscriber numbers One-2-One has continued to be the largest single source of subscribers. As of December 31st 1998 MediaOne (the successor to US West out-region) had a proportionate subscriber base of 1,734,000, with One-2-One accounting for 960,500 of these.[17]

6.3.2.2 Learning from cable-TV.

US West first entered the cable-TV market in 1989 though the main period of expansion occurred at the start of the 1990s. The significance of the cable-TV market to US West cannot be underestimated. Not only has the sector been the recipient of significant investment capital from US West, but the sector has also shaped domestic investment activity as well. The scope and scale of US West's presence in the cable-TV industry is far reaching. The cable-TV investments span the range of US West's overseas presence. Moreover, the cable-TV sector has been the recipient of just under half of all the capital invested overseas by the RBOCs. For this reason alone the sector is of interest.

Although US West has made a number of cable-TV investments the UK market is of particular interest. Not only has the market received more capital than others, but the UK market has also served as a template for its other cable-TV investments. US West entered the UK cable-TV

[16] *Cited* in Global Business Telecoms, 1994a, pg22.

[17] MediaOne, 1998b.

market as US West Cable Communications Ltd but quickly concluded a joint-venture in 1991 with fellow entrant United Artists Cable Television, a wholly owned subsidiary of Tele-Communications Inc (TCI). The resulting company was TeleWest, which became the first cable company to be listed on the London Stock Exchange in 1994 when the company sold 23% of its shares to the public.[18] US West further expanded its presence in the UK market from 24 to 31 franchises in 1995 when it merged with SBC CableComms.

A comment in the 1994 Annual Report of US West is significant as it casts light on the motivations of the RBOCs that propelled it to be present in the UK marketplace:

> [t]he UK has proved to be the ideal market for US West International to implement its corporate strategy. ... Its concentrated population and *progressive regulatory environment* make it an attractive market for introducing new services and learning how to compete effectively with strong incumbents. As a result US West has gained *critical experience* – in packaging video and telephone services – that we're applying in others parts of the world, including the US. Out initial international strategy in the UK was "entry and positioning." After securing strategic market positions ... US West is firmly established as a market leader in the UK.[19] *(Emphasis added).*

Thus, the UK provided a unique opportunity for US West to gain critical skills through the combination of cable-TV with telephony. In addition the UK also provided a template of a strategic model that enabled service integration to occur across cable-TV, telephony, cellular and information services. In addition to TeleWest US West also owned 50% of One-2-One and 100% of Thomson Directories. Finally, the UK marketplace provided US West with the experience of competing against entrenched incumbents in the form of BT, BSKYB and the BBC.

The UK strategic model has influenced developments elsewhere within US West's cable-TV portfolio. US West sold its interests in Norkabel, Kablevision and Swedish Cable & Dish during 1996. Although no explicit reason was cited, US West has been quoted as stating that the inability to provide telephony services, which proved to be both popular and lucrative within the

[18] US West International, 1995, pg9.

[19] US West, 1994c, pg41.

UK, was an important factor for the sales. Subsequent to the UK investment US West sought to develop cable systems that are capable of delivering multiple revenue streams over the same network. For example, the RBOCs' two Japanese cable-TV investments, TITUS and Chofu Cable, have been developed with this in mind.

6.3.3 Organisational aspects of international investment activity.

The organisational form through which market entry is affected has important implications for the degree to which the company is integrated with the marketplace, the ability to access market specific information sources and the risk that it is exposed to. This section will address two areas relating to the organisational form adopted by US West. The first of these is the organisational form used by US West in its overseas expansion, whilst the second is the degree to which it has deepened its commitment to certain markets.

6.3.2.1 The organisational form of international expansion.

The organisational form adopted by US West throughout its international investment activity has largely remained the same. That is, the RBOCs has chosen collaborative organisational forms over wholly owned. Table 6.12 (below) shows that of the forty investments made by US West since 1989 only two are wholly owned. Moreover, both of these are to be found in the directory publishing market.

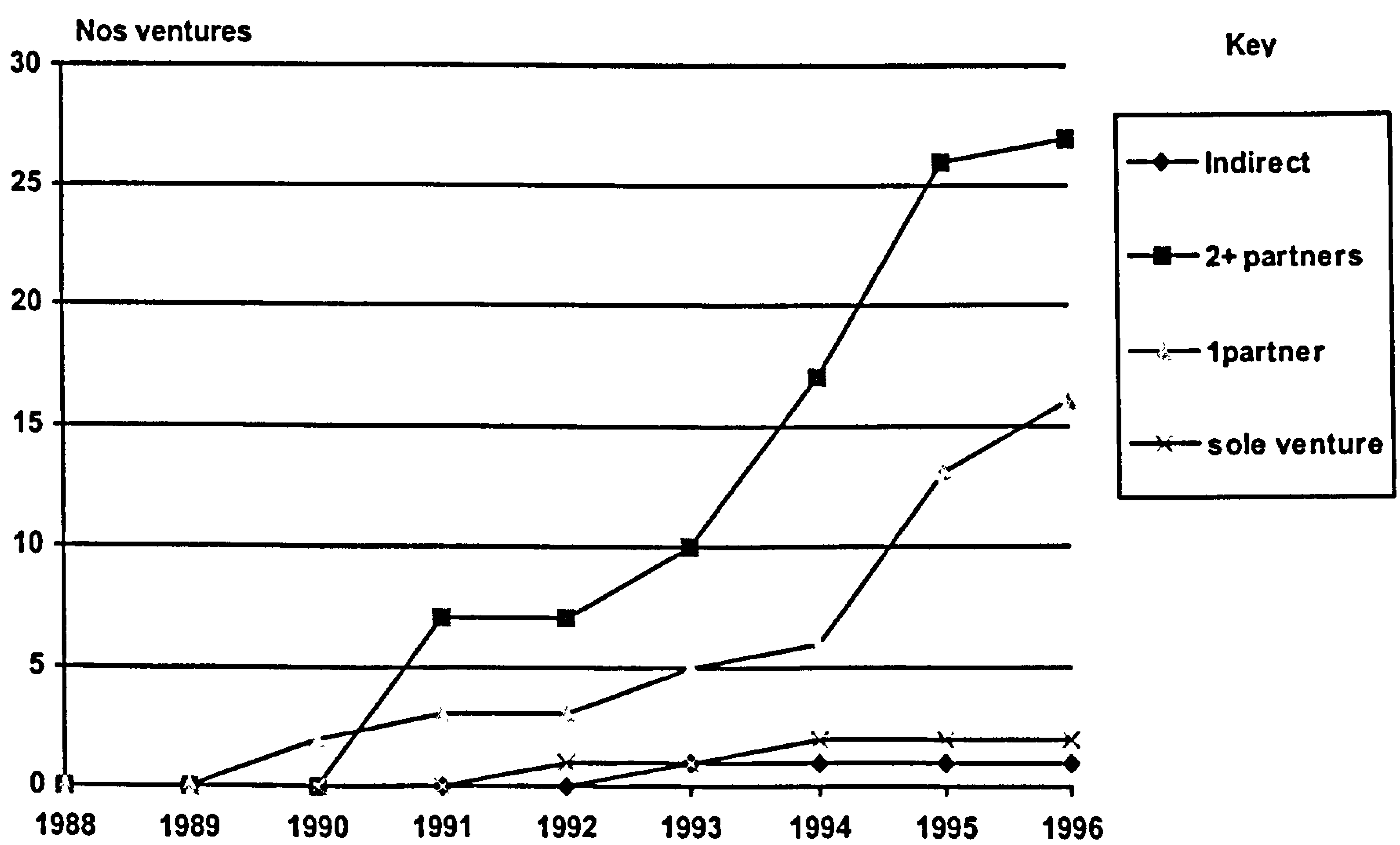
Table 6.12: The organisational forms employed by US West

Organisational form	Number of investments
Wholly owned	2
Joint-venture start-up	23
Joint-venture holding company	1
Joint-venture facilities management	2
Joint-venture	12

Source: various annual reports, US West; Wasden, 1993

Consequently, in the other lines-of-business where US West has invested, that is, cable-TV and cellular, it has done so entirely through collaborative arrangements with other companies. Given conditions of incomplete information US West will enter into collaborative arrangements to offset the risk inherent to the investment. Partners, especially those from the market being invested in, will provide the RBOCs with an understanding of the perculiarities of the local market. In addition, collaboration also provides US West with the opportunity to offset the costs associated with international expansion. The question arises of whether the propensity of US West to resort to collaborative arrangements when entering a market has remained constant since 1989.

Figure 6.3: A maturing of international investment activity?

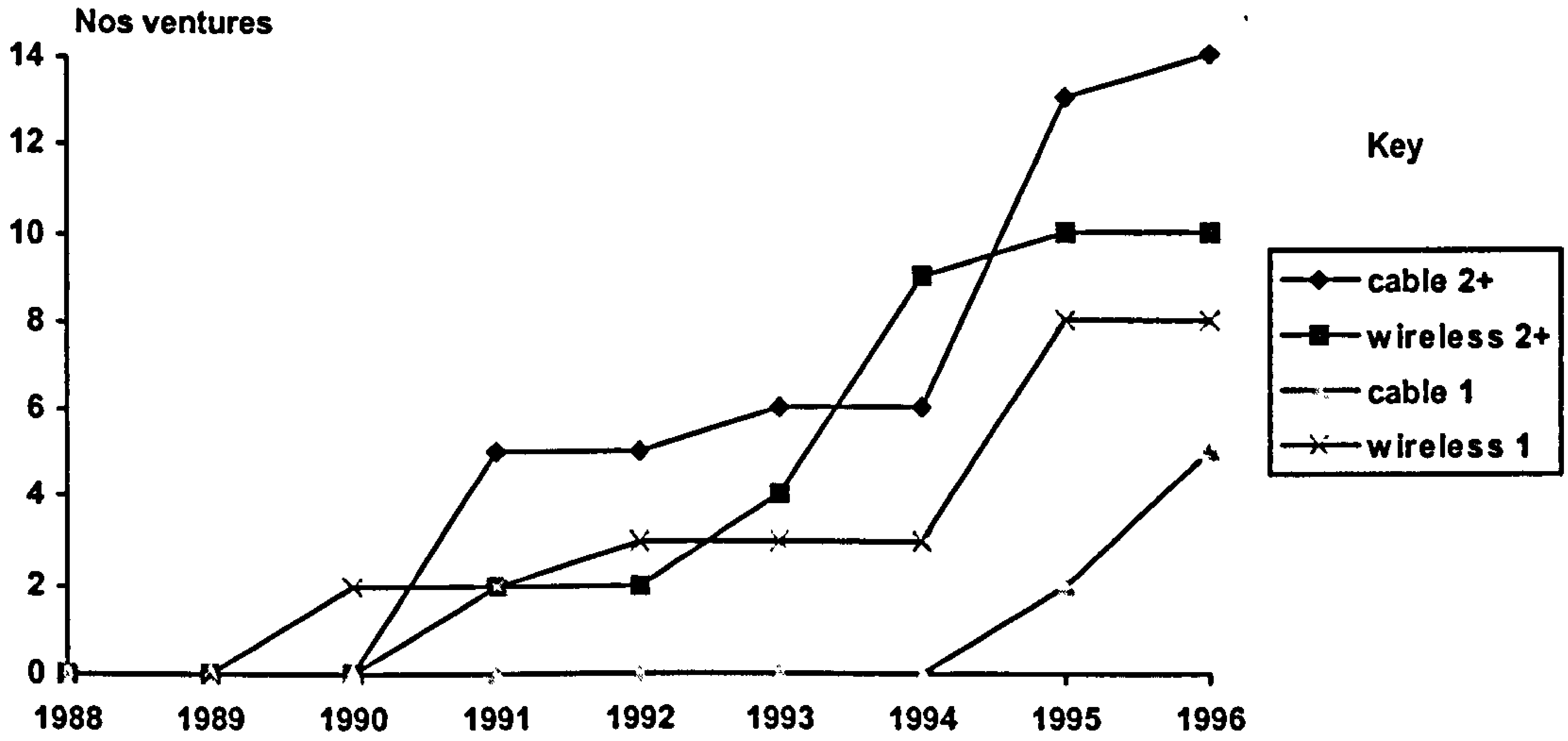


Source: various annual reports, US West; Wasden, 1993

It is not always the case that US West details either the number or role of its joint-venture partners. This information is, however, available for a limited number of the investments that the RBOCs has made over the years. US West International (1995) provides the relevant information for more than thirty direct investments as well as those indirect investments made by RTDC. The information that is available is presented in Figure 6.3 (above). This information has been updated to include any investments made after 1995 where the necessary information is available. This figure shows that the rate at which multiple partner investments have been made has declined, whereas the number of single partner investments nearly trebled between 1994 and 1996. This change is indicative of US West learning from its international exposure and becoming more able to evaluate the risks associated with an investment opportunity. That the RBOCs has moved towards fewer partners intimates that US West believes the advantages of fewer partners outweigh the associated risks.

It is also possible to differentiate the organisational form employed by US West by line-of-business. The analysis here is limited to the cable-TV and cellular industries as these are the two areas where US West has made the most investments. Furthermore, the information is limited to the period 1989 to 1996 so that it is comparable to that used above in Figure 6.3. From Figure 6.4 (below) it can be observed that the gap between the first multiple partner investment and the first single partner investment within the cellular industry was only one year. Such a rapid transition is due to the ability of US West to transfer operational information gained in the domestic context to the overseas venture. The role that partners play is one of offsetting the deficiencies of US West with respect to local market knowledge. Moreover, partners also provide an understanding of the local political environment as well as counter fears of neo-colonialism.

Figure 6.4: Comparing the organisation form for cable-TV and cellular investments



Source: various annual reports, US West; Wasden, 1993

In contrast the progression from multiple to single partner international investments in the cable-TV industry is much slower. The more gradual increase in commitment that the reduction in partners represents arises out of the requirement of US West to master a much wider array of tasks when operating in a foreign cable-TV market. Not only does the RBOCs have to understand the perculiarities of the local market but also has to cope with operating in a line-of-business where it cannot draw on domestic experiences. At the time when US West was making its initial forays into the cable-TV market the MFJ prohibited the RBOCs from providing cable-TV services domestically. Without the store of domestic operational experience to draw on US West is required to learn more of the necessary skills and competencies from its partners before it can go alone in the cable-TV industry.

6.3.3.2 Commitment deepening: the UK template and Russia.

On more than one occasion, US West has made multiple investments in the same host market. From Tables 6.9, 6.10 and 6.11 (above) it can be seen that US West has made multiple investments in the following markets: France, Malaysia, Japan, Hungary, Poland, Russia, Spain and the UK. Of these instances two, Russia and the UK, stand out. The first stands out because of the innovative way through which US West operates in the market, whereas the UK stands out due to the scope of the investments in the market.

In 1990 US West opened a representative office in Moscow. After three years of involvement in the market US West formed the Russian Telecommunications Development Corporation (RTDC) in 1993 to "manage, develop and fund telecommunications projects."[20] In exchange for contributing its Russian investments to RTDC US West received 66.5% of the equity, with the rest being owned by outside organisations. Through selling equity to outside shareholders US West raised additional capital for investment in the Russian market. This transaction also offset some of the risk that the Russian investments exposed US West to onto other parties.

[20] US West, 1994c, pg46.

Since its inception in 1993 the RTDC has made ten different investments in the Russian market. These investments are concentrated on the major metropolitan markets such as St Petersburg, Moscow and Rostov-on-Don and involve the development of a modern telecommunications infrastructure. To date (end of 1998) US West has made investments that intend to provide extra local access lines as well as cellular services. US West has been unable to expand its presence in the Russian telecommunications market any further. The RBOCs was out-maneouvred in the 1996 and 1997 privatisation of long distance carriers and failed to acquire any of the companies. Given the subsequent turbulence in the Russian economy this failure can be viewed as being highly fortuitous.

The UK has played a much wider role in the international investment activity of US West. At the height of its investment in the UK US West owned 26.75% of TeleWest, 50% One-2-One, Thomson Directories and 6.7% of Flextech. Together these four investments account for nearly half of the capital invested in overseas markets by the RBOCs, and provided the basis for the 'UK strategic model.' In this strategic model use delivered cable-TV, mobile and directory services and in doing so would provide US West with "invaluable market, competitive and technological insights."[21] US West divested several cable-TV businesses because they were unable to provide multiple revenue sources over the same network in a manner similar to that in the UK.

The UK market provided US West with unsavoury lessons. The first of these is that once market leadership is achieved a company cannot relax otherwise it will be out-manoeovured by its rivals. For a short while TeleWest was the dominant cable-TV company within the UK market, but it lost this position to Cable & Wireless Communications that was formed through the merger of three cable-TV companies and a long distance telecommunications operator. The second lesson that the UK market provided was that of the necessity of geographical coverage. One-2-One has been hampered by its lack of national coverage that limited service provision to the area around London. It is only recently that One-2-One expanded outside of this area through an extensive network investment programme to become a national cellular operator.

[21] US West, 1994c, pg41.

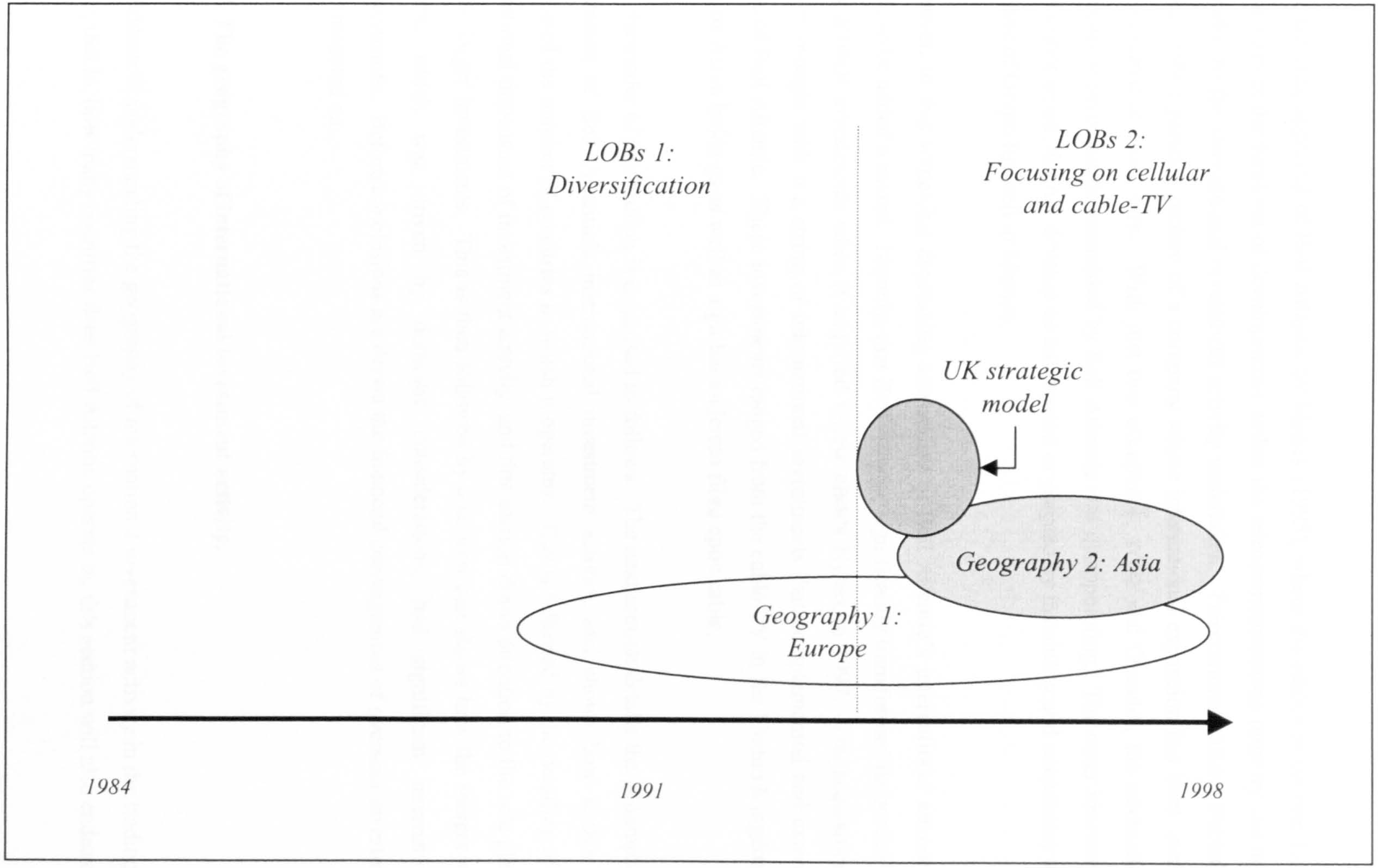
6.3.4 Conclusion.

Over the course of its international expansion US West has amassed a large portfolio of international investments. This portfolio of investments has not remained constant, however. As demonstrated in Figure 6.5 (over), and argued in the proceeding sections, the international investment activity of US West has undergone changes in two areas: geography and lines-of-business. Broadly speaking, in both areas US West has narrowed its operational scope.

Between 1984 and 1998 US West invested in a diverse range of markets, ranging from Asia to Europe. Having said this, US West has clustered its international investments in three regions – Western Europe, Eastern Europe and Asia. Of these three clusters the Asian cluster is the most recent. Although the RBOCs has remained an active participant in all three regions it has divested several investments, shifting in the process its geographical focus away from Eastern Europe towards the other two regions. US West has, on more than one occasion, made multiple investments in a host market. However, it is only in the case of the United Kingdom and Russia can it be said that commitment deepening has occurred.

Similarly, those lines-of-business in which US West has invested have not remained constant. After initially engaging in limited diversification the RBOCs concentrated its investment attention overseas in two lines-of-business, that is, in cellular and cable-TV. It has been argued that US West entered both of these lines-of-business to compensate for domestic shortcomings. That is, to exploit new technologies in the case of cable-TV and to acquire cellular subscribers. With respect to cable-TV the UK proved to be particular important as it allowed US West to provide cable-TV and telephony services over the same network. This was not possible within the United States. The UK also provided a 'strategic model' for US West where the RBOCs operated across the broad spectrum of the telecommunications industry. That, US West began to dismantle the UK 'strategic model' soon after it was launched suggests that the RBOCs was unsuccessful in its attempts to become an integrated telecommunications company within this particular market.

Figure 6.5: International strategies of US West



6.4 BELL ATLANTIC.

The flattering appraisal of Bell Atlantic by Maney (1995), where the RBOCs is the one to beat and always at the forefront of developments within the telecommunications industry can not be extended to the international investment activity undertaken. Telecommunications Publishing Group (1996) paints a picture of a company whose international expansion has been minimal and thwarted at every turn. With just two exceptions, TCNZ and Omintel, the international portfolio of investments assembled by Bell Atlantic was disappointing. The other investments were either small, did not develop as anticipated or plagued by instability and uncertainty as in the case of Grupo Iusacell in Mexico.

However, to this somewhat depressing assessment of Bell Atlantic's international adventures needs to be added a caveat. Namely, that Bell Atlantic significantly transformed its portfolio of international investments when it acquired fellow RBOCs Nynex in 1997. The acquisition of Nynex brought with it a string of international investments that complemented and extended those of Bell Atlantic. These investments ranged from the cable-TV in the United Kingdom to various Asian holdings as well as a global undersea fibre optic cable.

The remainder of this section is organised as follows. The next section details the geographical dimension of Bell Atlantic's international investment activity, and shows how RBOCs has increased the number of countries in which it operates. This is followed by the detailing of the operational dimension of investment activity, and this section draws attention to the role played by the larger investments. This is then followed by a section that shows how the merger with Nynex, which was driven by domestic considerations, had significant international repurcussions. Before conclusions are drawn the financial consequences of overseas investment is commented on.

6.4.1 The geography of international investment activity.

In addition to understanding the geography of international investment activity in the traditional sense, that is, how many countries does Bell Atlantic operate in, this section will also endeavour to identify patterns within these investments. These 'patterns' relate to whether or not Bell Atlantic has displayed a propensity to invest in one country or group of countries over another. Finally, this section will demonstrate that the acquisition of Nynex by Bell Atlantic increased the geographical scope of the RBOCs.

6.4.1.1 The number of countries.

For much of its international expansion Bell Atlantic steadily, unspectacularly, increased the number of countries in which it operated. From just one country in the year of divestiture, Bell Atlantic increased the total to ten by 1991 and it was at this level that the total remained until 1997 when the number jumped up to eighteen.

Table 6.13: The geographical expansion of Bell Atlantic

Year	Geographical scope stated as including:	Nos. Of countries
1984	Canada.	1
1985	Canada, UK.	2
1986	4 European offices, Canada, UK	6
1987	Germany, Spain, UK, France, Italy, Switzerland, Austria.	7
1988	UK, France, Italy, Germany, Switzerland, Austria, New Zealand.	7
1989	UK, France, Italy, Germany, Switzerland, Austria, The Netherlands, Spain, Belgium	9
1990	UK, France, Italy, Germany, Switzerland, Austria, South Korea, Taiwan.	8
1991	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Czechoslovakia, Russia, Australia.	10
1992	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Czech Republic, Slovakia.	9
1993	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia.	10
1994	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia.	10
1995	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia.	10
1996	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia.	10
1997	UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia, Poland, Gibraltar, Greece, India, Thailand, Indonesia, Philippines, Bermuda, Ireland.	18
1998	UK, France, Italy, Germany, Switzerland, Austria, Mexico, Czech Republic, Slovakia Poland, Gibraltar, Greece, India, Thailand, Indonesia, Philippines, Bermuda, Ireland.	17

Source: various annual reports, Bell Atlantic; Bell Atlantic, 1997b; Wasden, 1993.

This dramatic increase in international exposure was not due to Bell Atlantic making a series of investments in the space of a single year, but instead was the result of the RBOCs' domestically motivated acquisition of fellow RBOCs Nynex. Without the acquisition of Nynex there are signs that the international scope of Bell Atlantic would have progressively contracted. That is, the number of countries in which Bell Atlantic operated would have declined. Not only had the RBOCs had failed to acquire several ventures early on in its international expansion, but had taken steps to exit several of its long standing overseas businesses by placing the computer maintenance operations in a joint-venture with ICL of the UK. Furthermore, several other ventures were approaching the end of their fixed contract.

6.4.1.2 Geographical patterns within the host countries.

Through representing the information contained in Table 6.13 (above) so that geography is highlighted it is possible to identify a paradox within the international investment activity of Bell Atlantic. As shown in Tables 6.14 and 6.15 (over) the balance of host countries favours Europe, and in particular countries within the EU. However, none of the European investments made by Bell Atlantic are regarded by the RBOCs as being capable of acting as a springboard for future investment activity. Instead, those investments that are capable of acting as the anchors within a regional cluster of investments are outside Europe in New Zealand and Mexico. From Table 6.15 (over) it can be observed that no subsequent investments have been made by Bell Atlantic in Mexico, and the two that have been made in New Zealand cannot be taken as being representative of a regional cluster of investments.

Does Bell Atlantic display any other geographical patterns within the investments? It could be argued that the successive investment in the Italian market is an illustration of commitment deepening in practice. From 1988 onwards Bell Atlantic has made several investments in the Italian market, though with the exception of Omnitel none of these have been long term. For instance, the RBOCs invested in Infostrada and sought to develop the company as a manager of private networks and value-added services such as video-conferencing. However, the majority shareholder, Olivetti, widened the operational remit of the company so that it would become a full service competitor to the incumbent PTOs, Telecom Italia. As a result of this change in strategy Bell Atlantic decided to divest its shares and concentrate its investment in the cellular market instead.

Table 6.14: European investment cluster prior to the acquisition of Nynex

Country	Investment	Details
Austria	from BCE Inc.	100% Computer maintenance 1988
Czech Republic	EuroTel Praha	24.5% Cellular 1991
France	from BCE Inc.	100% Computer maintenance 1988
Germany	from BCE Inc. Connect Gmbh	100% Computer maintenance 1988 100% Computer services 1989
Italy	from BCE Inc. Sodalia Omnitel Videostrada Infostrada	100% Computer maintenance 1988 49% Software 1991 19.7% Cellular 1994 49% cable-TV 1995 33% Full service provider 1995
Slovakia	EuroeTel Bratislava	24.5% Cellular 1991
Switzerland	from BCE Inc.	100% Computer maintenance 1988
UK	from BCE Inc.	100% Computer maintenance 1988

Source: various annual reports, Bell Atlantic; Wasden, 1993.

Table 6.15: Other investments made by Bell Atlantic prior to the acquisition of Nynex

Country	Investment	Details
Australia	Pacific Star Communications	50% Facilities management 1992
New Zealand	TCNZ Sky Entertainment Sky Network Television Ltd	24.5% PTOs 1990 12.5% TV 1991 12.5% TV 1991
Mexico	Grupo Iusacell	42% Cellular 1993

Source: various annual reports, Bell Atlantic; Wasden, 1993.

6.4.1.3 Why one plus one does equal three.

As already alluded, the acquisition of Nynex had international implications for Bell Atlantic. Although Bell Atlantic had made a series of international investments, with those in TCNZ and Iusacell being viewed as platforms for subsequent regional expansion, overall the portfolio lacked either coherence or focus. Indeed, Global Telecoms Business (1994d) described the investments as being 'piecemeal.' Investments were geographically scattered, and differed enormously in the financial commitment required of Bell Atlantic. In many respects the only commonality between the investments was that Bell Atlantic was an investor.

The international investments of Nynex enhanced the Bell Atlantic's international portfolio in two distinct ways. Firstly, the investments reinforced the operational presence of Bell Atlantic in both Asia and Europe. How the acquisition expanded the international scope of Bell Atlantic is demonstrated in Table 6.16 below. That both of the RBOCs had invested in the same regions but with little overlap ensured that the international holdings of each were mutually reinforcing. Moreover, in the context of the aforementioned 'springboard' investments of Bell Atlantic the various holdings of Nynex strengthened their role as key investments.

Table 6.16: How the acquisition of Nynex extended Bell Atlantic's international exposure

	The geographical scale of the 'new' Bell Atlantic
The geographical scale of Bell Atlantic (1996)	*Wireless*
UK, France, Italy, Germany, Switzerland, Austria, New Zealand, Mexico, Czech Republic, Slovakia, Australia.	Mexico, Italy, Czech Republic, Slovakia, Greece, Indonesia.
The geographical scale of Nynex (1996)	*Other lines-of-business*
Poland, Gibraltar, Greece, India, Thailand, Indonesia, Philippines, Bermuda, UK, Ireland.	UK, Poland, Gibraltar, Czech Republic, Slovakia, Greece, India, Indonesia, Philippines, Bermuda, Switzerland, Germany, Austria, France, Ireland, New Zealand, Australia.

Note: Those countries underlined contain one or more investments originally made by Nynex. *Source:* various annual reports of Bell Atlantic and Nynex; Wasden, 1993.

Secondly, Nynex operated in several lines-of-business overseas that Bell Atlantic did not. Therefore, the acquisition extended the operational as well as geographical scope of Bell Atlantic. One line-of-business in particular is significant, namely, cable-TV. Bell Atlantic had failed to affect an entry into this market when its merger with TCI collapsed in 1994, and was struggling to articulate a replacement strategy. In contrast Nynex, though its UK based Nynex CableComms unit, was already active in this market and would therefore be able to provide Bell Atlantic with the operational experience that was so far lacking.

6.4.2 Operational characteristics of overseas expansion.

Notwithstanding the criticism of Global Telecoms Business (1994d) that the international investments of Bell Atlantic were 'piecemeal' it is possible to identify several common traits.

These common traits demonstrate that the international investment activity of Bell Atlantic has been more structured that it would otherwise appear to be. Bell Atlantic has made several anchor investments around which it has sought to construct regional investment clusters, has switched its investment emphasis to concentrate on the cellular market, and finally, has often invested through wholly owned acquisitions.

6.4.2.1 Key or anchor investments.

There are two types of key investment within the international portfolio of Bell Atlantic. Firstly, several of the international investments made by Bell Atlantic are described by the RBOCs as being springboards for future regional expansion. In other words, they are 'anchor' investments around which the RBOCs will make subsequent investment. The second type of key investment is the one that has grown to become significant within the context of Bell Atlantic's portfolio. TCNZ and Grupo Iusacell fall into the former category, whilst Omnitel is an example of the latter type of key investment.

When Bell Atlantic joined with Ameritech to acquire TCNZ it was the largest overseas investment made by any of the RBOCs. In 1990 Bell Atlantic and Ameritech together paid $2.5bn for full ownership of the PTOs, with the proviso that this would be reduced to less than 50% by September 1993. This was achieved through two local firms joining the RBOCs in the ownership of TCNZ and the IPO representing 31% of the company in 1991. The IPO allowed Bell Atlantic to sell $395.5m worth of shares, and to value its remaining holdings.[22] Between 1991 and 1997 Bell Atlantic continued to sell shares in TCNZ, realising its investment and maintaining its holding at 24.82%. For instance, in 1996 TCNZ announced a stock repurchase programme that Bell Atlantic partook in during 1997 to ensure that its holding remained below the legal threshold. This enabled Bell Atlantic to realise $153.5m in 1997 and increase its holding to 24.95%, the maximum legally permitted.[23] Late on in 1997 Bell Atlantic announced that it would sell its remaining 24.95% stake in TCNZ through the issue of $2.5bn of exchangeable notes due April 1st 2003. This affected the exit of Bell Atlantic from TCNZ.

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[22] Bell Atlantic, 1991, pg17.

[23] Bell Atlantic, 1996a, pg23; Bell Atlantic, 1997c pg25.

The investment in TCNZ impacted on subsequent Bell Atlantic investment activity in two quite different ways. Firstly, Bell Atlantic sought to invest elsewhere in New Zealand and Asia. In New Zealand the RBOCs acquired a 12.5% stake in Sky Network for $10.9m in May 1991.[24] Outside of New Zealand Bell Atlantic was active in several markets. In Australia Bell Atlantic owned Pacific Star Communications, a company that manages corporate networks. Wasden (1993) details that Bell Atlantic also formed bidding various telecommunications related consortia in Australia, South Korea and Taiwan. Those in Australia and Taiwan failed to win cellular licenses, whilst the broadly based alliance with Korea Telecomm appears to have sunk without trace.

Secondly, over the course of 1991 and 1992 Bell Atlantic regularly expressed interest in pursuing other privatisation issues as they arise. However, by the end 1998 TCNZ remains the only privatisation that Bell Atlantic has invested in. This is not to suggest that the company did not try to make such investments. Global Telecoms Business (1994d) suggests that Bell Atlantic bid for Matav in Hungary, and there is prima facie evidence indicating that Bell Atlantic was interested in several other European PTOs.

In October 1993 Bell Atlantic announced its intention to invest in Grupo Iusacell, S.A. de C.V., the second largest telecommunications company in Mexico. In the following month Bell Atlantic invested $520m to acquire a newly issued class of stock that represented 23% of the company. In June 1994 Bell Atlantic increased its interest in Iusacell by investing another $524m with the result that the RBOCs owned 41.9% of the Mexican company. At the time of the investment Iusacell operated cellular services in four contiguous regions that covered 70% of the population (66m pops). The company planned, however, an extension of its operational remit. Initially Iusacell intended to use its existing 750Mhz radio licences to offer wireless service in rural areas. Further to this, Iusacell was intent on entering the long distance market once this was liberalised in August 1996.

Bell Atlantic was enthusiastic about the prospects for this investment. Brown (president, Bell Atlantic International) is quoted as stating that "Mexico will be our strategic platform for Latin

[24] Bell Atlantic, 1991, pg34.

America."[25] Moreover, the investment would capitalise both on the pent-up demand within the Mexican market as well as the move of American capital to Mexico after the formation of NAFTA. However, Bell Atlantic's involvement has been subject to problems from soon after the RBOCs completed its $1.04bn investment.

The first problem to beset the investment was environmental in nature, namely, poor economic conditions and currency instability that reduced the value of Bell Atlantic's holding by half. Recognising that the unfavourable economic conditions were likely to be long term, Bell Atlantic wrote down the value of its holding by $530m and backdated this change to include the 1994 accounts as well.[26] Nevertheless, during 1995 Iusacell did gain regulatory approval to enter the long distance market in 1997.

Table 6.17: A torrid affair – Bell Atlantic and Iusacell

Date	
1993 November	$520m for 23%. Will launch new services using old radio frequencies.
1994 June	Stake raised to 42%. Total investment of $1.04bn.
1994 December	Peso devaluation.
1996 January	Corruption allegation levelled against vice-chairman Peralta. Doubtful whether old frequencies can be used for new services.
1996 November	Bell Atlantic buys out Peralta, announces intention to buy new frequencies. Total investment raised to $1.7bn
1997 February	Restructuring announced. Bell Atlantic gain management control.
1998	Iusacell draws on a credit line guaranteed by Bell Atlantic. This converts into Iusacell equity that increases the RBOCs' stake.
1999 April	New senior management team announced, largely from Bell Atlantic

Source: Smith & Weber, 1997; various annual reports, Bell Atlantic.

In addition to the devaluation 1995 also saw the entry of Iusacell into the local market through its wireless fixed service be delayed. This delay arose because of the role played by Carlos Peralta, the head of Peralta family that are Bell Atlantic's partner in Iusacell, in an ongoing corruption scandal. Peralta revealed that he has lent Raul Salinas, the brother of a former president, $50m prior to Salinas being sent to prison on murder and corruption charges. This emerged as the NRA was determining whether or not Iusacell could use its radio frequency to enter the local market. If the NRA determined that Iusacell could use its frequency it would lay

[25] Global Telecoms Business, 1994d, pg16.

[26] Bell Atlantic, 1995, pg35.

itself open to charges of perpetuating cronyism between business and politics. The NRA eventually ruled that Iusacell could not use the frequency as intended.

In addition to this failure Smith & Weber (1997) allege that Bell Atlantic and the Peralta family clashed over strategy, a clash made more acrimoniuos by the company being dragged into the aforementioned corruption scandal and failing to enter the fixed wireless local market. The operational consequences were twofold: firstly, Iusacell had not grown as anticipated, and secondly, rivals had managed to gain both more subscribers as well as the strategic high ground. In November 1996 the impass was resolved with Bell Atlantic taking effective charge of the company. Additional aspects of the plan included:

- The RBOCs would pay the Peralta family $50m to swap non-voting for voting shares. Debts owed to Bell Atlantic would be converted into equity.
- Bell Atlantic would, at some point within three years, buy the remaining Peralta owned shares for up to $450m.
- Bell Atlantic would acquire the necessary frequencies to enter new markets such as data, wireless fixed local and long distance.
- Bell Atlantic would provide up to $150m in additional financing as circumstances required.

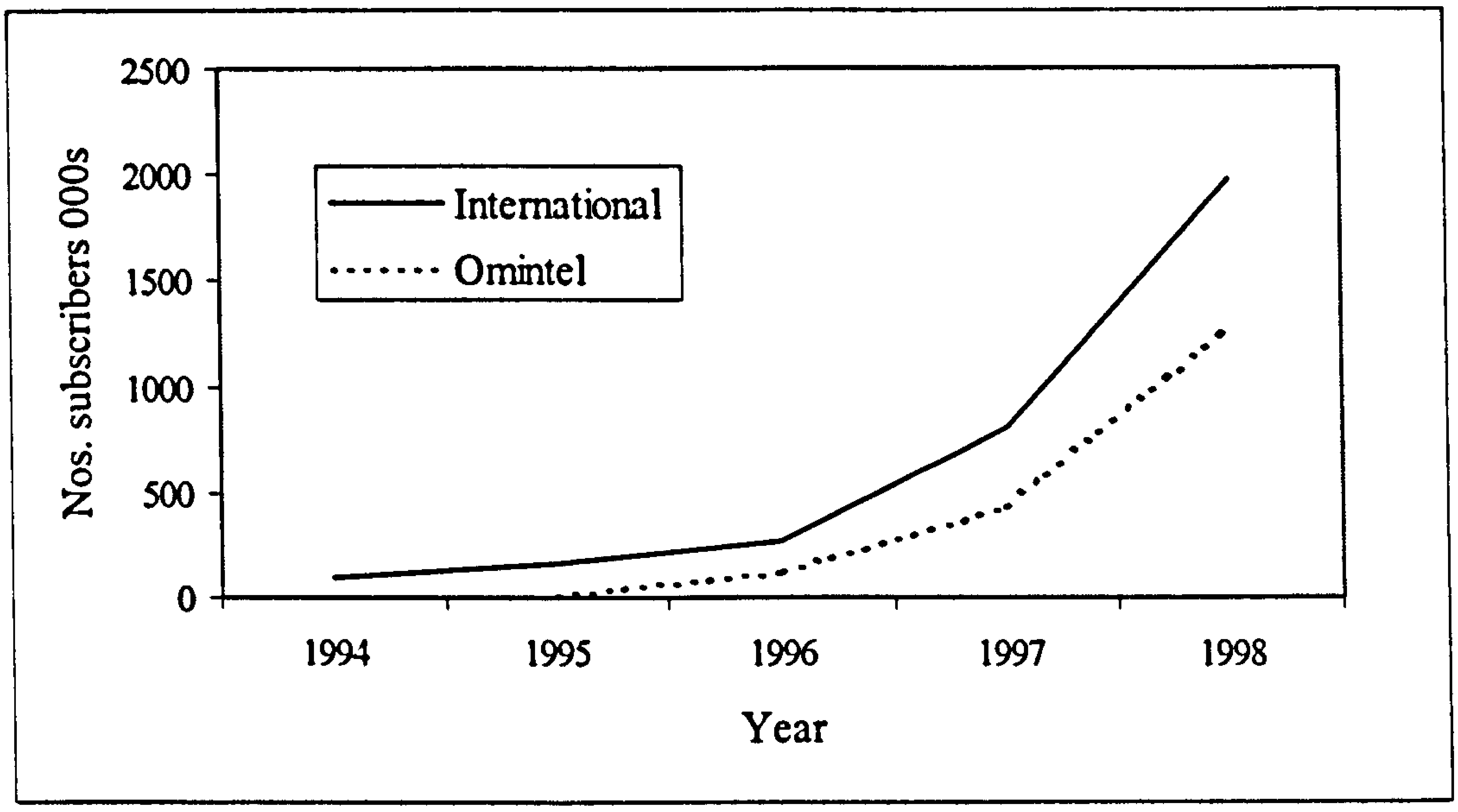
Thus, Bell Atlantic increased its ownership of Iusacell, gained management control of the company and was able to appoint a majority of the board of directors. In addition Bell Atlantic cemented its control over Iusacell through appointing expatriates to management positions throughout the Mexican company. It is yet to be seen whether taking management control has benefited Iusacell, and Babbio (vice-chairman, Bell Atlantic) has defended the investment stating that "I don't think [the Mexican venture] was a bad investment."[27]

The final key investment within the international portfolio of Bell Atlantic is Omintel Pronto Italia, an Italian cellular company. This investment is viewed as being key not because of its potential as an anchor like TCNZ or Iusacell, but because of its role as a driver of increasing international cellular subscriber numbers. In 1994 Bell Atlantic invested $40m for 11.67% of

[27] Smith & Weber, 1997, pg48.

Omnitel, a joint-venture with Olivetti, AirTouch and Mannesmann, which had been awarded Italy's second GSM licence in January 1995. In late 1996 Bell Atlantic increased its ownership in Omnitel, investing $273.5m to raise its holding to 17.4%, and increased it again in 1998 to 19.7% through investing an additional $163m.[28] Thus, for a total consideration of $475m Bell Atlantic owned 19.4% of Omintel.

Figure: 6.6: A growing Omintel subscriber base



Source: various annual reports, Bell Atlantic; Bell Atlantic, 1998c, 1998h & 1998k; Bell Atlantic Mobile, 1999.

Without doubt Omintel has enjoyed spectacular growth. Since the service became operationally in December 1995 Omintel has rapidly grown to 6.5m subscribers by the end of 1998. This growth has underpinned the increase in Bell Atlantic's international cellular subscribers, of the 2m international subscribers in 1998 1.2m are accounted for by Omintel. Given that the investment is only four years old this dominance is both surprising, but an inditment of the failure elsewhere of Bell Atlantic to achieve significant growth. Until Bell Atlantic acquired Nynex it has only made two 'pure' cellular investments: EuroTel Praha and EuroTel Bratislava. By the end of 1998 these two companies had proportionate subscribers of less than 300,000. The poor operational showing of Iusacell resulted in this company contributing less than 200,000 subscribers. More cellular subscribers were found in integrated investments such as TCNZ that had 282,400 proportionate subscribers.

[28] Bell Atlantic, 1995, pg9; Bell Atlantic, 1996a, pg9; Bell Atlantic, 1998i, pg31.

6.4.2.2 Other investments.

Outside of the aforementioned key or anchor investments Bell Atlantic has invested in a diverse range of overseas companies. If those investments associated with the acquisition of Nynex are excluded, the lines-of-business that Bell Atlantic has invested in include computer maintenance and facilities management. These are briefly detailed below:

- In 1988 Bell Atlantic acquired six *computer maintenance, distribution and customisation* companies from BCE Inc. These companies operated in Austria, France, Italy, Germany, Switzerland and the United Kingdom. In the following year Bell Atlantic formed CONNECT GmbH to provide technological support to MNEs. In June 1991 Bell Atlantic formed a partnership with ICL to which it transferred the six company acquired from BCE Inc.[29]

- Bell Atlantic built upon its software expertise by providing advice and consulting services to foreign telecommunications companies in the mid to late 1980s. In Italy Bell Atlantic International provided consulting services related to operating support systems, whilst in the United Kingdom such services related to BT's use of Centrex.

- Corporate publications imply the international expansion of Bell Atlantic's domestic diversification into *financial services*. The domestic acquisition of Greyhound Capital Corporation (renamed Bell Atlantic Systems Leasing International) in 1986 brought with it four European offices. This acquisition can be viewed as being complementary to the RBOCs' push into computer markets, as Greyhound provided leasing finance for companies wishing to obtain computer equipment.[30]

- In 1990 Bell Atlantic formed a joint-venture with US West and the Czechoslovak PTOs to launch *cellular* services in the country. Service was launched in the following year

[29] Bell Atlantic, 1988, pg12; Bell Atlantic, 1991, pg4 & 8; Wasden, 1993.

[30] Bell Atlantic, 1986, pg14.

through two companies that reflected the division of Czechoslovkia into the Czech and Slovak Republics. Both EuroTel Praha and EuroTel Bratislava initially launched monopoly analogue services, though in the digital markets they are subject to competitive pressures.

- Subsequent to its investment in TCNZ Bell Atlantic expanded its presence in the market with the purchase of 12.5% in both Sky Entertainment and Sky Network Television during 1991. Both of these companies operate in the *pay-TV* market and would thus provide Bell Atlantic with experience of a market from which it was, at that time, barred from entering domestically. These investments were sold in 1997.

6.4.2.3 A changing emphasis in the lines-of-business of investments.

The focus of Bell Atlantic's international investment activity has not remained constant. Table 6.18 (below) divides the international expansion of Bell Atlantic into three phases. In the first of these the RBOCs invests solely within the computer related market, whilst in the second phase its investments are spread across the whole spectrum of telecommunications markets. The third phase is related to the expansion associated with the acquisition of Nynex.

The shift in investment focus between the first two phases is related to the nature of liberalisation. That is, when Bell Atlantic began expanding overseas 'traditional' telecommunications markets such as local telephony and cellular service provision were still provided on a monopoly basis by PTOs. These were monopoly provision markets. In contrast, computer related markets were more liberal and competitive. Thus, it was possible for Bell Atlantic to enter these markets if it so desired to do so. Consequently, as shown in Table 6.18 (below) the early international investments were limited to a line-of-business which is, for all intense and purpose, ancillary to the core activities of the RBOCs. However, Bell Atlantic voiced its much wider international aspirations in the 1987 Annual Report:

> We recognise that the market for the services and products we offer is worldwide. This is an opportunity for us to use our strengths – in building and managing communications networks, in marketing telecommunications services and products, and in maintaining and

financing equipment – to participate in developing the global communications systems of the 21st century.[31]

Table 6.18: A changing focus to international investment

Year	Line-of-business					
	Cable-TV and related areas	Cellular	PTOs	Computer related	Directory publishing	Other
1984 – 1989	-	-	-	7	-	-
1990 – 1996	3	4	1	-	-	3
Due to Nynex acquisition	3	9	2	-	1	4
1997 – 1998	-	-	-	-	-	-
Total (37)	6	13	3	7	1	7

Source: various annual reports, Bell Atlantic; Bell Atlantic 1999d.

The second phase of international expansion took advantage of the liberalisation under way and as a result the investments are broadly spread across the telecommunications industry. Some of the ventures undertaken, primarily those related to cable-TV, took the RBOCs into lines-of-business that did not have a domestic counterpart. Therefore, these investments represent an extension of Bell Atlantic both operationally and geographically. The intent to enter markets unencumbered by regulatory restrictions was made plain in the 1989 Annual Report where a rationale for international investment activity was presented:

> There are compelling reasons for entering the overseas market. It allows us to provide better service to large domestic customers whose operations extend to foreign lands. It offers is the opportunity to expand into new high-growth markets. And it gives us an arena free from certain domestic regulations and legal restrictions where we can test new ventures and expand our base of knowledge.[32]

The second phase took advantage of the liberalisation underway and as a result the investments are broadly spread across the telecommunications industry. Not only do the investments undertaken correspond to those lines-of-business conducted domestically, but some of the investments are in markets were Bell Atlantic has no domestic presence. For instance, the cable-TV investments are outside of Bell Atlantic's domestic scope. Of the other investments that Bell

[31] Bell Atlantic, 1987, pg7.

[32] Bell Atlantic, 1989, pg23.

Atlantic entered only one, Pacific Star Communications, provided telecommunications services aimed at MNEs. It is surmised that the other investments, such as the EuroTel companies, were undertaken to exploit the high growth characteristics of the host markets.

As liberalisation opened up new investment opportunities Bell Atlantic shed its initial overseas investments. By forming a joint-venture with ICL the RBOCs has effectively exited the computer services market. Moreover, a domestic retrenchment of its financial activities had the effect of reducing its overseas exposure in these markets as well. The acquisition of Nynex dramatically increased the international exposure of Bell Atlantic. In the third phase of international activity that the acquisition heralded Bell Atlantic has divided its assets into three distinct operational groups: global wireless, global directory services and telecommunications.

The first two are self explanatory, whilst the third contains all those investments that provide fixed, cable-TV, satellite or undersea cable infrastructure. Therefore, included within this category are investments such as TCNZ and Cable & Wireless Communications. Of these three groups by far the most fetted is global wireless. It is this group of investments that has been the recipient of continued investment, unlike telecommunications where Bell Atlantic divested its largest two holdings, TCNZ and Cable & Wireless Communications. Of the remaining telecommunications holdings only one, FLAG, has not suffered financial a write-down as its host market undergoes economic instability. The global directory services group includes the United States, which is responsible for the overwhelming majority of titles, advertising customers and circulation. Given the restructuring that has been undertaken to date it is highly probably that Bell Atlantic will continue to shift the balance of its international holdings towards wireless and away from telecommunications.

6.4.2.4 Organisational dimensions of international investment activity.

Bell Atlantic does not own outright any of its international investments. It was initially assumed that the companies acquired from BCE Inc were an exception to this, but although Bell Atlantic does not describe the nature of the joint-venture formed with ICL the evidence suggests that a transfer of equity to the British company did occur. Therefore, Bell Atlantic owns only a part of these companies and not their entirety. Similarly, on first glance it would appear that the various overseas directory publishing companies are wholly owned. However, a more careful examination reveals that the divisional holding company is itself a joint-venture, and several of its subsidiaries are also joint-ventures. Therefore, none of these companies are wholly owned.

Table 6.19 (below) categories the international investments by the nature of the partners. The partners in these companies are either indigenous to the host market, from another country or some combination of the two. Also distinguished are those investments originally made by Bell Atlantic, and those acquired as part of Nynex and the line-of-business that the investment is in. The distinction here is between wireless and other lines-of-business.

Table 6.19: Partners of international expansion

	Line-of-business	
	Wireless	*Other lines-of-business*
Local partners	• Grupo Iusacell	• <u>TelecomAsia</u> • <u>GNC</u> • CSM • PBH III
International partners		• <u>FLAG</u> • Computer related companies
Local & international partners	• EuroTel Praha • EuroTel Bratislava • <u>STET Hellas</u> • Omnitel • <u>Excelcomindo</u>	• TCNZ • <u>Cable & Wireless Communications</u> • <u>Global Directory Services</u>

Note: Underlined investments originally made by Nynex. *Source:* Bell Atlantic, 1997b; various annual reports, Bell Atlantic.

From the table it can be observed that the majority of investments combine local with international partners. However, the majority of the Asian investments have been made with just local partners whilst the European investments combine local and international together. One explanation for this is that the Asian countries are weary of foreign investment on the grounds that it can be viewed as neo-colonialism. Interestingly, what will become the largest single investment by Bell Atlantic, Iusacell, has been made solely in conjunction with local partners. Whilst this is advantageous, as local partners can provide political influence and an understanding of local market conditions not available to foreigners, it also has its negative points as well. If a foreign investor allies itself with the wrong local company then its investment may not be successful in the first place, and if it is the foreign investor is forever reliant on the local firm remaining influential. The case of Iusacell demonstrated how closely allying yourself with a local company can backfire when this companies 'falls from grace.'

6.4.3 Financial aspects.

Bell Atlantic does not explicitly detail the financial performance of its international investments. The overseas cellular holdings, for instance, are reported as part of Bell Atlantic's 'global wireless' division. Notwithstanding this it is possible to make several conclusions about the international financial performance of Bell Atlantic.

As already intimated the TCNZ and Omnitel investments have proved to be financially very successful. Bell Atlantic was able to sell shares in TCNZ that recovered its initial investment of $1.2bn before issuing the exchangeable notes. The $2.5bn raised through the notes was, in fat, Bell Atlantic's profit on its investment. The rising cost of investment needed to increase Bell Atlantic's ownership of Omnitel from 11.67% to 19.7% indicates the appreciation that the company was enjoying.

Table 6.20: Omnitel financial results

	Year			
Lira BN	1995	1996	1997	1998
Revenues	49	776	1835	4471
Net income (loss)	(128)	(589)	(140)	781
Capital expenditure	615	729	535	1308
Subscribers 000s	60	714	2456	6500
Nominal value $m	342[1]	4715[1]	7012[1]	11000[2]

Notes: 1. Based on amount Bell Atlantic paid for initial and subsequent equity. 2. Value placed on company as part of Olivetti's bid for Telecom Italia in February 1999. *Source:* Bell Atlantic, 1997b; Bell Atlantic, 1998k.

Countering the financial success of TCNZ and Omintel has been the relative failure of Iusacell. As already detailed Bell Atlantic has wrote down its investment in the company, from $1.04bn to less than $500m. In addition, in the third quarter of 1998 the RBOCs wrote-down the values of TelecomAsia and Excelcomindo by a total of $485m. This was prompted by not only economic problems within Asia, but also recognition that the original business models, in particular of TelecomAsia, were unrealistic. Throughout 1998 Bell Atlantic has been refocusing TelecomAsia towards fewer lines-of-business.

A final point worth mentioning relates to the unique way in which Bell Atlantic has divested TCNZ and Cable & Wireless Communications. Bell Atlantic has sold its stake in both of these companies through issuing interest bearing notes that will be at some point in the future converted into the RBOCs' equity holding in the companies. The RBOCs has calculated a price that the shares of TCNZ and Cable & Wireless Communications will be in the future. If the price is less than that calculated then the RBOCs' earnings are not affected, but if it is more then they will pay the difference to the investors. However, Bell Atlantic is under no obligation to exchange the shares. Thus, if the shares in the two companies have appreciated beyond expectation Bell Atlantic could repay the notes in cash rather than shares and thus retain control of both investments.

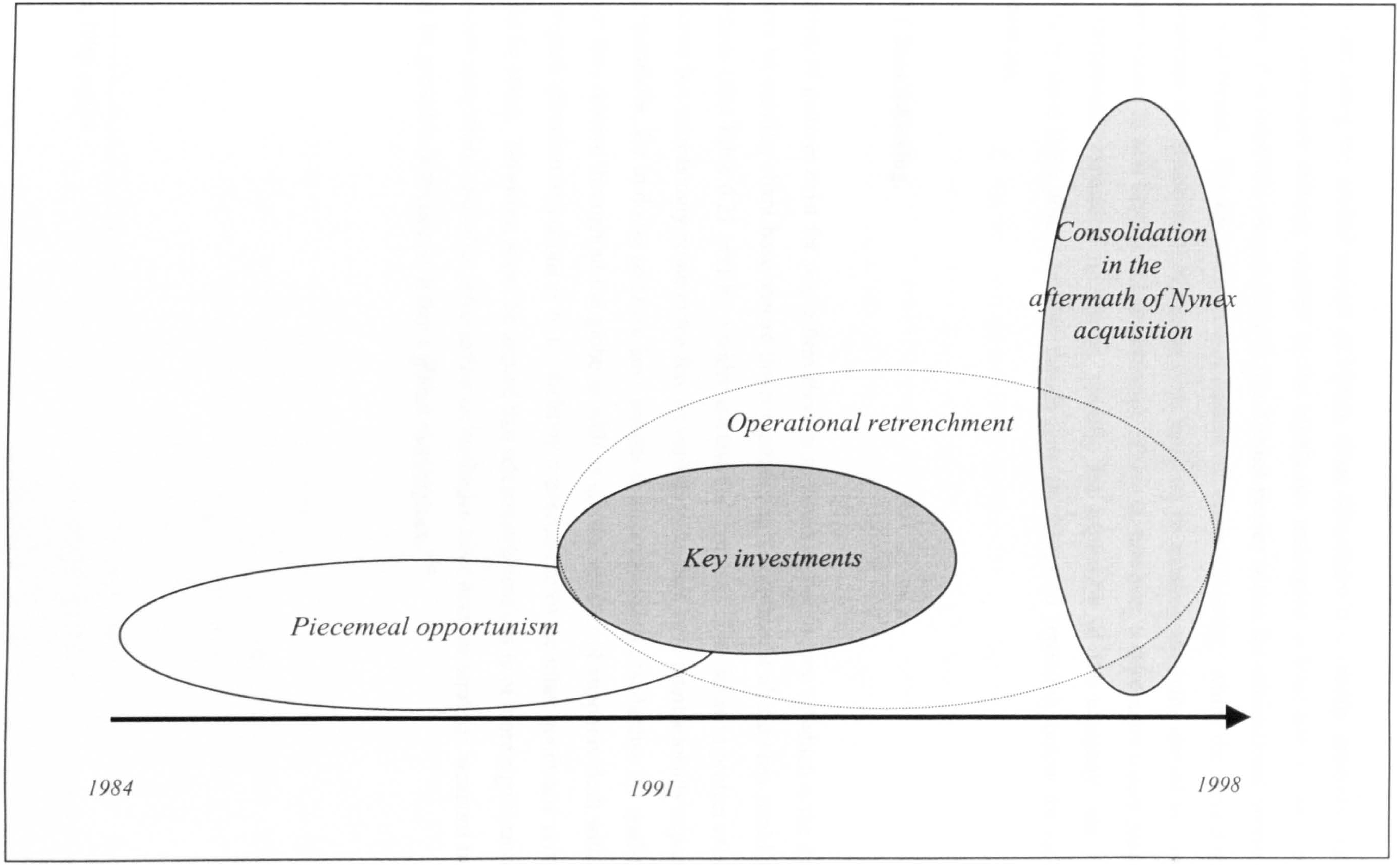
6.4.4 Conclusion.

Undoubtedly the acquisition of Nynex added not only vigour but also scale and substantial investments to the international portfolio of Bell Atlantic. In doing so, the acquisition propelled Bell Atlantic much further towards its stated 1991 goal of being a "leading international communications and information-management company."[33]

Until the acquisition of Nynex the international strategy of Bell Atlantic lacked focus. In the period immediately after divestiture the RBOCs acquired in a piecemeal fashion a diverse array of investments. However, from 1990 Bell Atlantic began to reduce its diverse array of investments and to focus its attention on a smaller number of investments. Figure 6.7 (over) attempts to depict the close relationship between the key investments and the operational retrenchment of Bell Atlantic. Over the course of its international investment activity Bell Atlantic has made three key investments: TCNZ, Iusacell and Omintel. Not only did these investments provide focus to the international strategy of the RBOCs, but also they also demonstrated the advantages of actively concentrating on fewer investments. In this respect they encouraged retrenchment, a process that continued after Bell Atlantic had merged with Nynex.

[33] Bell Atlantic, 1991, pg2.

Figure 6.7: International strategies of Bell Atlantic



6.5 NYNEX.

From examining the annual reports of Nynex since divestiture it is readily apparent that the internationalisation strategy adopted by the RBOCs has undergone at least one, if not two sea changes. It is relatively easy to identify two distinct phases within the international investment activity of Nynex. The first of these is reflective of 'client following,' whilst the second phase demonstrates the intention of Nynex to both build on its existing strengths abroad as well as acquire access to new skills and competencies. There is, however, a third more recent phase to the international expansion of Nynex, namely, the expansion of the company into Asia. Inevitably these three phases overlap though they are discussed separately below for ease of presentation.

6.5.1 Client following.

A variety of motives exist for why a firm chooses to internationalise, one of which is the desire to serve its existing client base abroad thereby protecting the custom it already has established with them. (See Table 6.21 over for a wider selection of motives). The desire to protect existing customers has increasingly come to the fore as various industries have internationally expanded their operations, for in doing so MNEs have sought to simultaneously standardise the quality of service they receive throughout the globe as well as cut the number of suppliers dealt with. In this respect telecommunications is in no different a position from the other goods and services bought by MNEs. However, it can be argued that telecommunications is of more significance as "telecommunications and other information technologies have become strategic weapons in the battle for growth and success in today's global marketplace."[34]

[34] Oh, 1996, pg714

Table 6.21: Motives for internationalisation

	Internal	External
Proactive	-managerial urge -economies of scale -economies of scope -learning	-margin opportunities -volume opportunities -serve international customers -locational advantages -monitoring competitors
Reactive	-bandwagon effect -excess stock -excess production capacity -risk spreading	-unsolicited orders -unattractive home market -retaliatory strike -political pressure

Source: Meyer, 1996, pg9.

The composition of the northeastern economy provides two sources of companies that Nynex has followed abroad: companies that are indigenous and headquartered somewhere in the region; and, those MNEs that may be of foreign parentage and have invested somewhere in the region. In the latter case the company is attempting to leverage its position as supplier within the American market to gain access to opportunities elsewhere, whilst for both the company is also attempting to forestall the possibility that others may act as telecommunications suppliers:

> ...we're approaching the international market in a unique way - through strategic partnerships with public and private sector telecommunications organisations in other countries. This gives us the opportunity to work with our counterparts globally to better serve our customers.[35]

Consequently, the strategy adopted by Nynex can be characterised by the twin features of:

- the establishment of 'points-of-presence' in foreign markets;
- and the provision of consultancy and software expertise abroad to existing and new clients. That is, become a multinational enterprise itself.

Nynex gradually increased its overseas representations, either through contacts with foreign telecommunications authorities and operators or with the opening of offices. Between 1985 and 1989 a presence or relationship was established in twelve different countries.[36] (See Table 6.22

[35] Nynex, 1987, pg24

[36] Though the client following strategy is continued after 1989 the international emphasis increasingly becomes one focused on facilities investments with their commensurately higher commitment levels.

below). This form of market contact provided Nynex a mechanism that allowed market specific knowledge to be accumulated whilst minimising the market commitment required. This would in turn reduce the psychic distance present and thus facilitate the RBOCs' ability to increase market commitment levels at some point in the future.

Table 6.22: The extent of client following internationalisation for selected years

Year	Geographical coverage
1986	Offices in Geneva and HK
1987	office added in London alliances in ROC[1], UK, France, Netherlands and Japan
1988	Alliances added in PRC[2], Spain, Italy, FDR[3], Sweden
1989	office added in Frankfurt

Notes: 1. Republic of China (Taiwan). 2 People's Republic of China. 3. Federal Republic of Germany.
Source: various annual reports, Nynex.

Complimentary developments occurred in the fields of consultancy and software. On divestiture both of these areas were developed on the back of Bell system developments - software, developed for the BOCs, was sold overseas.[37] Similarly, consultancy services, derived from the company's operational experience, were offered to foreign corporations and governments.[38] Domestically 1985 saw the acquisition of The DATA Group, whilst internationally the London based Business Intelligence Services (BIS) was bought in 1987 to provide further financial software and consultancy skills.[39]

It is necessary to ask the question whether or not these developments are in line with those intimated in the theoretical framework discussed earlier. Offices and representative relationships correspond to the strategy suggested – both are capable of accruing 'knowledge' for the company within a minimal risk environment and thus contribute to a reduction in the psychic barriers present. The purchase of Business Intelligence Services expanded the competencies possessed by the RBOCs. However, as the acquisition was in a field and market already entered it can not be regarded as radical internationalisation. Furthermore, it would appear that asset specificity has driven Nynex in its internationalisation strategy. Geographical diversification has been limited to those areas where Nynex already has some degree of experience. Unrelated diversification, such as into computer retailing, has not occurred overseas.

[37] Nynex, 1985, pg29

[38] Nynex, 1985, pg25

[39] Nynex, 1985, pg29; Nynex, 1987.

Outside of the international investments described above was the conditional option in 1986 to buy Private Transatlantic Telecommunications Systems Inc (formerly Tel-Optik, Ltd.). Through this venture Nynex would partner Cable & Wireless in the construction and operation of a trans-Atlantic fibre optic cable. The cable would link together the financial centres of London and New York, and would therefore complement Nynex's financial software investments. The trans-Atlantic link would also enable Nynex to offer telecommunications services to financial services institutions that had presence in both of the cities.

However, regulatory problems prevented the RBOCs from integrating this particular investment with its other international investments. The MFJ stipulated that the RBOCs could not provide international services. As a result the purchase was held in trust separate from Nynex whilst the RBOCs ought to have the restriction overturned. In May 1987 Nynex applied to Judge Greene to have the restriction overturned. No record can be found as to the fate of the application, though as the RBOCs were only allowed to provide international services after the passage of the 1996 Telecommunications Act it is surmised that Nynex did not receive permission to own a stake in PTAT Inc. The investment in PTAT Inc stands outside of those operational areas where Nynex possessed some experience its success was highly reliant on Cable & Wireless. Notwithstanding the investment would have provided Nynex with the opportunity to acquire new skills and competencies.

6.5.2 Skill and competence driven international investment.

The second discernible phase is based on the assertion that Nynex will "build on the data capabilities of our telecommunications operations and develop new ventures across the United States and abroad...."[40] Here Nynex sought to invest wherever it could gain new skills and competencies. Ferguson (Chairman & CEO, Nynex) singled out two of the investments detailed in Table 6.G (over):

[40] Nynex, 1989, pg4

...[f]rankly, we see many opportunities abroad that we can't pursue in this country because of the current regulatory situation. For example, we're precluded from competing in most aspects of the cable TV industry and other electronic information services markets in the United States. But in Gibraltar, we've proposed building a telecommunications network that will deliver a variety of advanced information services to homes and businesses, including cable television services. This will allow us to gain valuable insight and expertise in these areas.[41]

In the former of these Nynex entered into a joint-venture – GNC - with the Government of Gibraltar to upgrade the domestic telephone network. The stated objective was to construct a telephone network capable of delivering advanced services such as video conferencing and cable TV. Although GNC was the first to offer Nynex the opportunity to develop new skills and competencies, of greater importance was the company's participation in the UK cable TV market.

Through Nynex CableComms Nynex has been an active participant in the UK cable-TV market since 1990. By 1996 Nynex CableComms had grown to become the second largest MSO (multiple systems operator) in the market, with 16 franchises and a potential subscriber base of 2.7m homes and 167500 businesses.[42] Geographically these 16 franchises are dividable into two distinct groups, a largely contiguous patch of franchises in the north-west centred on Manchester and a scattered collection of franchises along the south-east coast of England.[43] In addition to the provision of cable TV to subscribers, Nynex CableComms also offers a range of telecommunications services. Although telecommunications services were originally envisaged as ancillary to cable TV they have become increasingly important determiner of the success of the whole company. In the financial year ending December 31st 1995 telecommunications

[41] W.C. Ferguson, cited in, Nynex, 1989, pg5

[42] Nynex CableComms, 1995.

[43] The largely contiguous northern franchises are Blackburn, Bolton, Derby, Manchester & Salford, Bury & Rochdale, Oldham & Tameside, Chester & Warrington, The Wirral and Stoke-on-Trent. The scattered southern franchises are Portsmouth, Brighton, Bromley, North & North East Surrey and Bournemouth (Nynex CableComms, 1995).

services generated half of Nynex CableComm's revenues, and had a lower subscriber churn rate than cable TV.[44]

Table 6.23: International investments, 1990 - 1993

Year	Investment	Area
1989	-GNC	-network enhancement (Gibraltar)
1990	-Nynex CableComms	-cable TV (UK)
1991	-name n/a -Nynex Info Resources	-home security (Eire) -phone directory (Gibraltar)
1992	-Tu-KA companies	-cellular billing (Japan)
1993	-STET Hellas Comms -Nynex Info Resources -FLAG[1]	-national cellular (Greece) -yellow & white pages (Czech & Slovak Republics) -international fibre optics (global)

Note: 1. Fibre optic Link Around the Globe. *Source:* Global Telecoms Business, 1994 pg19; various annual reports, Nynex.

Of the American firms that have invested in the UK cable-TV market only Nynex has done so alone. As a consequence Nynex had to rely on the inherent skills possessed, from its BOC operations and Gibraltar, as well the internal generation of appropriate new skills and competencies. It is clear from the initial investment onwards that the enhancement of Nynex's skill base, through the operation of a combined cable and telephony network, was an important, if not *the* dominant, factor for the RBOCs. Frequent comments by Nynex allude to the scale economies and customer benefit that these networks generate, and the exciting commercial opportunities that they represent, suggest this to be the case.

By entering the UK cable-TV market alone, and without prior experience of the market, Nynex's investment is an example of radical international expansion. As such it goes against the notion of international expansion being incremental in character. Market knowledge, particular in its experiential form, is vital if the company is to be able to interpret the market in which it is operating. Nynex did possess some UK market specific knowledge through the 1987 purchase of the Business Intelligence Services Group but this would not be operationally relevant. Instead the knowledge would be limited to providing only a general understanding of the market in which Nynex is investing. No detailed knowledge of the peculiarities of the UK broadcasting market would be available for the RBOCs to draw upon. This would be particularly importance given that it was predicted that cable operators would have to be innovative to gain subscribers in a market where terrestrial and satellite providers were already entrenched.

[44] Nynex CableComms, 1995.

In 1995 Nynex launched an initial public offering that reduced the RBOCs' ownership of Nynex CableComms to 71% and raised £380m of new equity to fund further network expansion. However, the stock market did not look favourably on Nynex CableComms. The company was floated in June 1995 at 137p but by January 1997 this had fallen to 104.5p. In late 1996 Nynex agreed to merge Nynex CableComms with Videotron, Bell Cablemedia and Mercury Communications to create Cable & Wireless Communications. Nynex would own 18.5% of the enlarged group, Bell Canada International 14.2% and Cable & Wireless 56.2%.

The attractions of such a merger were that it would combine the loss making and capital consuming cable companies with the profitable Mercury Communications. For its part Mercury Communications would gain access to the local loop infrastructures of the cable companies that would allow it to bypass BT and directly connect with the customer. In addition the merger also offered unhappy participants in the UK cable-TV market an exit strategy. Le Groupe Videotron used the merger to immediately exit the UK market, as did Bell Canada International shortly afterwards in May 1998. In August 1998 Bell Atlantic – the new parent company of Nynex - issued $3bn in notes exchangeable for its Cable & Wireless Communications shares.[45] This brought to an end the involvement of Nynex in the UK cable-TV market.

Events subsequent to the initial investment suggest that the combination of transferable and general market knowledge was insufficient to provide the company with a thorough understanding of the broadcasting market invested in. That is, these sources of information were incapable of overcoming the psychic distance between the host location, the UK, and the investor, Nynex. As a consequence miscalculations were made in the risk assessment/market evaluation procedure. The continued poor performance of the cable industry in general, and particularly of Nynex CableComms, would appear to offer substance to this assertion. It may not be that far from the truth to state that Nynex CableComms exemplifies the mishaps that result from international expansion based on incorrect and inaccurate market information. These combined to produce a misconceived strategy on the part of Nynex.

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[45] Bell Atlantic, 1998g.

6.5.3 Headlong into Asia - TelecomAsia et al.

In 1994 Nynex stated in future its international investment activity would be targeted towards two quite different areas:

> [o]ne was in extremely inviting regulatory climates like the UK. The other was where penetration was low and there was a need for expertise, allowing us to participate in explosive growth - like Asia.[46]

Lately it is the second type of investment, in high growth Asian markets, which has preoccupied Nynex and which has been judged by many to be a highly successful strategy. Some degree of the region's significance to Nynex is provided in the 1995 establishment of a regional investment co-ordination company - Nynex Asian Communications Group. (See Table 6.24 below).

Table 6.24: Nynex's Asian adventure

Year	Investment	Area
1991	-13.5% TelecomAsia[1]	-Thai wireline
1992	-FLAG	-global fibre link
1993	-Telecom Holding (TelecomAsia subsidiary)	-Thai cable TV franchise
1994	-Memo of understanding	-with China re network construction
1995	-est. NYNEX Asia Communications Group -23% Excelcomindo -20% Bayantel[2] -joint venture with Reliance Industries -23% OTT[3]	-co-ordination co -Indonesian GSM -Philippines operator -Indian bid for basic circles and cellular -indirect holding in TelecomAsia
1996	-1.5% UCOM	-parent of Thai cellular co TAC

Notes: 1. Partner is Charoen Pokphand Group 2. Bayan Telecommunications Holding Corporation. 3. Orient Telecom & Technology. *Source:* various annual reports, Nynex; Daiwa, 1996.

The equity investment in TelecomAsia was Nynex's first the region. Nynex explicitly states that they were "selected as the finalist for ... a two million line project based on our unique experience and success in operating complex networks in densely populated metropolitan

[46] Global Telecoms Business, 1994c, pg19

areas."[47] From this it would appear that Nynex are transferring basic operational knowledge to the overseas investment. In turn they are reliant on their partner, Charoen Pokphand Group (CPG), to provide market specific information. That is, they are relying on their partner to provide the relevant information so that the vagaries of the targeted market can be interpreted. Thus the organisational form of choice would be one, such as joint venture, where the investment can occur yet the risk involved is kept to a minimum.

In many respects the investment in TelecomAsia is typical of a company wishing to expand incrementally and minimise the risk that overseas investment will expose the company to. The use of a joint venture enables market specific knowledge to be acquired so that investment opportunities can be evaluated. Knowledge asset specificity is also playing a role in determining the investments that Nynex is making. By drawing on its domestic experiences Nynex is leveraging its existing skills and competencies to maximise the return on capital invested. Moreover, by using its existing skill base Nynex is able to quickly respond to any investment opportunity that might present itself.

Table 6.25: A burgeoning conglomerate - TelecomAsia

Company	Area
99.99% Telecom International	invests in international projects
90% UTV	cable TV services
60% RadioPhone Co	trunk radio service
99.99% Chai Tai Int'l Telecom Co	holds 14.3% investment in APT Satellite Co
19.6% Com-link Co	installs and operates fiber optic along state railways
20% FLAG	global fiber optic cable
20% Modi Network	Indian cellular venture
10% Bayantel	Philippines local and international fixed line services

Source: Daiwa, 1996.

TelecomAsia acted as a foundation for other investments in the region. These investments have built onto the company's existing diverse collection of assets (see Table 6.25 above) and have granted Nynex access to opportunities that otherwise would have been denied to it. The strategic partnership that has resulted from the initial investment in TelecomAsia is regarded by some as both fortuitous and of unique value to the company whilst it is increasing its Asia Pacific Rim investments. Throughout the Asian investments are building on the existing strengths of the

[47] Nynex, 1991, pg8

company rather than developing new ones. No other RBOCs has a strategic alliance in place covering the fast growing Asia Pacific market.

6.5.4 Conclusion.

Nynex has charted a unique course internationally. Unlike its fellow RBOCs Nynex has developed a substantial presence in Asia, which has been completed by the investments within Europe. During the initial phase of international expansion Nynex engaged in diversification, investing in cable-TV, software, directories and consulting companies. In Figure 6.8 (over) this stage in Nynex's international strategy is labelled 'client following'. However, Nynex later modified its investment strategy so that in later years the RBOCs concentrated its investments in the cable-TV, directories and infrastructure provision markets. This part of Nynex's international expansion is referred to as 'Skills and competencies' in Figure 6.8 (over). As the RBOCs shifted into this phase of its international strategy it simultaneously exited from its client following investments.

Throughout Nynex has used joint-ventures to offset the risk associated with international expansion. Furthermore, joint-ventures have also allowed Nynex to ally itself with powerful local companies that have facilitated its entry into new markets. This was particularly important in the third phase of Nynex's international strategy, namely, its expansion into Asia.

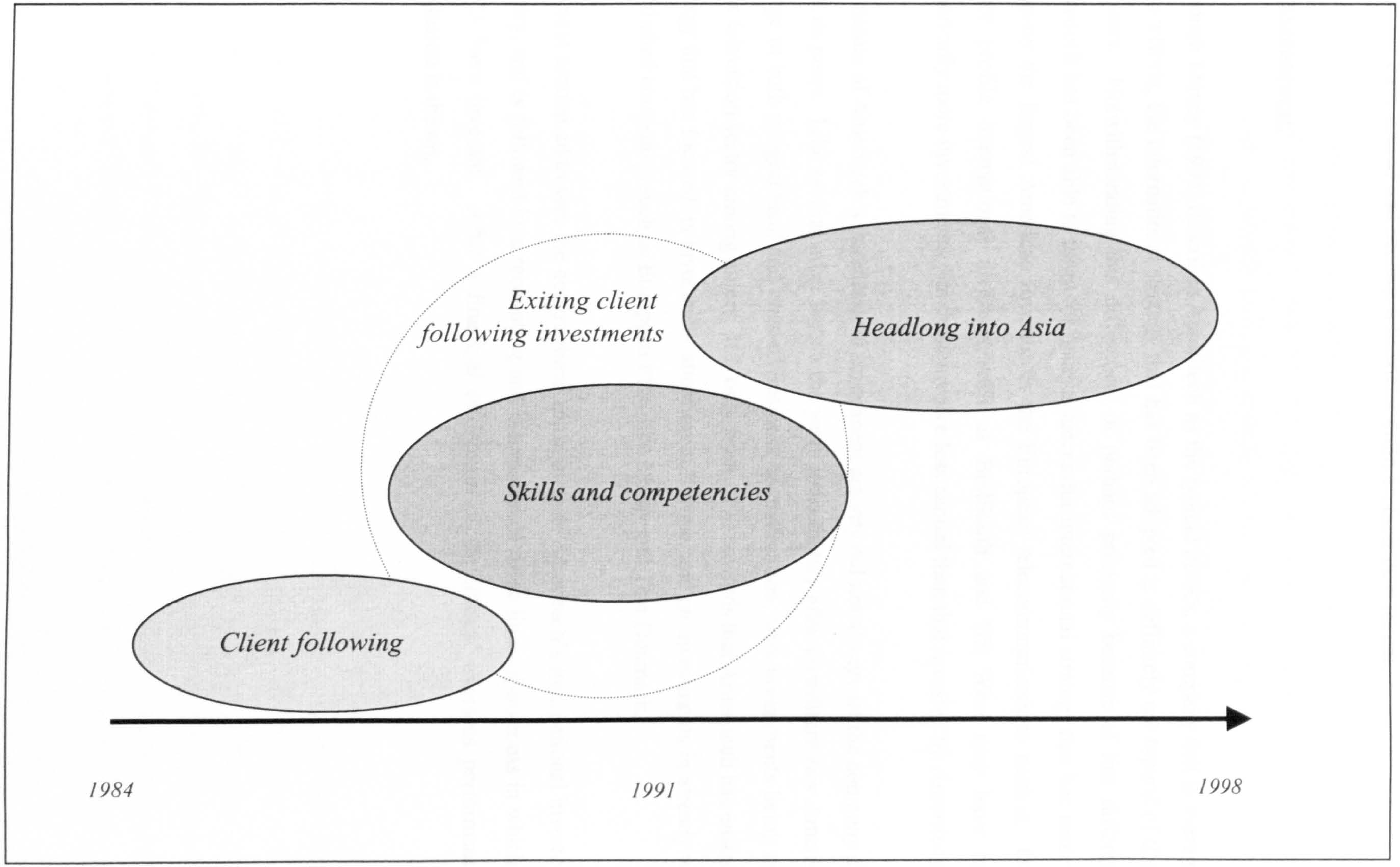
Some consider international to be Nynex's sole strength. Maney (1995) wrote that:

> ...the exception has been Nynex's moves outside the United States, mostly in the United Kingdom and Asia. At the rate it is going, Nynex should probably close up shop in New York and just run an international company.[48]

Notwithstanding such platitudes the international investments amassed by Nynex were geographically diffuse, and were spread across many different lines-of-business. No overarching vision linked together the Asian and European investments. Moreover, in the two

[48] Maney, 1995, pg91f

Figure 6.8: International strategies of Nynex



years that have passed since Nynex's acquisition by Bell Atlantic the Asian investments in particular have soured and become a financial drain on their new parent.

6.6 AMERITECH.

Although Maney (1995) describes Ameritech as the typical RBOCs, a company that is average in all its efforts, the international strategy that has been adopted is definitely not typical of that of its peers. Notwithstanding this difference, or perhaps primarily because of this difference, Ameritech has been able to forge for itself a successful international strategy that has made the company the largest American investor in the European telecommunications market. Other higher profile international investors such as BellSouth and US West may have made numerically more investments, but these involve less capital than that invested by Ameritech.

The nature of Ameritech's international investment activity did not always set the company apart from its peers. Like several other RBOCs the years immediately after divestiture saw Ameritech engage in both geographical and lines-of-business diversification, with investments being made in the television sector among others. It is only from 1990 onwards that Ameritech has enacted a strategy that has focused its investment attention in Europe, and on investments in already well-established companies such as European PTOs like Matav and Tele Denmark.

The next section addresses the geographical dimension of Ameritech's international investment activity, and is followed by a recounting and discussion of those lines-of-business in which the RBOCs have invested. After a financial evaluation of the RBOCs' overseas performance a conclusion is drawn.

6.6.1 A changing geography of international investment activity.

It has previously been shown that there are two ways in which geography within international expansion can be interpreted. The first of these takes a literal approach to international expansion and seeks to identify those countries in which Ameritech is present in one form or another. This presence may be either operationally or in the shape of a representative office. The second way in which geography can be understood is through identifying whether Ameritech has grouped its investments together in any way. That is, has the RBOCs built a network of interlocking and contiguous investments for itself?

6.6.1.1 Number of countries.

The exact determination of which countries Ameritech operates in is not as straight forward as it may appear to be. Ameritech reports the countries in which it operates in two different ways. On the one hand, the RBOCs states those countries where the company has made an investment or has a representative office. Moreover, this may be either the total number of countries where the RBOCs operates, or those new locations added during the previous year. However, on the other hand Ameritech provides a global figure for the number of countries that it operates in. This figure includes not only the countries in which Ameritech has invested, but also those where its investments operate and where its products are sold. When calculated the second way the number of countries where Ameritech has an investment is considerably larger than under the first method. Ameritech employs both of the above methods when stating the geographical extent of its international expansion. Moreover, they are employed interchangeably and not in parallel to one another.

Consequently, the number of countries in which Ameritech operates displays considerable fluctuation. Table 6.26 (over) demonstrates that from 1990 onwards the number of countries that Ameritech states it operates in varies from between three and forty. That the number displays considerable variation could be taken as suggesting that Ameritech has undergone periods of rapid expansion that were followed by de-internationalisation. De-internationalisation may have occurred because the investment was short-term in nature, or because it had not lived up to expectations. That is, they failed as commercially viable propositions. However, if the number of countries hosting inward investment is looked at then it can be seen that Ameritech's international expansion has not been a failure. The number of countries in which the RBOCs operates has steadily increased since 1990 to reach eight by the end of 1998.

Table 6.26: The geographical expansion of Ameritech

Year	Operational or representative presence claimed in:	Nos. of countries	Nos. of countries with inward investment
1990	Japan, New Zealand, Italy, France, The Netherlands, Denmark, Spain, Germany.	8	2
1991	Australia, Canada, France, Germany, Italy, The Netherlands, Spain, Switzerland, Sweden, UK, Japan, Taiwan, New Zealand, Venezuela, Chile, Columbia, Poland	17	2
1992	Hong Kong, Brazil, Poland, Norway	4	3
1993	South Korea, Norway, Hungary,	3	5
1994	Hungary, New Zealand, Poland, Norway, Germany, China, Czech Republic, Portugal	8	5
1995	China, Belgium, Poland, Norway, New Zealand, Germany, Austria, Switzerland	8	6
1996	40 countries	40	6
1997	Denmark, Belgium, Hungary, Norway, Canada, New Zealand and 10 other countries	16	8
1998	15 countries	15	8

Source: various annual reports, Ameritech; Wasden, 1993.

6.6.1.2 Increasing commitment towards Europe.

By taking just those countries where Ameritech has made an inward investment it is possible to identify eleven investments in all that are spread across a total of nine countries. Geographically these eleven investments can be divided into two groups: European investments and non-European investments. Those investments that fall in the former category are detailed in Table 6.27 (over), whilst those that fall in tot he latter category are recounted in Table 6.28 (over).

Table 6.27: The European investments of Ameritech

Country	Investment	Details
Belgium	Belgacom S.A.	17.5% PTO 1996
Denmark	Tele Danmark	42% PTO 1997
Germany	Wer liefert was?	100% directory 1990
Hungary	MagyarCom	33.5% PTO 1993
Norway	NetCom GSM	19.7% cellular 1993
Poland	Polska Telefonia Komorkowa	24.5% cellular 1992

Source: various annual reports, Ameritech; Ameritech, 1998e; Wasden, 1993.

Table 6.28: The non-European investments of Ameritech

Country	Investment	Details
Canada	Cantel Cross-Global Alarms	19.9% cellular 1984 100% security monitoring 1997
China	N/A	N/A Cellular & fixed 1995
New Zealand	TCNZ Sky Network Television Ltd	24%% PTO 1990 12.5% TV 1992

Source: various annual reports, Ameritech; Ameritech, 1998e; Wasden, 1993.

Of the non-European investments only one, Cross-Global Alarms in Canada, remains within the international investment portfolio of Ameritech. Ameritech has divested all of the other non-European investments. Interestingly Ameritech does not include Cross-Global Alarms in its foreign investments, but instead incorporates the company into its in-region lines-of-business. In contrast, all but one of the European investments remains within the international portfolio of Ameritech. Thus, it is clear that over time that Ameritech has progressively switched its investment attention towards Europe and the expense of other geographic areas. In this respect Ameritech is unique among the RBOCs in the degree to which it has concentrated its investment attention on just one region.

Two explanations provide a rationale for why Ameritech has ignored other geographic regions to concentrate on Europe. The first of these is the increasing importance of overseas markets to American companies, not only as a source of exports but as a productive base as well. The FDI that has resulted is primarily located within Japan and the EU. American companies from the in-region market have European investments and Ameritech is following them abroad to provide 'one stop' service provision and safe guard its in-region business. Secondly, Ameritech has adopted what it calls a "focused and disciplined" approach to the expansion of its out-region business. The host locations of inward investment must satisfy a series of criteria, and offer the possibility for future growth. Notebaert (Chairman & CEO, Ameritech) writes that:

> [w]e have taken a very disciplined approach as we evaluate international opportunities. We use a number of quantifiable criteria, including political and economic stability, economic activity and education levels that support advanced communications services. Many European countries meet these criteria.[49]

Notebaert continues:

> Equally important, the European communications market offers tremendous opportunities. It's projected to grow 60% over the next five years. And beginning this year [1998] changing regulations have opened European markets to competition, causing more and more companies to seek experienced, skilled partners such as Ameritech.[50]

Thus, Ameritech has switched its investment activity towards Europe due to a combination of economic and political stability factors and potential telecommunications growth. That Ameritech has used a set of criteria that elevate stability can be taken as being indicative of the RBOCs adopting a cautious approach to its overseas expansion plans.

The European investments identified in Table 6.27 (above) are not contiguous. The PTOs investments are separated from one another by WLW (Wer liefert was?) in Germany. Therefore, it can not be argued that Ameritech has undertaken the investments to gain scale economies or to create a pan-European network. A different picture is presented if the indirect investments of Ameritech are included in the analysis. Table 6.29 (below) shows Wer liefert was?, Belgacom and Tele Danmark all operate outside their 'home' national markets and that when these are included the scale of Ameritech's European operations is considerably expanded. From having investments in just five countries the inclusion of the indirect investments expands the total to fifteen. Moreover, these investments are contiguous and form a broad swathe across Europe from France to Poland and include three out of the four Scadinavian countries.

[49] Ameritech, 1997, pg21.

[50] Ameritech, 1997, pg21.

Table 6.29: Expanding the European presence of Ameritech: indirect investments

	Direct investment		
	Wer liefert was?	Belgacom	Tele Danmark
Indirect investments	• Throughout Europe	• France • Russia • Netherlands	• Belgium • Lithuania • Austria • Czech Republic • Russia • Hungary • Sweden • Poland • Netherlands • Switzerland • Germany • Ukraine

Source: Ameritech, 1998d.

However, it is perhaps significant that Ameritech gives no indication of how co-ordinated these investments are. It is unlikely that any co-ordination occurs at the level of the indirect investments. One reason for a lack of co-ordination is that Ameritech would have to convince its partners in Matav and Belgacom that the co-ordination was in their interest as well. Whilst this may be possible for Belgacom, any expansion by Matav would bring the company into conflict with either Deutsche Telekom or companies associated with Ameritech. Consequently, it is felt that their inclusion by Ameritech is an example of 'boosterism' and a need to justify its multi-billion dollar investments rather than a reflection of actual operational scope.

6.6.2 The operational focus of Ameritech.

Ameritech has not overtly used its international investment activity to gain access to new skills and competencies, and especially those prohibited by the domestic regulatory framework. Instead, Ameritech has sought to exploit its domestic developed skills and competencies overseas. As detailed in the 1995 Annual Report the investment ethos of Ameritech is to "contribute capital and expertise to grow companies around the world." Notwithstanding this focus on exploiting already existing skills and competencies, Ameritech has come into contact with those parts of the telecommunications industry that it cannot enter domestically. For example, one of its investments, TCNZ, participants in the manufacture of telecommunications equipment as well as international long distance services. Both of these areas are outside the operational remit of Ameritech and a waiver from the lines-of-business restriction limitations was required before the investment could be finalised.

6.6.2.1 Public telephone operators.

Perhaps more than anything else the successive investments in PTOs distinguish Ameritech from its fellow RBOCs. Since making its first such investment in 1990 when it acquired 24.5% of TCNZ Ameritech has expanded its portfolio of such investments so that at its height it contained four PTOs. (See Table 6.30 below for details of the four PTOs investments made). Although each of these investments is the same in that they are all PTOs, and thus provide a wide range of telecommunications services within the national market, they are in fact dissimilar from one another.

Table 6.31: PTOs investments of Ameritech

	Details			
	Services provided	Nos. lines	Nos. cellular 000s	Other types of subscriber
Belgacom (Belgium)	Local phone, cellular, long-distance, security services.	5.1m	1,200	-
Tele Danmark (Denmark)	Local phone, cellular, long-distance, security services, directories, cable-TV.	3.5m	995	812,000 cable-TV
MATAV (Hungary)	Local phone, cellular, long-distance, directories, cable-TV.	2.7m	640	-
TCNZ (New Zealand)	Local phone, long distance, cellular, satellite-TV.	1.8m	403	-

Source: Ameritech, 1996b, pg22; Ameritech 1998e, pg18f.

The first of the PTOs that Ameritech invested in was Telecom Corporation of New Zealand (TCNZ). In 1990 Ameritech joined with Bell Atlantic and two local companies to acquire control of TCNZ for $2.5bn. L. Rutigliano (executive vice-president of corporate strategy, Ameritech) described the investment as follows:

> We feel the acquisition will enhance long term shareholder value. Telecom NZ is also a good match for Ameritech's capabilities and gives us the opportunity to gain expertise in businesses we currently are restricted from entering in the United States.[51]

Under the terms of the privatisation agreement the RBOCs were required to reduce their combined holdings of TCNZ equity to less than 50% within 3 years. This was achieved through the sale of 40.1% of the equity to the public. The result was that each of the RBOCs owned 24.9%, the public 40.1% and Fay, Richwhite Holdings and Freightways Holdings Ltd (Kiwis) 10% between them.

The investment was managed through a local subsidiary headed by an ex-Bell Atlantic employee. The RBOCs focused their involvement towards two related areas: network modernisation and productivity improvements. To this end Ameritech combined regional subsidiaries into a single subsidiary covering the entire country, and reduced employee numbers. By 1997 the workforce of TCNZ had been reduced by nearly half.

The second privatisation issue that Ameritech invested in was Matav, the Hungarian PTOs. The motivation for this privatisation, and that of TCNZ, was to attract inward investment so that infrastructure investments could be made and service quality improved. In December 1993 Ameritech joined with Deutsche Telekom to acquire a minority 35% interest in Matav, though in December 1995 this was increased to 67%. At the time of their original investment the inward investors undertook to double the number of lines in service by 2000 so that the 800000 backlog of customers waiting for lines would be eliminated.[52] By 1997 Matav had installed sufficient access lines to eliminate the waiting list, and had improved operating efficiency through the elimination of more than fifty subsidiaries and reducing the company's headcount.

Belgacom is the second type of PTOs that Ameritech has invested in. Although the PTOs has been subject to some competitive pressures the degree and pace to which this had occurred is less than in several other markets within Europe, yet Belgium committed itself to pan-EU liberalisation from the start of January 1998. Thus, a primary objective of the Ameritech led

[51] Ameritech, 1990, pg8.

[52] Ameritech, 1993, pg33.

consortium has been to improve the operational efficiency prior to liberalisation and increase the pace of new service innovation. In other words, to ensure that Belgacom can rise to the competitive challenge brought by liberalisation. As outlined by Ameritech:

> [w]e are working with Belgacom to rapidly streamline operations, lower costs and raise performance standards. By the end of 1998, its work force will be reduced by nearly one-fourth. In addition, Belgacom is centralising warehousing operations, consolidating 80 sites in one location in two years.[53]

The most recent PTOs investment made by Ameritech is that of Tele Danmark. In January 1998 Ameritech paid $3.1bn for 42.4% of the Danish PTOs. Unlike Belgium, Denmark began the liberalisation of its telecommunications markets in July 1996 so the investment cannot be depicted in terms of improving the company's competitiveness. Instead two contradictory motivations can be proposed. The first of these is that Ameritech will improve the value of Tele Danmark through assisting the company to more fully exploit its network. For example, by improving the penetration of enhanced network services such as Caller ID. The second possible explanation is that through the acquisition Ameritech itself is gaining experience of a competitive market, and access to the expertise necessary to counter the competitive threat arising from new entrants.

6.6.2.2 Other lines-of-business.

In addition to the investments in PTOs Ameritech has also acquired stakes in directory publishing, cellular and wireline companies. It shall be shown that not all of these investments have been as successful as those outlined above. The result is that the international portfolio is dominated more by PTOs investments than maybe was originally the intention.

In 1990 Ameritech acquired Wer liefert was? ("who sells what?"). At the time of acquisition the company produced and distributed printed business directories in Germany and Austria, however, this has subsequently changed. Since Ameritech acquired the company its operational

[53] Ameritech, 1997d, pg18.

scope has increased. In 1991 Wer liefert was? expanded into Switzerland, another German speaking country. Between 1991 and 1994 Wer liefert was? added three new and non-Germanic markets, namely, the Benelux countries. The steady expansion into new European markets continued so that by 1997 the company was operational in ten European countries in all.[54] The company was, however, absent from three of the largest European markets, that is, from the United Kingdom, France and Italy. In 1994 Wer liefert was? began to move its directories into the electronic media. Initially this was achieved through the launch of a CD-ROM version of the directories, though more recently in 1997 the directories have also been placed on the WWW. By producing six different language versions of the directories, that include French, the company has been able to expand its geographical scope.

Twice since 1984 Ameritech has exited from international investments whilst they have been operationally. The first of these was in China, whilst the second was in Poland. In late 1995 Ameritech announced that it has formed a strategic alliance with ChinaCom to assist with telecommunications infrastructure development. Significantly, Ameritech would actually own part of the infrastructure. Until this point no foreign company had actually been granted permission to own the infrastructure that it developed. To further developments in the Chinese market Ameritech also opened a representative office in Beijing. However, within a year the joint-venture had collapsed and Ameritech had retreated from the market. The unstable nature of the Chinese telecommunications sector, where different ministries compete against one another, resulted in the concession to allow Ameritech to own the infrastructure being withdrawn.

The other international failure suffered by Ameritech also started promisingly as well. In partnership with France Telecom Ameritech acquired 49% of Polska Telefonia Komorkowa, a Polish cellular company. The Polish PTOs owned the remaining 51% of Polska Telefonia Komorkowa. The service debuted in the Warsaw region in June 1992 under the Centertel brand, and expanded nation wide in 1994. From the onset, reflecting pent-up demand for telecommunications services, the company enjoyed considerable growth. Subscribers grew

[54] These countries are Germany, Austria, Belgium, The Netherlands, Switzerland, Luxembourg, Slovenia, Slovakia, Croatia and the Czech Republic.

190% in 1994 to 39,000, and 93% in 1995.[55] However, legislation was passed that prevented Centertel from being awarded a digital licence. No company, partially owned by a state agency such as the PTOs, could not participate in the auctioning of national digital cellular licences. Both France Telecom and Ameritech complained at this limitation, and after receiving no reprieve Ameritech sold its stake in 1996.

6.6.2.3 Organisational aspects of international investment activity.

According to the 1994 Annual Report Ameritech intends to exploit its operating skills and competencies overseas through three different initiatives: privatisation issues, alliances with partners and strategic investments in new markets.[56] With only two exceptions Ameritech has expanded its overseas presence through the use of collaborative ventures with other companies. According to the 1998 Annual Report this has allowed Ameritech to minimise the risks inherent to overseas investments.[57] Moreover, Ameritech asserts that the partnerships have allowed the RBOCs to learn form the experience of other companies. There is, however, no evidence to suggest that this has occurred.

The two exceptions are Wer liefert was and Tele Danmark. Given the small size of the former of these investments the risk associated with the investment is comparatively insignificant. Sharply contrasting with Wer liefert was? is the latter investment, Tele Danmark. This is the single largest investment made by Ameritech and consequently exposes the RBOCs to significant risks. In the same way that the appreciation of Tele Danmark stock has fuelled the growth in value of the international portfolio, any depreciation would have a proportionately large impact on the value of the portfolio. However, Ameritech argues that the risk associated with this investment is offset by the significant managerial control that the RBOCs has over Tele Danmark. Anecdotal evidence suggests that in addition to gaining six board members Ameritech has strengthened its control over the PTOs through transferring 'domestic' employees to Denmark. Again there are two ways to interpret such a rotation of employees. The American employees

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[55] Ameritech, 1994, pg23; Ameritech, 1995, pg19.

[56] Ameritech, 1994, pg21.

[57] Ameritech, 1998d, pg21.

will help implant the 'Ameritech' ethos on Tele Danmark, but at the same time they will also learn how to operate a telecommunications company in a competitive environment.

6.6.3 Financial evaluation.

Table 6.31 (below) illustrates that Ameritech has enjoyed substantial financial success overseas. The 1998 value of the investments is far in excess of the cost of the various investments. However, on closer examination the table reveals that the appreciation in valuation has been driven by the PTOs minority investments and in particular by Tele Danmark.

Table 6.31: Evaluating financially Ameritech's investments

	Details				
Investment	Year	% equity	Initial investment	Value 1997	Value 1998
TCNZ	1990	25.0	$1200m	$2000m[1]	N/A
Matav	1993	29.8	$843m	$1610m	$1845m
Belgacom	1996	17.5	$865m	$1010m	$1800m
WLW	1990	100	N/A	$80m	$100m
NetCom	1993	19.7	N/A	$230m	$255m
Tele Danmark	1997	42.4	$3100m	$3150m	$6110m
Total portfolio value:			$6008m	$8080m	$10110m

Note: The approximate value of the retained stake that was subsequently realised through the 1998 open market stock sale. Ameritech was able to recover its initial $1.2bn investment from a combination of the sale of equity in accordance with the original terms of privatisation as well as dividend proceeds. *Source:* Ameritech, 1997c, pg19; Ameritech, 1998c, pg18.

TCNZ provides an apt example of how the PTOs investments have financially been very rewarding for Ameritech. Ameritech and Bell Atlantic collectively paid $2.5bn for their combined 64% of TCNZ, and through stock sales in 1993 generated a $24.7m profit above restructuring costs.[58] These restructuring costs were associated with the grouping of four regional subsidiaries into a single company, which contributed to boosted efficiencies and improved profitability in 1994.[59] Between 1990 and 1997 the value of TCNZ shares tripled, so that by the time Ameritech and Bell Atlantic sold their equity in early 1998 they were able to make a considerable profit on top of their original investment. Bell Atlantic raised $2.455bn

[58] Ameritech, 1993, pg16.

[59] Ameritech, 1997b.

from the sale, nearly double its initial investment whilst Ameritech stated an after-tax gain of $1bn.[60]

Of the other three PTOs investments two, Matav and Tele Danmark, are public companies whilst Belgacom is privately owned by the investment consortium of Tele Danmark, Singapore Telecom, Kreditbank, Credit Comminal and SOFINA and the Belgan government. In 1997 Matav listed 27% of its equity on the New York and Budapest stock markets. This enabled Ameritech to sell part of its holding in the company, realising $146m in all. The stock market valued the remaining 30% held at $1.6bn; nearly double the $843m that Ameritech had paid for its original 33.5% stake.[61] As yet Ameritech has not sold any of its investment in Tele Danmark on the open stock market, so the gains are paper rather than actual. Nevertheless, a near doubling of the investment within the space of just a year is a considerable gain.

The information available to evaluate the financial contribution of the non-PTOs is limited. However, given that WLW and NetCom account for less than 3% of the overall value attributed the international portfolio it is surmised that the earnings contribution of these two companies is equally small. In other words, these two companies are financially peripheral to the other PTOs investments. This is borne out in the 1998 accounts of Ameritech where the company states that the income from affiliates is primarily that from Tele Danmark, Belgacom and Matav. No mention is made of the other international investments owned by Ameritech.

6.6.4 Conclusion.

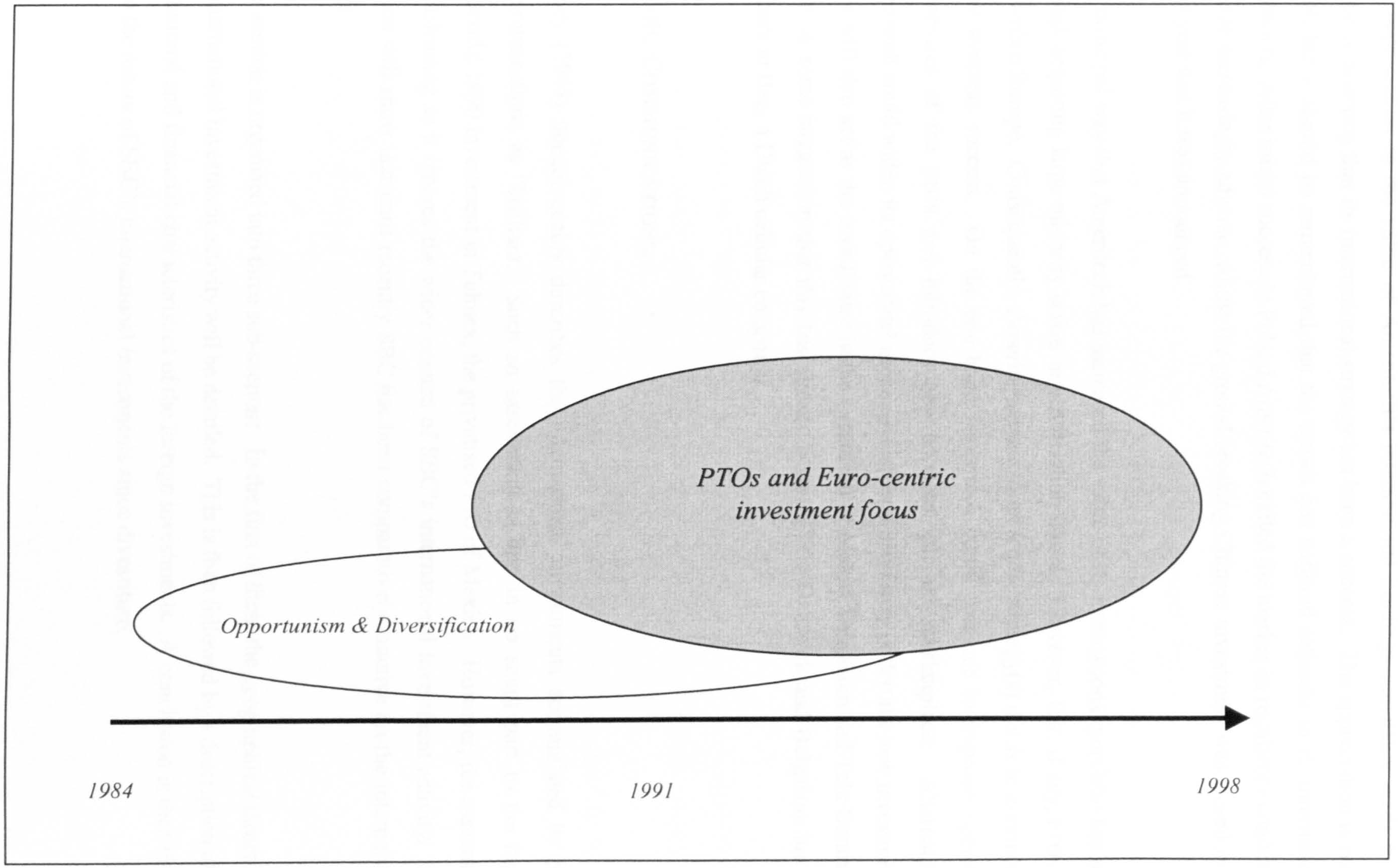
The international investment strategy of Ameritech is bifurcated. Initially the RBOCs enacted an international strategy that was characterized by a global perspective, opportunism and diversification, but from 1989 onwards Ameritech changed its focus to concentrate on PTOs investments in Europe. (This change is shown in Figure 6.9 over).

Through shifting the focus of its international investment activity from global to Euro-centric Ameritech has enacted a unique strategy. In doing so the RBOCs is taking a course of action that

[60] Ameritech, 1998a.

[61] Ameritech, 1997d, pg41.

Figure 6.9: International strategies of Ameritech



stands in contradiction to its peers and firmly refutes the assessment made by Maney (1995). The appreciation in the value of Ameritech's international holdings inevitably leads to the company asserting that its international strategy has been a success. The appreciation is not in doubt, but it should be remembered that the RBOCs has suffered setbacks in its international expansion. After initial success in Poland Ameritech exited the marker as regulatory conditions became increasingly adverse, whilst the ground breaking Chinese investment was closed in the same year that it was announced.

The principal way that Ameritech has increased the value of its international portfolio has been through acquiring large minority stakes in privatisation issues. However, few, if any, PTOs are left within Europe. Consequently, Ameritech must adopt a new strategy(s) if it is to continue to enjoy overseas success. On the one hand Ameritech could continue to improve operating efficiencies of the PTOs and introduce new services into the marketplace. Alternatively Ameritech could widen its operational scope. Ameritech itself may undertake new investments, but it will also act as the coordinator in the expansion of Matav, Belgacom and Tele Danmark. There is some suggestion that this has already begun. Tele Danmark and Belgacom are the partners in Ben, a Dutch cellular company.

6.7 SBC Communications.

Maney (1995) unequivocably describes the international investments accumulated by SBC Communications as "brilliant." Such an assessment is due in no small part to the highly successful 1990 investment in Telmex, the privatised PTO of Mexico. However, the assessment is misleading as it ignores the wider context of SBC's international investment activity. This section will show that until recently SBC has been comparatively inactive on the international stage.

This section is organised into three sub-sections. In the first of these the geographical dimension of international investment activity will be detailed. This is then followed by a description of the operational and financial characteristics of the foreign investments. A conclusion is then drawn as to the nature of SBC's international investments since divestiture.

6.7.1 Geographical criteria.

There are two ways in which the geographical dimension of SBC's international investment activity can be examined. The first of these adopts a literal approach to internationalisation and details those countries in which SBC has made an investment. This provides a longitudinal dynamic to SBC's foreign expansion. The second approach looks for patterns in the geography of SBC's international investments. The investments are grouped depending on whether they are in the same country, or close geographical proximity. Both approaches are presented here.

6.7.1.1 Number of countries.

Table 6.11 (over) details the geographical expansion of SBC International since it undertook its first international investment in 1984. The table demonstrates that although international expansion has ebbed and flowed the overall trend has been one of expansion. The international expansion of SBC International that is shown can be divided into three distinctive periods:

1. From divestiture to 1988 (inclusive). In this period the company's internationalisation was a gradual process so that by 1988 operations could be found in 4 different countries.

2. In contrast with the previous gradual increase in internationalisation the period from 1989 to 1994 (inclusive) demonstrates a dramatic growth in the number of countries that the company operated in. By 1994 SBC International operated in a total of 26 different countries.

3. However, from 1995 onwards the geographical expansion of SBC International has been curtailed. In 1997 SBC operated in only 11 countries.

Table 6.32: The geographical expansion of SBC International

Year	Geographical expansion
1984	Australia
1986	West Germany
1987	International operations claimed in: UK, Canada and South Korea.
1988	Israel, Sweden
1989	International presence claimed in: Australia, Canada, Israel, UK, West Germany and throughout the South Pacific.
1990	International presence stated as: Philippines, Australia, NZ, Fiji, Samoa, Cook Islands, Alaska, Hawaii, Mexico, Guatemala, Costa Rica, Brazil, Argentina, Uruguay, UK, Canada, Sri Lanka, Israel, plus two more.[1]
1991	International presence stated as: Argentina, Australia, Brazil, Canada, Caribbean, Costa Rica, Ecuador, Egypt, El Salvador, Fiji, France, Guatemala, Israel, Kuwait, Malta, Mexico, NZ, Panama, Philippines, Samoa, Singapore, Sri Lanka, Thailand, Uruguay, UK, US
1994	Chile
1995	International presence stated as: France, Chile, RSA, ROK, Mexico, Chile, UK Mexico, Australia
1997	Switzerland, Taiwan
1998	

Note: 1. No reference can be found which explicitly identifies which two countries these are. However it is likely than they are Algeria and Bangladesh. *Source:* various annual reports, SBC Communications.

No explicit explanation is provided by corporate publications to explain why SBC's international scope underwent a reversal in the mid-1990s. Even so this it is possible to suggest that the decline occurred due to the decision of SBC International to withdrawal from the sale of telecommunications equipment overseas. In 1984 the company acquired the rights to Freedom Phones which it distributed initially in-region, subsequently out-region and eventually internationally from 1987 when it established Southwestern Bell Telecom (UK) Ltd. In 1989 the company expanded the international distribution of Freedom Phones to the South Pacific and then further afield so that by 1991 sales occurred in 16 different countries.[62] Beginning in 1992 SBC International reversed this policy, and, for example, sold the UK equipment subsidiary in 1992.[63] Assuming this, and the reorganisation of the US equipment business are symptomatic, and are also replicated elsewhere then the decline in the number of countries that SBC operated in can be accounted for.

Judging the success of international expansion solely by the number of countries it can be argued that SBC has been relatively successful in its efforts to expand overseas. However, at this point

[62] Southwestern Bell, 1989, pg2; Southwestern Bell, 1991, pg19.

[63] Global Telecoms Business, 1994e, pg21

it is necessary to add a caveat. If the number of countries is the sole evaluatory criteria, then the decline in international presence experienced by SBC suggests that the success of the internationalisation undertaken is in the process of being reversed. Other criteria are necessary to ascertain the success of the SBC's international investment activity.

6.7.1.2 Geographical clustering.

The information presented in Table 6.32 (above) can be restructured so that the geographical proximity of investments, whether they are clustered near one another, can be shown. From this it is possible to identify three clusters among the investments that SBC has made since 1984. These clusters are: Asia / Pacific Rim, Europe and Latin America. Below Table 6.33 shows the Asia / Pacific Rim, Table 6,34 the European cluster and Table 6.35 the Latin American cluster. Those investments that are outside of these three geographical clusters are shown in Table 6.36.

Chronologically and geographically the investments entered into by SBC International are diverse. Investments have been made from 1984 onwards and across six different continents. Furthermore, the pace at which new investments have been entered into has quickened so that 1995-1997 accounts for 11 out of the 19 investments made since 1984. Nearly one third of all the investments were made in just one year, 1997. Of the 11 investments Asia / Pacific Rim has received 3 (see Table 6.33), Europe 5 (see Table 6.34), Latin America 1 (see Table 6.35) and South Africa 2 (see Table 6.36).

Table 6.33: Asia / Pacific Rim geographical cluster

Country	Investment	Details
Australia	-Australia Directory Services -Pacific Access	-50% yellow pages, 1984 -50% directory advertising, 1991
China	-China-United States Cable Network	-c10% undersea cable, 1997
Korea	-Shinsegi Mobile Communications Company Ltd	-7.8% nationwide cellular, 1995 (operational 1996)
Taiwan	-TransAsia Telecommunications	-20% southern region cellular, 1997

Source: SBC Communications Inc., 1997a; Global Telecoms Business, 1994c; SBC Communications Inc., 1997a; Wasden, 1993.

Table 6.34: European geographical cluster

Country	Investment	Details
France	-Societe Francaise de Radiotelephone (SFR)[1] -Cegetel[2]	-10% (indirect), 1994 -15% (indirect), 1996
Israel	-Aurec -AMDOCS -Golden Channels -Golden Lines International Telecommunications Services Ltd	-50% cable TV, yellow pages, advertising, 1985 -50% directory software, 1985 -42.7%, cable TV, 1996 -22%, long distance and international, 1997
Switzerland	-Diax	-40%, full service provider, 1997
UK	-Southwestern Bell Telecom (UK) Ltd[3] -SBC CableComms[4] -TeleWest	-100% equipment, 1987 -50% cable TV, 1992 -15% cable TV, 1995

Notes: 1 The holding in SFR along with cash was contributed to Cegetel in return for an equity stake in that company. 2 The stake in Cegetel is indirectly held through a holding company jointly owned 30:70 with Compagnie Generale Des Eaux (CGE). 3 Sold in 1992. 4 Initially a wholly owned subsidiary. Equity was sold to Cox until the company became an equal partnership. In turn merged into TeleWest in return for a minority equity stake. *Source:* SBC Communications Inc., 1997a; Global Telecoms Business, 1994c; SBC Communications Inc., 1997a; Wasden, 1993.

Investment clustering can be either between (inter) or within (intra) countries. The European cluster (Table 6.34) is the only one to display inter-country clustering. Three national markets are linked together by virtue of their common borders: France, UK and Switzerland though the ability to exploit any geographical or other economies of scale between these markets is limited. Moreover, not only are the UK and French investments in different segments of the industry but Switzerland is also outside of the European Union.

Intra-country clustering represents a deepening of the commitment displayed by SBC International to the given location and appears to suggest that the initial investment has acted as a market intelligence / familiarisation mechanism. Once the initial investment has been made the company is able to collect market specific information that was previously unavailable. This enables the RBOCs to access the commitment that it has made, and so ascertain whether or not subsequent investments are warranted.

On more than one occasion it is possible to identify a situation whereby the initial investment in a country has been followed by a subsequent increase or deepening of commitment by SBC International. The three occasions when this has occurred are Australia, Israel and South Africa.

SBC International has been present in the Israeli market for more than a decade and in conjunction with initially local, and subsequently international partners the company has been able to develop wide-ranging business interests.

In addition France, South Korea and the UK have all played host to more than one investment from SBC International. In the former case the company's investment in SFR enabled it to ascertain whether the subsequent commitment that the investment in Cegetel would require was warranted. This investment then became part of Cegetel.

Table 6.35: Latin American geographical cluster

Country	Investment	Details
Mexico	-Telmex	-10% former PTO, 1990
Chile	-VTR S.A. -CNT-Telefonica del Sur -VTR Telecable -Startel	-49.3% holding company, 1995 -local, national & international long distance -cable TV -wireless (Santiago)

Source: SBC Communications Inc., 1997a; Global Telecoms Business, 1994c; SBC Communications Inc., 1997a; Wasden, 1993.

Table 6.36: Other international investments

Country	Investment	Details
RSA	-MTN -Thintana Communications -Telkom South Africa	-15.5% cellular, 1995 -60% consortium -30% former PTO, 1997

Source: SBC Communications Inc., 1997a; Global Telecoms Business, 1994c; SBC Communications Inc., 1997a; Wasden, 1993.

However, in the case of both the UK and South Korea the previous investments were discontinued when the current commitments were being evaluated and entered into. In the case of the UK SBC International sold Southwestern Bell Telecom (UK) Ltd in the same year, 1992, that SBC CableComms began operating. With respect to South Korea, SBC's only other experience of the market prior to Shinsegi Mobile Communications was the publication of the Olympic guidebook in 1988. Even so, it is surmised that the experiences and information gained from the company's previous investments in both of these countries will have played some role in the process of evaluating whether or not subsequent investment should be undertaken.

Alluded to above, but not explicitly stated, has been the key role played by partnerships in the international expansion of SBC. As stated by SBC soon after the international expansion began:

... we're beginning to establish key relationships in strategic parts of the world where we can learn, form alliances and develop new technologies and new markets.[64]

The same theme is reiterated later on by SBC:

[t]hrough strategic acquisitions and joint-ventures, SBC is entering high-growth territories and positioning itself for continued expansion in international markets.[65]

It is clear that partnerships - joint ventures and key relationships - are central to the strategy of SBC International. Of the numerous investments made only one, Southwestern Bell Telecom (UK) Ltd, was a wholly owned subsidiary and this failed to meet expectations and was subsequently sold. All of the other commitments have been made in association with either local or international companies. The international investments made can be divided into three groups depending on the nature of the partners. International investments have either been made in conjunction with local partners (11/19), international partners (3/19) or some combination of the aforementioned (4/19) as shown below in Table 6.37.

Table 6.37: Investment grouped by type of partner

Type of partner	Investment	
Local partners	• Aurec • AMDOCS • Golden Channels • Shinsegi Mobile Comms • Australia Directory Services	• Pacific Access • MTN • Diax • VTR • TransAsia Telecommunications • SFR
International partners	• SBC CableComms • TeleWest • Thinatana Communications	
Both local and international partners	• Telmex • Cegetel	• China-United States Cable Network • Golden Lines

Source: various annual reports, SBC Communications; SBC Communications, 1997a & 1998b.

[64] Southwestern Bell, 1988, pg24.

[65] SBC Communications, 1997a.

The preference for local partners arises due to the ability of these companies to supply local market information. Not only does this enable SBC International to acquire access to information pertaining to the structure of the market but also to evaluate the country's political and other characteristics which impinge on the regulatory process. In addition the coupling of a local company with SBC International helps sway charges of economic imperialism (neo-colonialism). In no case is SBC International the majority partner in the investment; at most it is an equal partner. This undoubtedly reflects its status as a successful operator, which access to relevant resources such as financial and technological.

The 1996 Annual Report reveals another motive for the choice of partner. SBC writes that:

> [t]he Corporation also reached an agreement with DETECON, a subsidiary of West Germany's telephone company. That agreement is designed to help Southwestern Bell Corporation leverage its expertise through the assistance and international experience of its West German partner.[66]

SBC International allied itself with DETECON in such a manner because it was mutually advantageous to do so. The German company gained access to SBC's skills, whilst in turn the RBOCs was able to benefit from their international experience. This would compensate for the deficiencies of SBC in this area. It is necessary to remember here that on divestiture Ma Bell possessed only limited international exposure, and that what was possessed was allocated to AT&T by the MFJ and not the RBOCs.

Allied to the above point is the suggestion that some foreign ventures have been entered into to demonstrate both the capabilities of the SBC as well as its ability to successfully work with foreign companies.[67] Effectively these are 'trophy' or 'demonstration' investments that enhance the company's standing (reputation) overseas. In addition such investments may also allow SBC to acquire new skills and competencies. For example, Southwestern Bell International entered into a partnership with several Korean companies to publish the Seoul Olympics guidebook. In doing so Southwestern Bell International gained experience of working with foreign companies

[66] Southwestern Bell, 1986, pg5

[67] Southwestern Bell, 1988, pg25

as well as demonstrated its competencies on the global stage. Glaser (Vice-president of strategic planning, SBC Communications) wrote in the 1988 Annual Report that:

> ...our [SBC] strategy was to demonstrate our ability to work with a foreign company to produce a successful product... It [the Olympic handbook] gives us valuable experience for handling publications for other foreign events because we have established an excellent reputation.[68]

Similarly, the involvement in the China-United States Cable Network was perceived by Whitacre (Chairman & CEO, SBC Communications) as a strategic investment capable of opening Asia up to further investment.[69]

Though the majority of investments identified in Table 6.37 (above) have been made in conjunction with local partners it is interesting to note that the largest international commitments, which are also regarded by many to be the most strategic as well, are not included within this group. These investments have either been made in conjunction with other foreign telecommunications operators alone, or with companies drawn from both the local and international spheres. SBC International's investment in Telkom South Africa is an illustration of the former whilst the Golden Lines is an example of the latter.[70] The key Telmex investment was entered into in conjunction with an international French as well as local partner, Grupo Carso. A plausible explanation for such an occurrence relates to the nature of the investments: the technical and financial requirements of the projects undertaken may be such that they cannot be satisfied by local firms alone. The successful completion of the investment project necessitates the presence of international companies.

It is clear that the international investments of SBC are diverse in character. Chronologically the pace of overseas expansion has quickened, whilst the geographical focus has created three broad clusters of investments. The quickening pace of international expansion would suggest that SBC

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[68] Southwestern Bell, 1988, pg25.

[69] SBC Communications, 1997i.

[70] The company's partner in the former's case is Telecom Malaysia. Golden Lines is a partnership between STET SpA (Italy), AUREC and Globescom (both Israel).

has raised overseas expansion to the forefront of its agenda. It has also been shown that SBC has demonstrated a propensity for local over foreign partners. However, it has also been illustrated that where the larger investments are concerned the RBOCs prefers to be partnered by other large multinational telecommunications operators.

6.7.2 The lines-of-business of foreign investments.

The international investments of SBC may also be examined by the lines-of-business that they are in. Thus, this section will focus on the operational dimension of the investments made by SBC International. In other words, this section will examine whether SBC International has engaged in diversification or internationalisation. The former is when SBC International enters a new line-of-business whilst the latter is when the geographical scope alone is extended. There is, of course, a third alternative: dual diversification that combines both of the aforementioned.

From the various international investments it is possible to identify three common themes relating to the lines-of-business. Over the course of its international expansion SBC has invested broadly across a wide range of telecommunications markets. SBC International has also selectively deepened its commitment to certain markets, and has preferred to invest in existing companies rather than newly formed ventures. All three are discussed below.

6.7.2.1 Diverse lines-of-business.

SBC International has spread its international investments across a broad range of lines-of-business. As a consequence no single area of the telecommunications industry has been favoured by the RBOCs. SBC International has invested four times in three different portions of the telecommunications industry, that is, in the cellular, directory / yellow pages and cable-TV markets. If grouped chronologically then it is clearly noticeable that the RBOCs' international focus pre-1995 was to be found in the directory / yellow pages segment of the industry. (See Table 6.9 over). Other investments include cable-TV as well as a stake in Telmex. In 1995 the investment in Telmex was the principal international investment of SBC. Without this investment the international portfolio would have lacked both weight and credibility.

From 1995 the emphasis of SBC's international investment activity changed. The RBOCs moved away from slow growth areas such as directories and instead targeted faster growing, and potentially more lucrative, portions of the industry, such as, cellular. Moreover, SBC International has made several investments in multiple service providers. These are either former PTOs that have been privatised, telecommunications holding companies or new entrants licensed to compete against the incumbent across the entire industry. For example, Telkom South Africa, VTR SpA and Diax respectively. Common throughout these investments is their location in fast growing markets and / or their ability to act as a platform for further investment in neighbouring markets.

Table 6.38: New international ventures by year and type

Year	Cellular	Directory / Yellow Pages	Cable – TV	PTO privatisation	Full Service providers	Long distance & intn'l	Local	Other
to 1994	-	4	1	1	-	-	-	-
1995	2	-	2	-	-	1	1	1
1996	-	-	1	-	-	-	-	-
1997	2	-	-	1	1	1	0	1
1998	-	-	-	-	-	-	-	-
Total	4	4	4	2	1	2	1	2

Source: various annual reports, SBC Communications; Wasden, 1993.

6.7.2.2 Deepening and broadening of market commitment.

Tables 6.33 to 6.36 (above) illustrate that SBC International has made successive investments in more than one country. These countries are Israel, South Africa, South Korea and the United Kingdom. Furthermore, two other investments, VTR SpA and Telmex have expanded their operational scope subsequent to SBC International initial investment.

Table 6.39: The Israeli investments of SBC International

Year	Investment	Details
1985	50% Aurec	Directories and outdoor advertising.
1985	50% AMDOCS	Software development for the publishing industry.
1996	42.7% Golden Lines	Cable-TV.
1997	22% Golden Channels International Telecommunications Services	Long distance and international.

Source: various annual reports, SBC International; SBC Communications, 1996c & 1997b.

The deepening of commitment to a market is amply demonstrated by the case of Israel. Since the initial investment in 1985 SBC International has expanded its range of activities so that with the 1997 award of an international and long distance license the RBOCs is an investor in various companies that collectively encompass all aspects of the telecommunications industry with the exception of cellular. (See Table 6.39 above). This omission is not for want of trying, in 1994 an unsuccessful consortia bid was made for the country's second cellular license.[71]

The sequential and expansive nature of the company's investment in the Israeli market also reiterates the changing focus of SBC International's internationalisation strategy. Moreover, expansion in the Israeli market underlines the importance of alliances and partnerships to SBC International. After the initial investments in directory publishing SBC has always expanded its operations in conjunction with its initial local partner, Aurec. This would appear to indicate that the RBOCs has developed a productive working relationship with Aurec that has enabled it to become familiar with the political as well as market vagaries of Israel. By being present within the Israeli market SBC International is acquiring information unavailable to an outside investor and which facilitates a more accurate and perceptive analysis of future investment opportunities as they arise. That SBC has expanded its presence in the Israeli market would seem to indicate that this has occurred. Whitacre (Chairman & CEO, SBC Communications), speaking after the long and international license was awarded, said that:

> [t]his is an excellent global growth opportunity that fits well with our skills and current international operations, especially our extensive investments in Israel. ... This opportunity positions us for further expansion into Israel's changing communications marketplace.[72]

Three other countries - South Africa, South Korea and United Kingdom - have also been the recipient of more than one investment by SBC International. Of these three countries it is felt that only the former case represents a situation in which the initial investment acted as a market intelligence / familiarisation mechanism that enabled subsequent investment opportunities to be evaluated. In 1995 SBC acquired a 15.5% stake in MTN, a rapidly growing cellular company

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[71] Global Telecoms Business, 1994e, pg21

[72] SBC Communications, 1996c.

that had 336000 subscribers by December 1996.[73] Subsequent to this SBC International acquired an indirect 18% equity stake in Telkom South Africa from the government.[74] Given the available evidence it is surmised that the success of the first investment encouraged the subsequent commitment to occur. In particular the rapid growth of MTN, as pent up demand is revealed by the use of mobile rather than fixed communications, encouraged further investment:

> South Africa's regional importance, expanding economy and stable political environment, coupled with the high levels of pent-up demand for telecommunications services, make it a very attractive opportunity.[75]

Several years had elapsed between the initial and second investment in the case of South Korea though the company has articulated a belief that the relationships and exposure generated by the initial investment enabled the second to be completed. In the UK's case the RBOCs misjudged its initial investment - Southwestern Bell Telecom (UK) Ltd - as it was sold. The merger of the subsequent investment, SBC CableComms, with TeleWest in exchange for a minority 10% holding in the latter company would suggest that the miscalculation has been repeated. The passive minority holding effectively represents a withdrawal from the UK telecommunications sector by SBC International.

6.7.2.3 Investing in existing companies.

Over the course of its expansion overseas SBC International has preferred investments in existing companies instead of other organisational forms such as joint-ventures or start-ups. No immediate and obvious explanation exists for why this is so though clarification of the terminology may offer insight into SBC's preferences. With the exception of three companies all of the investments made are joint-ventures as they are collaborative partnerships with others. Sometimes the number of partners is one, sometimes more. Some of these joint ventures are

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[73] SBC Communications, 1997a.

[74] Along with Telecom Malaysia SBC Communications acquired a 30% stake in the PTO. SBC is the majority shareholder of the investment vehicle with 60%. The company's direct shareholding can be calculated by using: 0.60*0.30 / 100. Thus, an 18% position is held by the company.

[75] Chair and CEO Whitacre, quoted in SBC Communications, 1997j.

new start-up companies which have been expressly formed so that a given opportunity can be pursued, for example, in Switzerland Diax was formed so that opportunities directly arising from market liberalisation could be pursued. Other joint-ventures have arisen as collaborative ventures between companies to take advantage of existing commercial opportunities. An example here would be Pacific Access that distributes, markets and compiles directories throughout Australia.

Yet another class of joint-venture is where SBC International and others have invested in a company that is already operational. Examples of this form of investment include Telmex and TeleWest. The preference of SBC International for this form of investment may have arisen due to the joint-venture providing the RBOCs with an opportunity to utilise a domestically developed skill in a new overseas context. The preference for existing joint-ventures is in line with SBC's conservatism. The joint-ventures allow SBC to observe how the partners interact, determine their skills and ascertain how it would contribute to the venture which all contribute to the likelihood that the venture will be a success.

Overall SBC has engaged in limited dual diversification. That is, SBC International has substantially widened its geographical operational scope since 1984 whilst undergoing limited product diversification. SBC has deepened its commitment to a market on more than one occasion, and the operational focus has migrated away from directories towards the cable-TV and cellular markets.

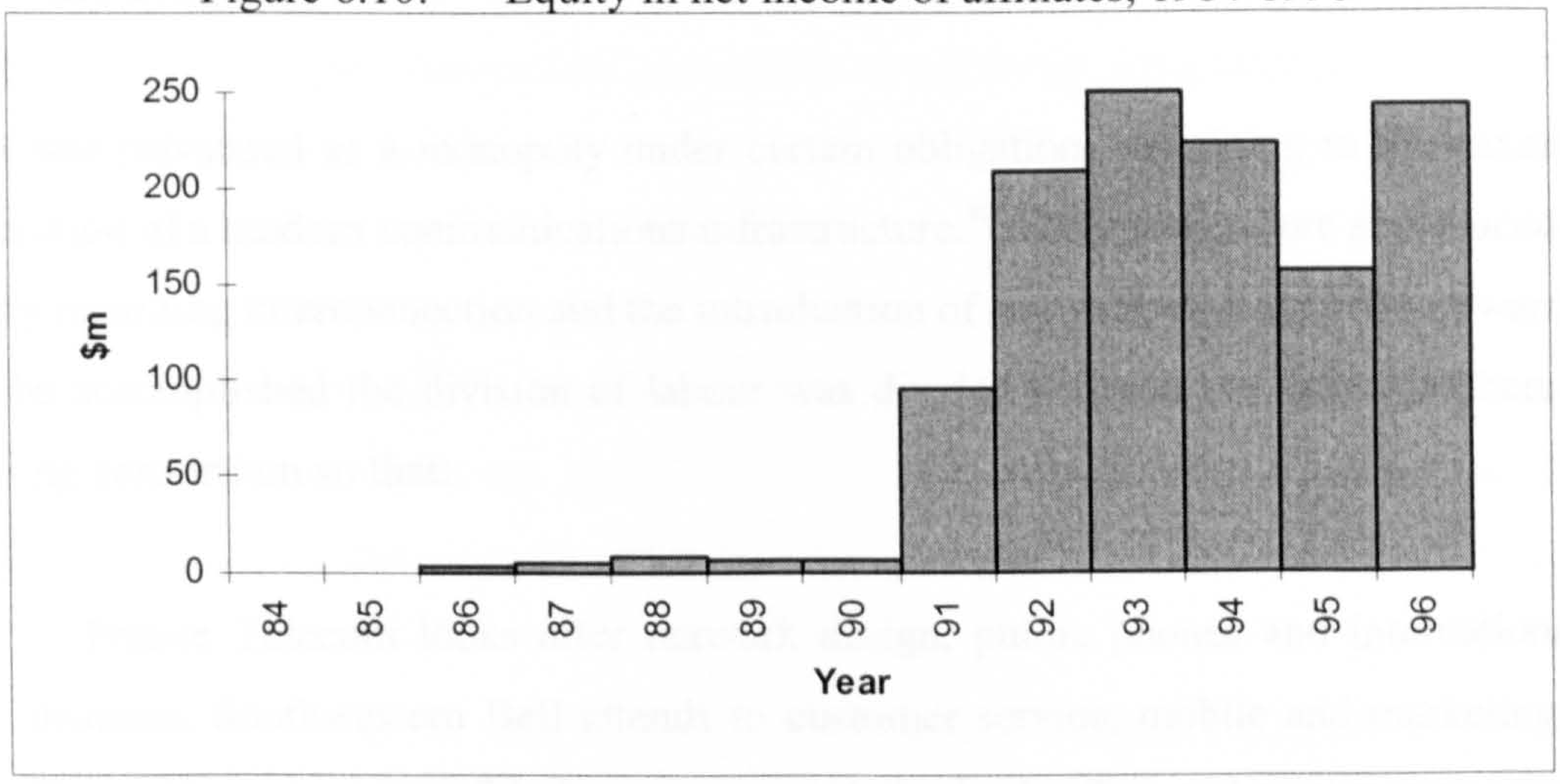
6.7.3 Financial evaluation.

Without doubt the overall financial performance of SBC since 1984 has been impressive with earnings and revenues consistently growing. In addition, the earnings of SBC are the most diversified of any of the RBOCs according to Cohen & Knight (1996). De-aggregating SBC's financial results enabled five different sources of revenues to be identified. For financial year ending December 31st 1996 these are local services (landline and wireless); network access (interstate and intrastate); long-distance; directory advertising and other.[76] Revenues and profits from the international operations are included within the 'other' category.

[76] SBC Communications, 1996e.

SBC accounts for its equity investments through the use of the equity method. For the financial year ending 31st December 1996 these consist primarily of the RBOCs' investment in Telmex, SFR (later absorbed into Cegetel) as well as the company's other international operations in the UK, Australia and Israel. Thus, 'equity in net income of affiliates' can be used as a proxy measure of SBC International's financial performance. Figure 6.10 (below) clearly illustrates since divestiture equity in net income of affiliates has risen from only $3m in 1986 to $244m in 1996.

Figure 6.10: Equity in net income of affiliates, 1984-1996



Source: various annual reports, SBC Communications.

From Figure 6.10 (above) it is clearly evident that 1990 is a pivotal year. After a bidding war, in which many global telecommunications operators were active, and which was described as "...unique opportunity; it could become the deal of the century,"[77] SBC along with Grupo Carso and France Cable et Radio (a subsidiary of France Telecom) acquired control of Telmex for a total consideration of $1.76bn. At the same time an option was granted for SBC to acquire limited voting right shares. When these were exercised in 1991 they brought SBC's total investment in Telmex to $953.1m, a figure that represented 10% of Telmex's total equity.[78]

[77] Vice-president, NYNEX International, quoted in *El Nacional*, 18 Oct 1990, pg21

[78] Southwestern Bell, 1993.

SBC, France Cable et Radio and Grupo Carso were able to obtain control of Telmex for a comparatively small investment due to the differential voting power of Telmex stock. Prior to privatisation the Mexican government created three classes of stock: the voting AA and A classes and the limited rights L class. Together the former two classes were equal to 40% of Telmex's total equity, with AA shares accounting for 20.4%. In order to ensure Mexican control of Telmex would be perpetuated past privatisation the AA shares were endowed with disproportionate voting rights so that all those investors holding AA shares would collectively have 51% of the total votes. Furthermore, all AA shares had to be voted in a single block with 51% being held by Mexicans. Consequently, Mexicans with a minority position would still be able to retain control.[79]

Telmex was privatised as a monopoly under certain obligations pertaining to the construction and operation of a modern communications infrastructure.[80] Obligations were also placed on the company regarding interconnection and the introduction of competition from 1996 onwards. For this to be accomplished the division of labour was divided between the three members of the controlling consortium so that:

> ... France Telecom looks after network design, public phones and international long distance. Southwestern Bell attends to customer service, mobile and marketing, while Grupo Carso is responsible for management, the back office and government relations.[81]

The investment in Telmex has been an unparalleled success. SBC repeatedly stated in corporate publications how successful the investment had been, and in particular drew attention to the stock market appreciation of the shares. The rise in share price enabled SBC to sell shares back to Telmex. This reduced the holding of SBC to slightly below 10%, freed capital for other uses, yet allowed the RBOCs to retain shares valued at nearly double its original investment. Telmex

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[79] Petrazzini, 1995.

[80] See Petrazzini (1995: Chapter 5) for further details of the privatisation process.

[81] Global Telecoms Business, 1994, pg21. This theme is further elucidated in Southwestern Bell's 1992 annual report where illustrative examples of the role played by the company in modernizing Telmex's network are given. The annual report also states that Telmex's growth, primarily through the relief of pent-up demand and the introduction of new services, is beneficial to the company for it directly feeds through to an appreciation of the company's equity holding.

has not been the sole equity investment of SBC though it has been the most prominent due to its size and growth. As a consequence has driven the international equity portfolio's growth from 1990 onwards. With the exception of SBC International's investments in SFR and SBC CableComms the remaining equity investments are relatively minor affairs with a correspondingly minor impact.

The equity investments of SBC International are shown in Table 6.40 (below). Analysis of this table gives rise to a series of observations regarding SBC's equity investments.

1. In recent years SBC has made several substantial adjustments to the value of the equity portfolio. These have arisen due to instabilities within the international currency markets. These adjustments have occurred due to the peso's continued devaluation against the dollar from 1994 onwards. The devaluation has continued apace with the effect that from January 1997 SBC will use the dollar as its "functional currency for its investment in Telmex due to the Mexican economy becoming highly inflationary."[82] Paradoxically not only has Telmex driven the growth of the equity investments in recent years, but the devaluation of the peso has also held it back.

Table 6.40: Reconciliation of equity investments, 1991-1998

In $m	1991	1992	1993	1994	1995	1996	1997	1998
Beginning of year	524.1	1081.3	1249.4	1421	1478	1586	1964	2740
Additional investment	470.1	-	-	626	409	292	1076	55
Equity in net income	94.5	208	249.7	223	156	244	201	236
Dividends received	(7.4)	(39.9)	(72.4)	(89)	(62)	(70)	(90)	(167)
Currency translation adjustment				(560)	(268)	(94)	(135)	(110)
Reclassification and other adjustments				127	(397)	(3)	(276)	(240)
Currency translation and other adjustments			(5.9)					
End of year	1081.3	1249.4	1420.8	1478	1586	1955	2740	2514

Source: Southwestern Bell, 1993, pg43; SBC Communications, 1995, pg38; SBC Communications, 1996a, pg27; SBC Communications, 1998d.

2. From 1994 onwards SBC has acted to expand its international equity holdings. This period largely corresponds to the aforementioned heightened pace of internationalisation from 1995 which has witnessed SBC rapidly expand its international operations.

[82] SBC Communications, 1996a, pg27

3. Overall the investments of SBC are not cash generative. Moreover, their ability to consume more cash than they have returned to SBC in the way of dividends has increased in recent years. In many respects this has only to be expected. As SBC International continues to build up its international portfolio start-up losses will be suffered. Once the more recent investments become cash generative this picture will change and the international investments will eventually contribute cash.

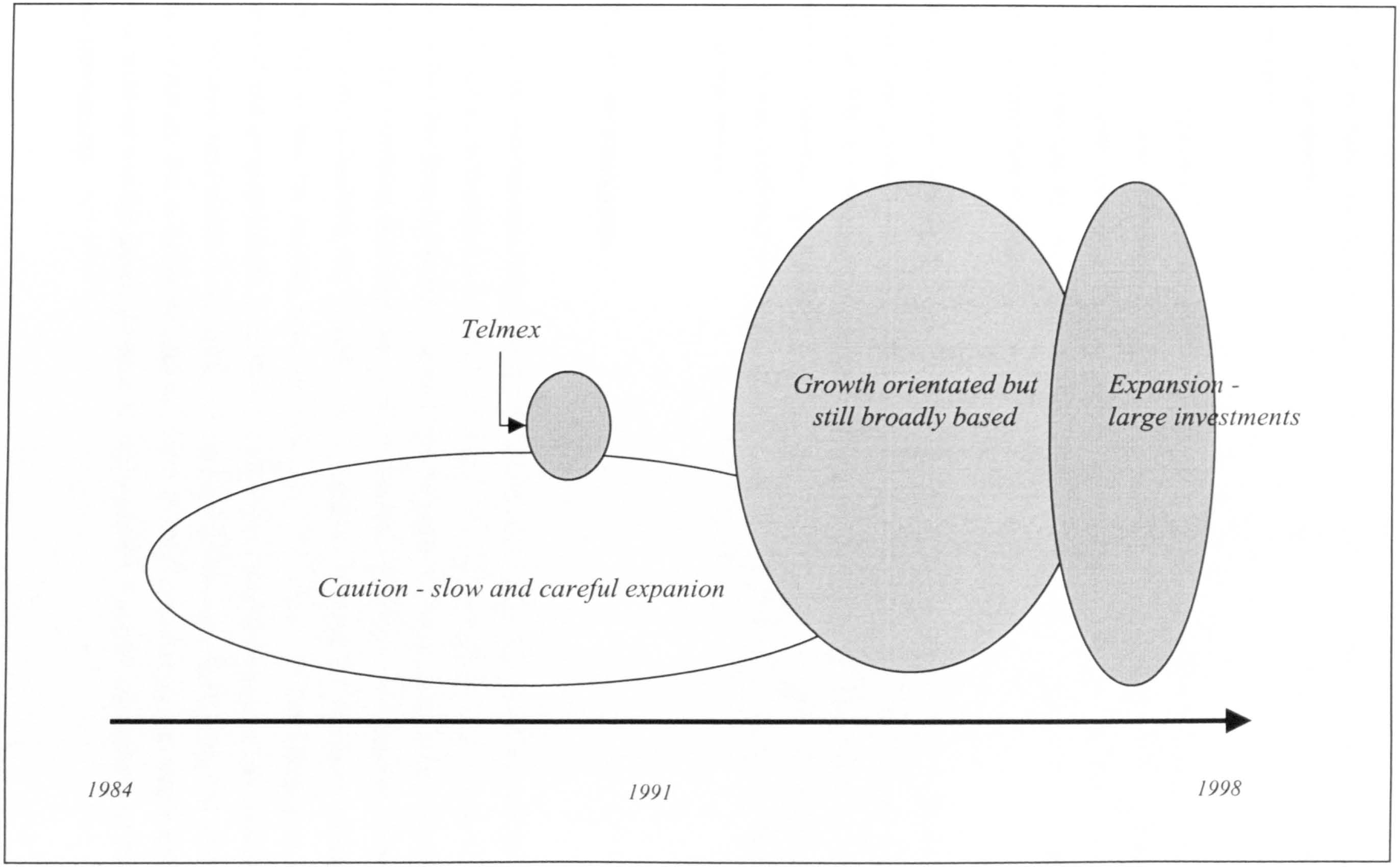
4. In light of recent currency instabilities, and the increased number of telecommunications operators seeking to expand outside their home markets, it is unlikely that the rapid growth in equity investment value can be sustained in the future. Apart from those investment opportunities associated with EU and / or OECD member states the new opportunities that are presenting themselves are found in countries whose currencies are volatile. Consequently, investments as well as earnings are liable to fluctuate.

The use of equity investment as a proxy would appear to confirm that SBC's international investment activity has been a success. The value of equity investments has risen nearly four-fold between 1991 and 1996. However, SBC's success to date can be largely attributed to the 1990 investment in Telmex. It remains to be seen whether the investments made in 1997 will be capable of continuing the growth that SBC has enjoyed until now.

6.7.4 Conclusion.

The international strategy of SBC can best be described as one of caution. In this respect the international strategy comfortably fits with that undertaken domestically. The international expansion of SBC began gradually, and after a period of rapid expansion the RBOCs has been consolidating its position. This change in the international strategy of SBC is depicted in Figure 6.11 (over). The only exception to the initial cautious phase of SBC's international expansion was the acquisition of an equity stake in Telmex. It was several years after this investment that SBC altered its international investment strategy, shifting first to a more growth orientated strategy and then to an expansionist phase through focusing on large-scale investments.

Figure 6.11: International strategies of SBC Corporation



Over the duration of SBC's international expansion the RBOCs has not favoured any one region over another, but has instead invested in markets that are geographically diverse. SBC has made investments in Asia / Pacific Rim, Latin America, Europe and perhaps surprisingly in South Africa. The geographical diversity is mirrored operationally, as not single lines-of-business has been favoured.

International expansion has been affected through collaboration with other companies. SBC has favoured collaboration because the partner companies can help overcome the presence of asymmetries. Such asymmetries may relate not only to technical aspects of the investments, but also to understanding the local political environment. Finally, SBC has also favoured investing in existing rather than start-ups.

In the international investment activity of SBC Telmex plays a pivotal role. Undoubtedly the investment has proved to be financially a success, in common with many PTOs privatisation investments SBC has been able to sell shares yet still retain a stake worth several times its initial investment. However, the influence of Telmex goes wider than this in that it demonstrated to SBC that it was capable of investing overseas, working with foreign partners and making a success of the venture.

6.8 Pacific Telesis Group.

Examining the international investment activity of Pacific Telesis is problematic. On the one hand only limited information is available on the international investment activity of the RBOCs, whilst on the other hand the curtailed nature of the overseas expansion compromises any ability to gauge the underlying characteristics of the expansion evidenced. Nevertheless, from the information that is available it is possible to discern that the international investment activity of Pacific Telesis was not constant between 1984 and 1994. After initially engaging in both operational and geographical diversification Pacific Telesis divested numerous investments so that its portfolio was focused on the mobile communications market. Furthermore, the tentative financial evidence that is available suggests that revenues were growing and that continued network build-out was the principal reason for the persistent financial loss suffered by Pacific Telesis International.

This section is organised along similar to the previous profiles of RBOCs international investment activity. The first section examines the geographical character of the investments made by Pacific Telesis International, whilst the second section draws attention to the operational dimension of the overseas expansion undertaken. The final section addresses the financial aspect of international investment activity. A conclusion is then drawn.

6.8.1 Geography.

The role of geography within the investment activity of Pacific Telesis International can be interpreted in two quite distinct ways. The first of these stems from a literal interpretation of international expansion and details the number of countries that Pacific Telesis International has invested in. The second restructures the information contained within the first interpretation and seeks to identify any patterns within the countries chosen to host investment by Pacific Telesis International.

6.8.1.1 Number of countries.

Pacific Telesis International steadily increased the number of countries so that by 1993, the last year that it was fully part of the RBOCs, it operated in 9 countries in all. However, as Table 6.41 (below) illustrates, Pacific Telesis International experienced fluctuations in building up to this figure. In other words, Pacific Telesis International experienced both international expansion and contraction (de-internationalisation). One explanation for this is that the geographical extent of Pacific Telesis included representative offices that were closed after only a short period of operation.

Another explanation can be found in Wasden (1993). Wasden (1993) provides a descriptive compendium of the international activities of Pacific Telesis, and includes not only details of the actual overseas investments made but also those announced and never completed. Through comparing Wasden (1993) and the various annual reports of Pacific Telesis it can be seen that many announced foreign ventures were never consummated. For instance, in October 1992

Pacific Telesis announced its participation in a cellular joint-venture that would bid for a GSM license in The Netherlands. It is on this basis that The Netherlands is included within the geographic scope of Pacific Telesis in 1992. However, Pacific Telesis was unsuccessful in gaining a license with the consequence that in following year no Dutch presence was claimed in the annual report.

Table 6.41: The geographical expansion of Pacific Telesis

Year	Geographical extent stated as:	Nos. of countries
1984		0
1985	China, UK, Japan	3
1986	China, UK, Japan, Spain, South Korea, India	6
1987	China, UK, Japan, Spain, South Korea, India, Thailand	7
1988	China, UK, Japan, Spain, South Korea, India, Thailand	6
1989	China, UK, Japan, Spain, South Korea, India, Thailand, Ireland	8
1990	West Germany, UK, Japan, South Korea, Thailand	5
1991	West Germany, UK, Japan, South Korea, Portugal, Thailand, East Germany	7
1992	Germany, Portugal, Japan, Thailand, South Korea, Spain, UK, The Netherlands	8
1993	Sweden, Belgium, France, Spain, Germany, Portugal, Japan, Thailand, South Korea	9
1994		0

Source: various annual reports, Pacific Telesis; Wasden 1993.

6.8.1.2 Clustering of countries.

Restructuring the information contained within Table 6.41 (above) allows us to show that Pacific Telesis International has invested in two quite distinct geographical regions: Asia / Pacific Rim and Europe. In the former of these clusters the investments are located in just countries, Japan and Thailand. In contrast, Pacific Telesis International has spread its European cluster investment thinly across a number of countries with the UK being numerically the largest recipient of investments.

The four investments in Japan are perhaps the nearest example of commitment deepening that can be found among the international investments undertaken by Pacific Telesis International. Of the four investments made three are cellular and one is the operator of international long distance service. The three cellular companies hold licenses for some of the most populous parts of Japan, and have a potential subscriber base of 77.2m (POPs).[83] Given the potential of these investments it is perhaps surprising that throughout corporate publications the more highlighted Asian investments are those in Thailand. It is surmised that this is because these investments were already in operation, generating revenues and thus were an instance of a successful international business that the company could use to justify its continued investment strategy.

Table 6.42: Asia / Pacific Rim investment cluster

Country	Investment	Details
Japan	International Digital Communications	10% Long distance 1989
	Central Japan Digital Phone Co	13% Cellular 1992
	Kansai Digital Phone Co	13% Cellular 1992
	Tokyo Digital Phone Co	15% Cellular 1992
Thailand	Pacific Telesis Engineering Ltd	100% Paging. 1987
	PerCom Service Ltd	49% Paging 1990

Source: various annual reports, Pacific Telesis.

The European investments are thinly spread throughout the continent with the exception of the UK where Pacific Telesis International assembled a collection of cable-TV franchises as well as mobile communications businesses. Geographically several of the investments are contiguous. Portugal, Spain, France and Germany form a continuous market of more than 180m potential subscribers. However, Pacific Telesis International has not invested in similar lines-of-business in all of these markets so the potential for international roaming in the cellular industry is limited. Pacific Telesis International has cellular investments in Portugal, France and Germany but not Spain. Similarly, Pacific Telesis International operates paging services in Portugal and Spain but not France and Germany. Notwithstanding these deficiencies, by 1994 Pacific Telesis International operated mobile communications businesses in all of the major European markets with the exception of the United Kingdom. The RBOCs exited the UK mobile market in 1991. It would, therefore, appear that the international investment activity of Pacific Telesis International has been driven geographical considerations. That is, by contiguous networks.

[83] AirTouch Communications, 1997, pg8.

Table 6.43: Europe investment cluster

Country	Investment	Details
Belgium	Belgacom Mobile	20% Cellular 1993
France	Omnicom	18.5% Cellular 1993
Germany	Mannesmann Mobilfunk Gmbh	29.15% Cellular 1990
Italy	Omnitel Pronto	14.3% Cellular 1994
Portugal	Telecel Telechamada	23% Cellular 1990 23% Paging 1991
Spain	Sistelcom-Telemensaje	17.5% Paging 1992
Sweden	NordicTel	51% Cellular 1993
UK	Kensington Datacom East London Telecommunications Bolton Telecable Ltd Mircotel Communications Ltd Pacific Telesis Cable	100% Value added network. 1985 Cable 1988 100% Cable-TV 1989 25% Cellular 1990 100% cable-TV 1991

Source: various annual reports, Pacific Telesis.

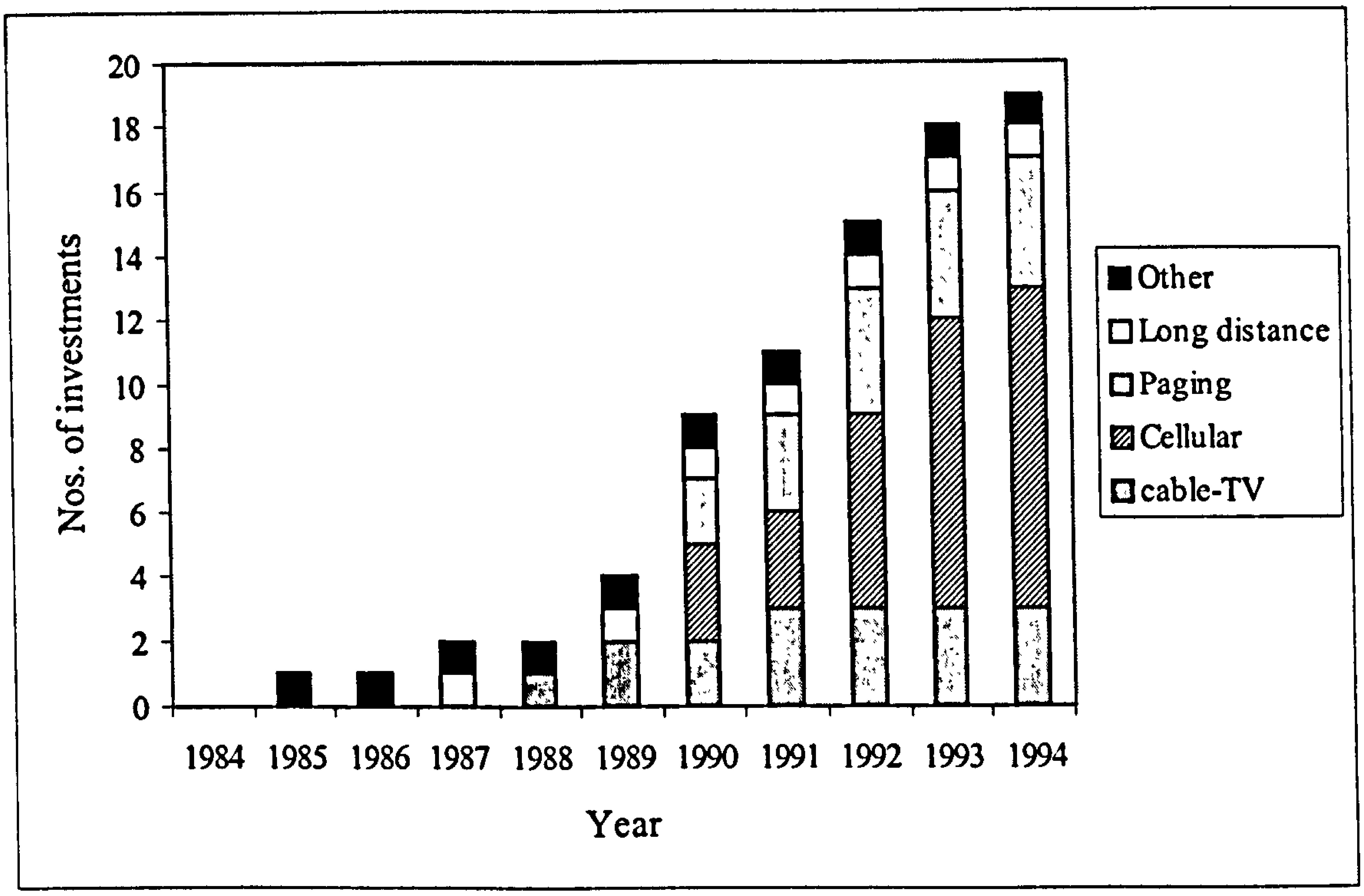
6.8.2 Operational aspects of international investment activity.

From examining the operational characteristics of the investments made by Pacific Telesis two themes become apparent. The first of these is that operational focus of the investments undertaken has changed away from cable-TV towards mobile communications, and in particular towards the cellular market. The second identified theme is that Pacific Telesis has favoured collaborative ventures when conducting its international investment activity. Of all the investments announced or made only four are wholly owned subsidiaries.

6.8.2.1 Lines-of-business.

Overall it is clear that Pacific Telesis International favoured mobile communications markets when investing overseas. From Figure 6.12 (below) it can be observed that of the nineteen international investments made ten are in the cellular industry and four in paging. The remaining five investments are spread between cable-TV (3), international long distance (1) and private value added networks (1). This division between the various lines-of-business was not always the case. Until 1990 Pacific Telesis International had invested in paging companies as well as the cable-TV within the UK.

Figure 6.12: A changing operational focus of Pacific Telesis International



Source: various annual reports, Pacific Telesis.

In the United Kingdom Pacific Telesis International invested in both the cable-TV as well as cellular markets. Common to both investments was the desire to exploit the new investment opportunities that UK liberalisation had presented, and in the process gain access to technologies present within this particular marketplace. Through its investment in Microtel, Pacific Telesis International would gain access to digital personal communications network (PCN) cellular technology, whilst the various cable investments:

> ...provided ... the opportunity to enter the cable-TV business, currently closed to regional telephone holding companies in the United States by Federal regulation.[84]

Thus, the cable-TV franchises within the UK provided Pacific Telesis International with an ability to circumvent domestic regulatory prohibitions and enter a new lines-of-business. In particular, the UK market provided the opportunity for Pacific Telesis to gain the skills and competencies necessary for operating a cable-TV business whilst it waited for domestic Federal approval of the purchase of a cable-TV service provider in Chicago. That ultimately Pacific

[84] Pacific Telesis, 1990, pg18.

Telesis International exited from the United Kingdom would suggest that the company's investments had not met expectations. Whilst Pacific Telesis International provided no definitive explanation for the sale of its 25% holding in Microtel in May 1991, it is likely that the poor competitive position of the cable-TV operations is the reason for their divestment.

Pacific Telesis International reacted to increased competition in the UK cable-TV market by emphasising the cost advantage of the service as well as the potential for additional services such as telephony at some point in the future. Unlike the other companies in the market it did not seek to increase its operational scope, or secure unique content in its fight against satellite operators such as BSkyB. Consequently, the cable-TV operations did not enjoy the same revenue growth as other operators in the United Kingdom like Nynex CableComms or TeleWest that combine traditional cable-TV services with telephony. From late 1992 onwards Pacific Telesis International implemented an exit strategy from the UK cable-TV market, a strategy that was accelerated by the 1993 decision to divest the out-region and international investments from Pacific Telesis in the form of AirTouch Communications. At no point was cable-TV mentioned as a core line-of-business of the new company, instead the company was to focus on mobile communications (cellular and paging) and international long distance.[85]

The creation of AirTouch formalised the concentration of Pacific Telesis International on mobile communications. From 1990 onwards all of the international investment activity conducted by Pacific Telesis International have been in either the paging or cellular industries. The overarching reason for this concentration of investment effort towards just these two lines-of-business would appear to be a desire to maximise the use the skills and competencies gained in the domestic context overseas. As stated in the 1990 Annual Report:

> [o]ur experience in the U.S. cellular marketplace serves us well in Germany where, through participating in a German company called Mannessmann Mobilfunk, Pacific Telesis International (PTI) is participating in the construction of the world's largest digital cellular system. PTI provides expertise in design, engineering, construction, and operations.[86]

[85] Pacific Telesis, 1992, pg1.

[86] Pacific Telesis, 1990, pg20.

Thus, underpinning and driving the international investment activity of Pacific Telesis International is the desire to achieve economies of scale and scope in domestically derived skill and competence use. In doing so Pacific Telesis International is implemented an international expansion strategy that is conservative in nature. The strategy is limiting the risk that Pacific Telesis International is exposed to, to that arising from the foreign location and not a new line-of-business as well.

6.8.2.2 Organisational characteristics.

As already intimated the pre-eminent organisational form adopted by Pacific Telesis International when expanding overseas is collaborative in nature. Of the nineteen international investments made between 1985 and 1994 only four are wholly owned subsidiaries. Several possible explanations for this bias towards collaborative ventures can be suggested. For example, to counter a technological shortcoming, to dissipate fears of neo-colonialism or to offset the risk inherent to the venture. As most of the international investments undertaken are in lines-of-business that Pacific Telesis already operates in domestically, and those investments which are wholly owned are in the cable-TV market where it does not operate, the risk off-setting explanation is limited to just one investment: International Digital Communications.

Therefore, what explanation is relevant to the other international investments undertaken by Pacific Telesis International? One explanation is that Pacific Telesis International has used joint-ventures to gain access to markets, that is, to facilitate the expansion of its international presence. In the case of the various Japanese investments Pacific Telesis International aligned itself with a series of large, well-established, non-telecommunications indigenous companies. As stated in the 1991 Annual Report:

> [o]ne of Pacific Telesis International's strategic objectives is to expand our cellular operations by building on effective relationships with overseas governments and businesses.[87]

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[87] Pacific Telesis, 1991, pg22.

This provides two reasons why Pacific Telesis International aligned itself with indigenous companies. One the one hand such an alignment would negate Japanese fears of a foreign company playing an overtly key role in a Japanese company. On the other hand, the joint-venture would bring Pacific Telesis International into contact with indigenous companies that could interpret the perculiarities of the local market better than the RBOCs could as an outside investor.

6.8.3 The financial and operational growth of Pacific Telesis International.

Prior to the creation of PacTel Corporation in 1993 and the sale of equity in December of that year, Pacific Telesis did not de-aggregate its financial results. As a consequence, it was not until this point that the operational and financial growth of both Pacific Telesis Enterprises and Pacific Telesis International can be accurately and consistently recounted. In other words, the creation of Pacific Telesis Corporation, and the subsequent implementation of 'California First' increased financial transparency.

From the limited financial information that is available it is clear that the revenues generated by Pacific Telesis International were small, if not insignificant. By 1993 the overseas investments generated less than \$200m in revenues. It can be observed from Table 6.123 (below) that in the context of the non-regulated businesses that this is one sixth of the overall revenue. This can be taken as indicative of rapid growth in the overseas businesses. However, when the 1993 level of revenue is compared to that of the BOCs the financial success of both the non-regulated and overseas businesses is less impressive. In 1993 the overseas businesses generated a total of \$188m in revenues, and all the non-regulated businesses \$1226m but the RBOCs (BOCs plus directory publishing) had revenues of more than \$9bn for the same year. From this it can be readily conclude that financially the overseas expansion of the RBOCs had only been marginally successful.

Table 6.44: Selected financial information for Pacific Telesis International

Revenue \$m[1]	Year				
	1989	1990	1991	1992	1993
Pacific Telesis Enterprises					
Domestic	430	555.1	657.2	812.9	1037.7
International	34	26.9	29.8	60.1	188.3
Total	464	582	687	873	1226
Pacific Telesis	9089	9052	9168	9108	9244

Note: 1. These figures have been reinstated to reflect the continuing operations of Pacific Telesis Enterprises (AirTouch Communications) and Pacific Telesis. As such they differ slightly from the aggregated information contained in Appendix B. *Source:* Pacific Telesis, 1993.

The financial information presented above indicates that the international investments have not enjoyed significant financial success. However, this assessment is somewhat misleading. Table 6.45 (below) contains information relating to the two principal non-BOCs lines-of-business of Pacific Telesis. These are differentiated into domestic and international paging and cellular. In doing so it becomes clear that Pacific Telesis has enjoyed quite different levels of success overseas for paging and cellular. Between 1989 and 1993 Pacific Telesis International managed to more or less double the number of paging subscribers overseas, whilst domestic the rise in subscribers was nearly threefold.

Table 6.45: Selected operational information of Pacific Telesis Enterprises

Nos. of subscribers (proportionate)	Year				
	1989	1990	1991	1992	1993
Paging					
International	47000	59100	68200	78200	101200
Domestic	392000	474000	601000	821000	1167000
Cellular					
International	0	0	0	35200	159600
Domestic	339000	418000	558000	744000	1046000
Cellular POPs					
International	17515000	18108000	24991000	35347000	4040100
Domestic	30740000	30920000	32560000	34121000	34889000
International as % of domestic	56.56%	58.56%	76.75%	103.59%	115.79%

Source: Pacific Telesis, 1993.

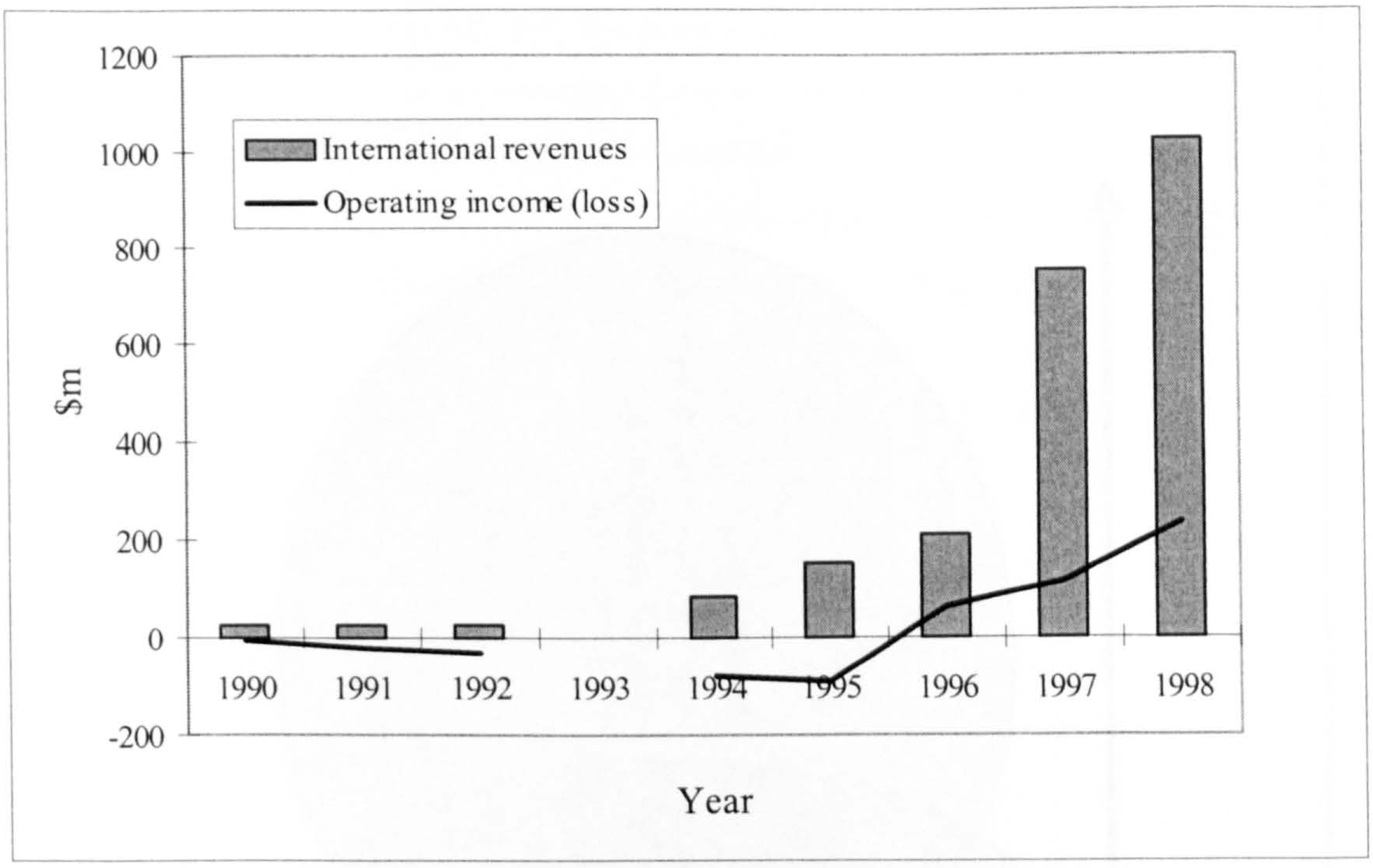
Table 6.45 (above) tells a much more interesting story in relation to cellular subscriber numbers. From the table it can be seen that Pacific Telesis International only began to report cellular subscribers in 1992, but that between 1992 and 1993 the number of subscribers tripled. Of perhaps greater interest is that the various overseas cellular investments collectively had a larger potential subscriber base (POPs) than their domestic equivalent. Moreover, the international POPs enjoyed considerable growth when compared to that domestically. The rapid growth in POPs is associated the acquisition of additional licenses. It is only when the associated networks are built-out will the virtuous circle of subscribers and maximum network coverage leading to increasing revenues is in place. That revenues rapidly increased between 1992 and 1993 would suggest that this relationship was occurring.

6.8.4 Conclusion.

It is clear that when 'California First' was implemented in 1994 the RBOCs was on the verge of restructuring its international portfolio of investments. The RBOCs was moving away from a diversified portfolio towards one that operationally was focused on cellular and geographically concentrated in Europe and the Far East. The focus on cellular would enable the RBOCs to exploit its domestic skills and competencies overseas. At the same point the RBOCs was also beginning to reap the benefits of its overseas investment strategy. Although Figure 6.13 (below) is incomplete with the information for 1993 missing, it clearly demonstrates that in the years following the split of AirTouch from Pacific Telesis the international revenues and operating income of the former enjoyed sharp and sustained growth.

It is clear that when Pacific Telesis implemented 'California First' in 1994 the RBOCs was on the verge of restructuring its international portfolio of investments. The RBOCs was moving away from a diversified portfolio towards one that was operationally focused on mobile communications and geographically focused on Europe and the Far East. The focus on mobile communications would have formed the third distinctive phase in the international investment activity of Pacific Telesis. (These three phases are shown graphically over in Figure 6.13). The first phase of the RBOCs' international strategy, diversification, gave way to the second phase, specialisation, at the start of the 1990s. The final phase of Pacific Telesis' strategy, with its concentration on mobile communications, is the continuation of the specialisation that began in phase two.

Figure 6.13: International revenues and income before and after the AirTouch Communications – Pacific Telesis split



Source: various annual reports, Pacific Telesis; AirTouch Communications, 1997 & 1998.

The focus on mobile communications, especially cellular, would enable the RBOCs to exploit its domestic skills and competencies overseas. The available evidence also suggests that 'California First' was implemented at the moment when Pacific Telesis was beginning to reap the benefit of its overseas investment strategy. Although Figure 6.13 (above) is incomplete, with the information for 1993 missing, it clearly demonstrates that in the years following the split of AirTouch from Pacific Telesis the international revenues and operating income of the former enjoyed sharp and sustained growth.

6.9 Summary.

This chapter has examined the international investment activity of the RBOCs between 1984 and the end of 1998. Through adopting a longitudinal case study approach the changing nature of RBOCs international investment has been highlighted. The resulting analysis has shown that there are both similarities as well as differences evident in the international expansion strategies adopted by the RBOCs.

Figure 6.14: International strategies of Pacific Telesis

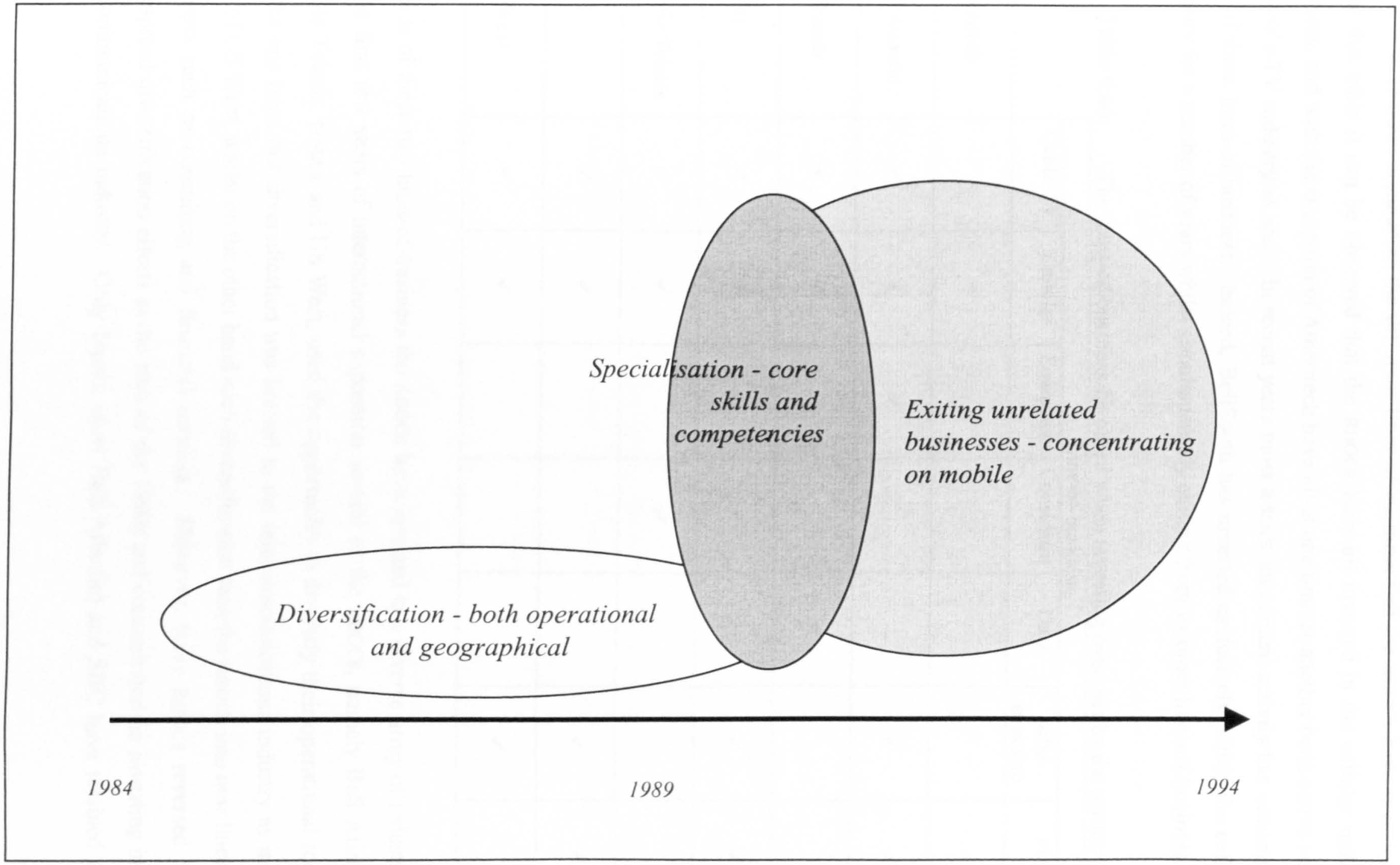


Table 6.46 (below) summaries the different lines-of-business that the RBOCs have invested in. From this table it can be observed that the RBOCs have all invested in the cellular industry overseas, and with the exception of Ameritech have all at one time or another been active within the cable-TV industry as well. In recent years most RBOCs investment activity has occurred in one of these lines-of-business. Indeed, BellSouth has invested exclusively within the cellular industry for a number of years whilst simultaneously exiting from its other lines-of-business.

Table 6.46: The lines-of-business favoured when investing overseas by the RBOCs

	Line-of-business						
	Cable-TV	Cellular	Equipment	Consultant	Data	Infra-structure	PTOs
Ameritech		✓					✓
Bell Atlantic	✓	✓	✓			✓	✓
BellSouth	✓	✓			✓		
Nynex	✓	✓		✓		✓	✓
Pacific Telesis	✓	✓		✓			
SBC	✓	✓				✓	✓
US West	✓	✓				✓	

Outside of these two lines-of-business the RBOCs have invested in a diverse array of industries. In the first few years of international expansion several of the RBOCs, namely Bell Atlantic, Pacific Telesis, Nynex and US West, used the opportunity to diversify their operational scope. On the one hand this diversification was limited to the telecommunications industry as in the case of US West, whilst on the other hand such diversification took the RBOCs into new lines-of-business such as consulting and financial services. However, these RBOCs reversed their widespread diversification efforts at the start of the 1990s and concentrated on investing in the telecommunications industry. Only Nynex (now Bell Atlantic) and SBC have retained their infrastructure investments. US West divested its various east European infrastructure holdings to concentrate elsewhere in the telecommunications industry.

Table 6.46 (above) also shows that four of the RBOCs – Ameritech, Bell Atlantic, Nynex and SBC – have invested at one point in a PTOs. For three of these RBOCs, Ameritech, Bell Atlantic and SBC, it has been their investment in a PTOs that has firstly encouraged further international investment, and secondly, underpinned the financial success of their international expansion. Of these three RBOCs only Ameritech has invested in PTOs to the comparative exclusion of other lines-of-business. From 1990 onwards this RBOCs has restructured its international portfolio so that it is dominated by European PTOs.

Furthermore, this chapter has also shown that the principal way through which the RBOCs have affected their international expansion has been collaborative. That is, the RBOCs have formed joint-ventures. The main advantages of joint-ventures over wholly owned investments is that they allow the investor, in this case the RBOCs, to overcome those information asymmetries present. On the one hand these information asymmetries are due to the cultural differences between the United States and host market, whilst on the other hand they may also be operational in nature as well. Further to this, joint-ventures also allow for the risk inherent within the investment to be offset onto others. Thus, it can be argued that joint-ventures are a manifestation of the risk adverse nature of the RBOCs. However, the RBOCs have also resorted to joint-ventures because the inclusion of indigenous companies helps to refute charges of neo-colonialism.

Although the RBOCs have invested in a broad range of countries BellSouth, SBC and US West have all deepened their commitment to a particular host country. In the case of Australia, Israel and the United Kingdom respectively these three RBOCs have used their initial investments as an opportunity to assess the nature of the telecommunications markets and to determine whether or not subsequent investments are warranted. BellSouth for one has openly acknowledged that this role was played by its initial investment in Australia. The presence of the RBOCs in the market facilitated the reduction of informational asymmetries so ensuring that it was better informed as to the nature of market opportunities. However, the greater the commitment of the RBOCs to the market the less able it will become to use the information elsewhere due to knowledge asset specificity.

CHAPTER SEVEN: GEOGRAPHY, RISK AND THE ORGANISATIONAL FORM.

7.1 INTRODUCTION.

The previous chapter has examined the internationalisation of the RBOCs on an individual and longitudinal basis, detailing in the process the strategies of each of the companies from divestiture in 1984 until the end of 1998. This has drawn attention to the dynamic nature of internationalisation, and how the emphasis accorded to internationalisation by the RBOCs has fluctuated over time. However, the chronological and individual nature of the analysis prevents the ready comparison of developments between each of the RBOCs. As a result the inter-relationships evident within RBOCs internationalisation are downplayed in favour of the chronological imperative, and comparisons between company strategies are not made.

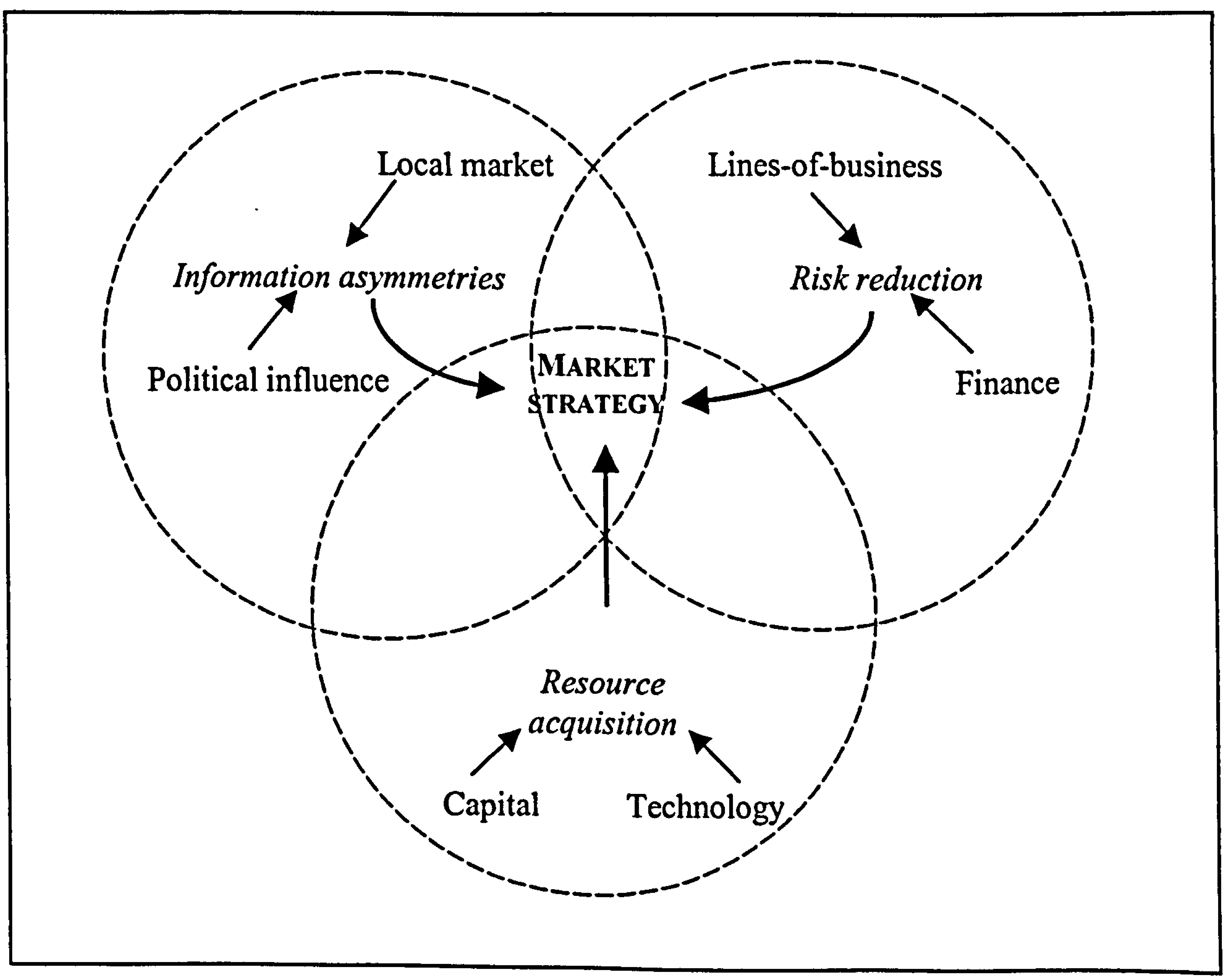
Consequently, this and the following chapter recast the information previously presented so that it is organised thematically. This chapter is concerned with the geographical and organisational dimensions of internationalisation, whilst the following chapter sheds light on the lines-of-business or operational aspects of RBOCs international investment activity. From the analysis presented in Chapter Six it can be argued that the international investment activity of the RBOCs can be placed at the confluence of three sets of factors: information asymmetries, the risk inherent to the marketplace and the degree to which the company requires access to external resources. The location of strategy at the confluence of these three sets of factors is illustrated in Figure 7.1 (over).

In addition to showing that market strategy is located at the confluence of these three factors, Figure 7.1 (over) also shows that each of the factors are in fact comprised of more than one component. In other words, each of the three factors identified is the result of the inter-play between different types of information asymmetries, risks to be reduced and resources to be acquired. One significant implication of this is that the inter-play between the factors is more complex, and more pervasive, than initially envisaged.

In the course of expanding overseas the RBOCs have faced two different forms of *information asymmetries*. The first of these relates to how the telecommunications market operates whilst the second is concerned with the workings of the broader political economy that, among other things, determines both the regulatory framework and the market's structure. The RBOCs have sought to counter deficiencies in these areas through forming joint-ventures with local companies.

A common trait displayed by the RBOCs when internationalising is their *desire to minimise the risks* that they face when entering a market. From a distance the company will be able to gain an impression of how the market, as well as the associated political and regulatory institutions, operate. However, psychic distance ensures that this impression does not enable the company to fully understand the workings and intricacies of the market and its associated institutions. As a consequence any investment judgement is subject to uncertainty and risk. In recognition the RBOCs have partially shifted the inherent risk of the investment onto others through the formation of joint-ventures with local and international companies. Local companies provide a mechanism through which a better understanding of the market can be gained, and in particular they bring with them an interpretative intuitiveness and contact network that are unavailable to any foreign investor.

Figure 7.1: Factors influencing the determination of organisation strategy



Despite each of the RBOCs having considerable resources at their disposal they do not possess all of the resources necessary for internationalisation to be successful. Consequently, in the course of their internationalisation the RBOCs have sought to *acquire resources* to negate these deficiencies. In addition to acquiring local market knowledge to counter the information asymmetries faced, the joint-ventures have also enabled the RBOCs to gain access to additional capital sources as well as sought after technologies.

Importantly, these three sets of factors do not operate in isolation from one another, but instead interact when influencing RBOCs international investment activity. For example, whilst undertaking international investment activity an RBOCs may wish to offset some of the risk inherent to the investment through forming partnerships with local companies. This is, however, dependent on the RBOCs being able to ascertain the nature of the risks that it faces and then identify from outside the host market a suitable and willing local partner for the venture. In both of these areas the information asymmetries faced by the RBOCs will play a role, both in enabling the RBOCs to identify the risks faced and then find a suitable and willing joint-venture partner.

These three inter-related themes can be found throughout this and the following chapter, though their pervasive character ensures that they cannot be mapped directly onto any of the sections within these two chapters. This chapter is organised into three sections. The first of these is concerned with the role of geography as understood in the context of psychic distance in the internationalisation of the RBOCs. In the second section the role of regulation, a determinant of market attractiveness to inward investment, as an influence on RBOCs internationalisation is investigated. In the final section of this chapter the organisational dimension of internationalisation is addressed, and especially its relationship with risk, is detailed.

7.2 EVALUATING THE IMPACT OF PSYCHIC DISTANCE ON INTERNATIONALISATION.

As shown in Chapter Two psychic distance plays a pivotal role in the Uppsala internationalisation models. Although the literature makes frequent reference to the concept, no single definition of psychic distance is evident. Even so, a great deal of similarity can be observed between these various definitions relating to the role of psychic distance in the erection of barriers that detract from the free flow of goods and services between countries. The various definitions of psychic distance support such an assertion:

> ... the sum of the factors *preventing the flow of information* from and to the market. Examples are differences in language, education, business practices, culture and industrial development.[1]

> ...a measure of the *difficulty* a seller has to perceive or estimate the needs of a buyer or the corresponding difficulty a buyer experiences in perceiving the seller's offer.[2]

> ...factors *preventing or disturbing* firms learning about and understanding a foreign environment.[3]

Psychic distance constructs barriers that detract from and undermine the concept of frictionless commercial activity, with often cited examples including information asymmetries, uncertainty, difficulties in the execution of contracts due to different legal regimes, intellectual property rights. Collectively these give rise to frictions in the international economy with the result that the greater the psychic distance between two countries the more difficult it is for trade to freely occur.

7.2.1 Methodologies for the evaluation of psychic distance.

For the relationship between psychic distance and international investment activity to be assessed it is necessary to construct a framework through which the debate can be structured. Drawing on the literature it is possible to identify three different methodologies through which the relationship between psychic distance and international investment activity can be examined. Each of these shall be briefly outlined before a discussion of the pros and cons of each is presented.

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[1] Johanson & Vahlne, 1977.

[2] Hallen & Wiedersheim-Paul, 1993, pg293.

[3] Nordstrom & Vahlne, 1992 cited in O'Grady & Lane, 1996, pg313.

7.2.1.1 The Kogut & Singh index.

The first method of assessing the degree to which internationalisation is influenced by psychic distance is derived from the work of Kogut & Singh (1988). Using Hofstede (1980) Kogut & Singh (1988) construct an index reflecting the distance from the United States of foreign countries along four cultural dimensions - power distance, uncertainty avoidance, masculinity/femininity and individualism. Table 7.1 (below) lists the countries for which the information is available, and provides details of their "scores" along the four dimensions relative to the United States.

In the construction of the index a similar methodology to Kogut & Singh (1988) is adopted; namely:

> ... a composite index was formed based on the deviation along each of the four cultural dimensions (i.e., power distance, uncertainty avoidance, masculinity/femininity, and individualism) of each country from the United States ranking. The deviations were corrected for differences in the variance of each dimension and then arithmetically averaged. Algebraically we built the following index:
>
> $$CD_j = \sum_{i=1}^{4} \{(I_{ij} - I_{iu})^2/V_i\}/4,$$
>
> where I stands for the index for the ith cultural dimension and jth country, V_i is the variance of the index of the ith dimension, u indicates the United States, and CD_j is cultural difference of the jth country from the United States.[4]

Using the above formula and methodology the country scores were calculated for each of the countries contained within Hofstede (1980). That is, for thirty-nine countries in all. Once each of the country scores had been calculated they were then used to prioritise in ascending order countries on the basis of their psychic distance from the United States. Australia, with the smallest psychic distance score was the country with the closest cultural distance to the United States, whilst the Philippines, with the largest score, was judged to display the

[4] Kogut & Singh, 1988, pg422.

greatest psychic distance from the United States. The resulting prioritisation of countries was then used in the subsequent analysis of the internationalisation pattern of the RBOCs.

Table 7.1: The measurement of cultural characteristics for selected countries relative to the United States and based on Hofstede (1980)

Country	Power distance index (PDI)	Uncertainty avoidance index (UAI)	Individual index (IDV)	Masculinity index (MAS)
USA	40	46	91	62
	Country PDI-USA	Country UAI-USA	Country IDV-USA	Country MAS-USA
Argentina	9	40	-45	-6
Australia	-4	5	-1	-1
Austria	-29	24	-36	17
Belgium	25	48	-16	-8
Brazil	29	30	-53	-13
Canada	-1	30	-53	-13
Chile	23	40	-68	-34
Columbia	27	34	-78	2
Denmark	-22	-23	-17	-46
Finland	-7	13	-28	-36
France	28	40	-20	-19
Germany	-5	19	-24	4
Greece	20	66	-56	5
HK	-28	-17	-66	5
Holland	-2	7	-11	-48
India	37	-6	-43	-6
Ireland	-12	-9	-21	6
Iran	18	13	-50	-19
Israel	-27	35	-37	-15
Italy	10	29	-15	8
Japan	14	46	-45	33
Mexico	41	36	-61	7
Norway	-9	4	-22	-54
NZ	-18	3	-12	-4
Pakistan	15	24	-77	-12
Peru	24	41	-75	-20
Philippines	54	-2	-59	2
Portugal	23	58	-64	-31
RSA	9	3	-26	1
Singapore	34	-38	-71	-14
Spain	17	40	-40	20
Sweden	-9	-17	-20	-57
Swiss	-6	12	-23	8
Taiwan	18	23	-74	-17
Thailand	24	18	-71	-28
UK	-5	39	-54	-17
Turkey	26	9	-2	4
Venezuela	41	30	-79	11
Yugoslavia	36	42	-64	-41

7.2.1.2 Country clusters of Ronen & Shenkar.

The second method builds on the work of Ronen & Shenkar (1985) who reviewed the literature relating to country clustering, and after identifying a range of variables on which countries can be compared generated "a map that integrates and synthesises the available data."[5] This map allocates countries into one of ten different zones that display maximum homogeneity within and maximum heterogeneity between. The ten zones identified were then ranked by their degree of cultural difference from the United States through reference to aforementioned Kogut & Singh (1988) index.

Table 7.2: Country membership of psychic distance zones

Zones	Member countries
Anglo	Canada, Australia, UK, Ireland, South Africa, New Zealand
Germanic	Switzerland, Austria, Germany
Latin European	France, Belgium, Italy, Portugal, Spain
Near Eastern	Turkey, Iran, Greece
Nordic	Finland, Norway, Denmark, Sweden
Latin American	Argentina, Venezuela, Chile, Mexico, Peru, Colombia
Other	All other countries not mentioned elsewhere.
Far Eastern	Singapore, Malaysia, Hong Kong, Philippines, South Vietnam, Indonesia, Taiwan, Thailand
Independent	Brazil, Japan, India, Israel
Arab	Abu-Dhabi, Bahrain, UAE, Kuwait, Oman, Saudi Arabia

Source: Ronen & Shenkar (1985).

7.2.1.3 A measurement of the degree of internationalisation.

The final method of Sullivan (1994) takes the ten zones of Ronen & Shenkar (1985) and constructs a measure of the degree of internationalisation. Sullivan (1994) offers a crude measure of the degree of internationalisation so that, for example, if a company has subsidiaries in six of the ten zones it is 60% internationalised, three subsidiaries 30% and so forth. By employing this method to the ranked zones a measure of the success of the company in internationalising away from the United States can be gained. A company assigned a value of 60% is more successful in internationalising to countries with greater psychic distance from the United States than a company with, for example's sake, an assigned value of 40%. Importantly, the measure of the degree of internationalisation

[5] Ronen & Shenkar, 1985, pg435.

constructed by Sullivan (1994) focuses on the diversity of internationalisation, and not on the level or volume of resources invested in overseas markets.

7.2.1.4 Methodology.

To varying degrees all three methodologies outlined above are drawn upon in the subsequent analysis. Having said this, the analysis draws more heavily on Ronen & Shenkar (1985) and Sullivan (1994) than that of Kogut & Singh (1988). These methodologies have been favoured primarily because they more closely resemble and reflect the intuitiveness of psychic distance. Furthermore, they are also based on a wider empirical tradition and sample than Kogut & Singh (1988) relies solely on Hofstede (1980) in this respect. The methodology proposed by Ronen & Shenkar (1985) is more inclusive as it allows all of the host countries where the RBOCs have invested to be included within the analysis. In contrast, Kogut & Singh (1988) limit themselves to the forty countries surveyed by Hofstede (1980). Not only does this fall short of the 50 countries in which the RBOCs have invested, but also some of the countries included within Hofstede (1980) have not been host to RBOCs investments, for example, Iran.

This should not be taken to suggest that Ronen & Shenkar (1985) and Sullivan (1994) are beyond reproach. They are not. Although the ten zones identified by Ronen & Shenkar (1985) are more inclusive than the index developed by Kogut & Singh (1988) that was outlined above, each of the zones has a limited population. This is because they provide a synthesis of eight different empirical works with a high degree of geographical overlap. Ronen & Shenkar (1985), therefore, explicitly allocate 46 countries to the zones they identify. These countries do not exactly correspond to those countries where the RBOCs have invested. Thus, any country that is not included falls by default into the 'Other' zone with the result that it effectively becomes a catchall zone. In contrast to the other zones identified the catchall, and therefore diverse, nature of the 'Other' zone ensures that the degree of similarity between those countries in this zone is minimal.

This may distort any subsequent analysis that is undertaken. The principal problem with Sullivan (1994) is that the measure of the degree of internationalisation that he offers is a crude one. It does not take into account a whole host of issues raised by, for example, Perlmutter (1969) or Ietto-Gillies (1998), concerning the extent and nature of company internationalisation.

7.2.3 Initial analysis.

Even though reservations have been expressed as to the usefulness of Kogut & Singh (1988) this initial analysis of RBOCs internationalisation employs their index as a tool to provide an overview of the RBOCs international investment activities. These results are presented in Table 7.3 (over).

In Table 7.3 the countries are ranked in ascending order of their psychic distance from the United States. Australia can be found at the top of the table because its psychic distance is closest to the United States, whilst the Philippines is placed at the foot of the table as it displays the greatest psychic distance from the United States of those countries identified. Each column is head by one of the RBOCs. The date of the first investment by an RBOCs in a host country has been entered onto the table.

As a group it is apparent that the RBOCs have invested at some point in a diverse range of countries, with both large and small psychic distances from the United States. Furthermore, the RBOCs have also favoured some locations over others. For instance, at one time or another BellSouth, Pacific Telesis, SBC and US West have all invested in the UK whilst only Bell Atlantic has invested in Greece. However, analysing RBOCs internationalisation at the group level is inappropriate. By altering the level of analysis, from the collective to the individual, the different international investment activities of each of the RBOCs becomes apparent. All of the RBOCs have demonstrated a propensity to invest in markets with comparatively minor psychic distances from the United States, for example, Australia, New Zealand or Germany. Outside of this commonality the RBOCs have variously penetrated the lower reaches of the index where countries display greater psychic distances from the United States.

Table 7.3: Geography, internationalisation and RBOCs penetration of the index, 1984-1998

Country	Ameritech	Bell Atlantic	BellSouth	Pacific Telesis	SBC	US West
Australia			1987		1984	1994
UK		1987	1992	1985	1987	1991
RSA					1995	
Swiss		1988			1997	
Germany	1990	1988	1994	1990		
Ire		1991				
NZ	1990	1990	1993			
Italy		1988		1994		
Canada	1984					
Iran						
Finland						
Argentina			1989			1996
Pakistan						
Taiwan					1997	
Holland			1993			1995
Spain				1992		1995
HK						1989
Austria		1988				
Israel			1994		1985	
Brazil						1994
Thailand		1992		1987		
India		1995	1988			1996
Belgium	1996		1995	1993		1996
France		1988	1993	1993	1994	
Norway	1993					1991
Turkey						
Japan		1991		1989		1993
Denmark	1997		1992			
Sweden				1993		1991
Peru			1990			
Chile			1991		1995	
Singapore						1996
Greece		1993				
Mexico		1993	1990		1990	
Venezuela			1991			
Portugal						
Yugoslavia						
Philippines		1995				

Note: The date within each cell represents the first instance of foreign direct investment (FDI) to the country by the RBOCs.

Although the number and location of countries differs between RBOCs the pattern is somewhat similar in that it is characterised by 'radical internationalisation' and 'back-filling.' That is, the RBOCs are expanding internationally, and then making subsequent investments in countries with smaller psychic distance to the United States than the initial investment. US West provides an apt illustration of this pattern of internationalisation in practice.

US West initiated its internationalisation in 1989 by investing in Hong Kong, a country nearly half way down the index. Two years later, when US West again expanded its international investment portfolio, the company combined back-filling with radical internationalisation. On the one hand the company engaged in back-filling, as the investments made were in countries such as the UK whose psychic distance from the United States is less than that of Hong Kong. On the other hand, US West engaged in radical internationalisation through investments in Norway and Sweden. All of the international investments between 1991 and 1995 inclusive are examples of back-filling, as these investments did not extend any further US West's penetration of the index. In 1996 US West once again expanded its penetration of the index through acquiring Continental Cablevision that had a Singapore based subsidiary.

Kogut & Singh (1988) provide a linear understanding of psychic distance and its influence on international investment activity. Companies make their initial investment in a host country that has a small psychic distance from the United States, and in time this initial investment is followed by investments in host countries that are progressively further away from the United States. However, the case of US West demonstrates that international investment activity is not linear, and is comprised of radical internationalisation as well as back-filling. Kogut & Singh (1988) does not address the issue as to why international investment activity switches between radical internationalisation and back-filling. Nor does the methodology they propose provide an explanation of the propensity for the RBOCs to concentrate their investments in particular regions.

One explanation arises from the adoption of a mathematical approach to psychic distance. By adopting a numerical approach Kogut & Singh (1988) are well placed to provide a categorical ranking of countries based on their psychic distance from the United States. There are, however, problems with adopting such an approach. The ranking produced often runs contrary to an intuitive based ranking of countries. For example, Japan was given a smaller psychic distance from the United States than Sweden by Kogut & Singh (1988) and other Nordic countries where placed closer to the United States than Japan. An intuitive and anecdotal understanding of psychic distance would suggest that Nordic countries like Sweden and Norway would be grouped close together, and that their psychic distance from the United States would be less than that of Japan. According to Kogut & Singh (1988) this is clearly not the case.

Thus, adopting one approach over another is likely to produce quite different results, a difference compounded by the fact that intuitiveness and anecdotal interpretation of psychic distance are likely to differ between researchers. Increasing the intuitive and anecdotal components of the ranking process will, therefore, reduce the reproducibility of the methodology. Having said this, some balance needs to be struck between the categorical certainties of the mathematical approach on the one hand, and the flexibility of the intuitive and anecdotal approach on the other hand. If nothing else this demonstrates the difficulties of constructing a framework capable of ordering countries based on their psychic distance in a rigorous manner that at the same time is sufficiently flexible to accommodate intuitive insights.

7.2.4 Further analysis.

The initial analysis has demonstrated that the relationship between internationalisation and psychic distance is more complex than initially envisaged, and can not be explained solely through reference to radical internationalisation and back-filling. The proposed framework for furthering the analysis is based on the ten zones identified by Ronen & Shenkar (1985) and the degree of internationalisation measurement constructed by Sullivan (1994). In this measurement each investment is given the same weighting regardless of the size of investment. Through the identification of clusters of countries that display similar cultural characteristics to one another, Ronen & Shenkar (1985) provide a method to investigate whether internationalisation is influenced by the presence of minimal psychic distance between countries. It is, therefore, proposed that the RBOCs will internationalise to each of the ten zones in turn, from the zone displaying the least psychic distance from the United States to the zone with the largest psychic distance form the United States. Thus, internationalisation will be incremental in character and will occur not only between zones but also within each zone once the initial investment has been made.

As a group the international investment activity of the RBOCs has altered over time. Initially the RBOCs favoured those zones with the least psychic distance from the United States, such as Anglo or Germanic. Later on international investment activity has increasingly favoured those zones with greater psychic distance, for instance, Latin American and Other.

However, as a group the international investment activity of the RBOCs has not incrementally expanded from those zones displaying least psychic distance with the United States to those with greater differences as suggested by the theory. The RBOCs invested in zones such as Far Eastern or Independent prior to those closer in terms of psychic distance like Nordic. Furthermore, throughout the expansion to other zones the initial recipient zones have continued to remain an important location of RBOCs international investment activity.

7.2.4.1 Ameritech.

As measured by Sullivan (1994) Ameritech is the least internationalised of the RBOCs. With investments in five of the ten zones Ameritech is accredited a degree of internationalisation of 50%.

Since divestiture the geographical focus of Ameritech's international investment activity has not remained constant. Initially after divestiture investment activity focused on Canada and NZ, but from 1990 onwards activity has largely been concentrated towards Europe. The international investment activity of Ameritech illustrates that a discrepancy exists between geography and psychic distance, in that all five zones where the company is present can be found within Europe yet the scope of countries within the five zones psychic distance is greater than just this continent. However, by 1998 the inclusion of the 'Anglo,' and to lesser extent 'Other' zones is somewhat deceptive as the Ameritech has divested all but two of the investments in these zones.

Of the four Anglo zone investments three have been divested so that by the end of 1998 only the 1997 purchase of Cross-Global Alarms (Canada) remains. Furthermore, the discontinuation of the Chinese joint-venture in late 1995 resulted in the 'Other' zone being soley European in focus. The removal of these investments from the analysis reinforces the shift in Ameritech's international investment activity towards Europe, so that as of the end of 1998 only one investment is not to be found within Europe. Finally, the removal of the divested investments also reduces Ameritech's degree of internationalisation to 40%.

Table 7.4: The degree and pattern of the internationalisation of Ameritech, 1984-1998

Zone	Initial investment		Subsequent investments	
	Year	Country	Year	Country
Anglo	1984	Canada	1990 1991 1997	NZ NZ Canada
Germanic	1990	Germany		
Other	1991	Poland	1993 1995	Hungary China
Nordic	1993	Norway	1997	Denmark
Latin European	1996	Belgium		

The limited nature of Ameritech's internationalisation, with its investments thinly spread across four zones, and with only one case of multiple investments would suggest that the company has room to expand within these zones. However, it woud also suggest that some factor, which may be the presence of significant and continued psychic distance between Ameritech and the host markets, or regulatory and market structures, is preventing the company from making subsequent investments within the zones as suggested by the model proposed earlier.

7.2.4.2 Bell Atlantic.

With a substantial portfolio of overseas operations in eight of the ten zones Bell Atlantic is the most internationalised of the RBOCs. As befits the most internationalised of the RBOCs the investments range from Asia to the Europe with an international fibre optic cable (FLAG) linking these two regions together. This extensive array of international operations is in itself surprising, given that Bell Atlantic was one of the last of the RBCOs to expand overseas.

The internationalisation of Bell Atlantic closely corresponds to that laid out in the model. Prior to 1991 Bell Atlantic expanded its degree of internationalisation, with each new zone displaying a greater psychic distance from the United States than the previous. Simultaneously, Bell Atlantic also increased its commitment to each of the zones in which it operated. In all cases these additional investments were within two years of the initial investment, and at least two investments have been made within each zone. This pattern of internationalisation is in accordance with the model which suggests that the initial investment acts to reduce the psychic distance between home and host country, thereby enabling the internationalising company to overcome the information asymmetries and assess investment opportunities. The reduction in psychic distance with the host market enables additional investment opportunities to be assessed on the basis of a more informed understanding of how the host market operates.

Figure 7.2: The interplay between internationalisation and psychic distance: the case of Ameritech

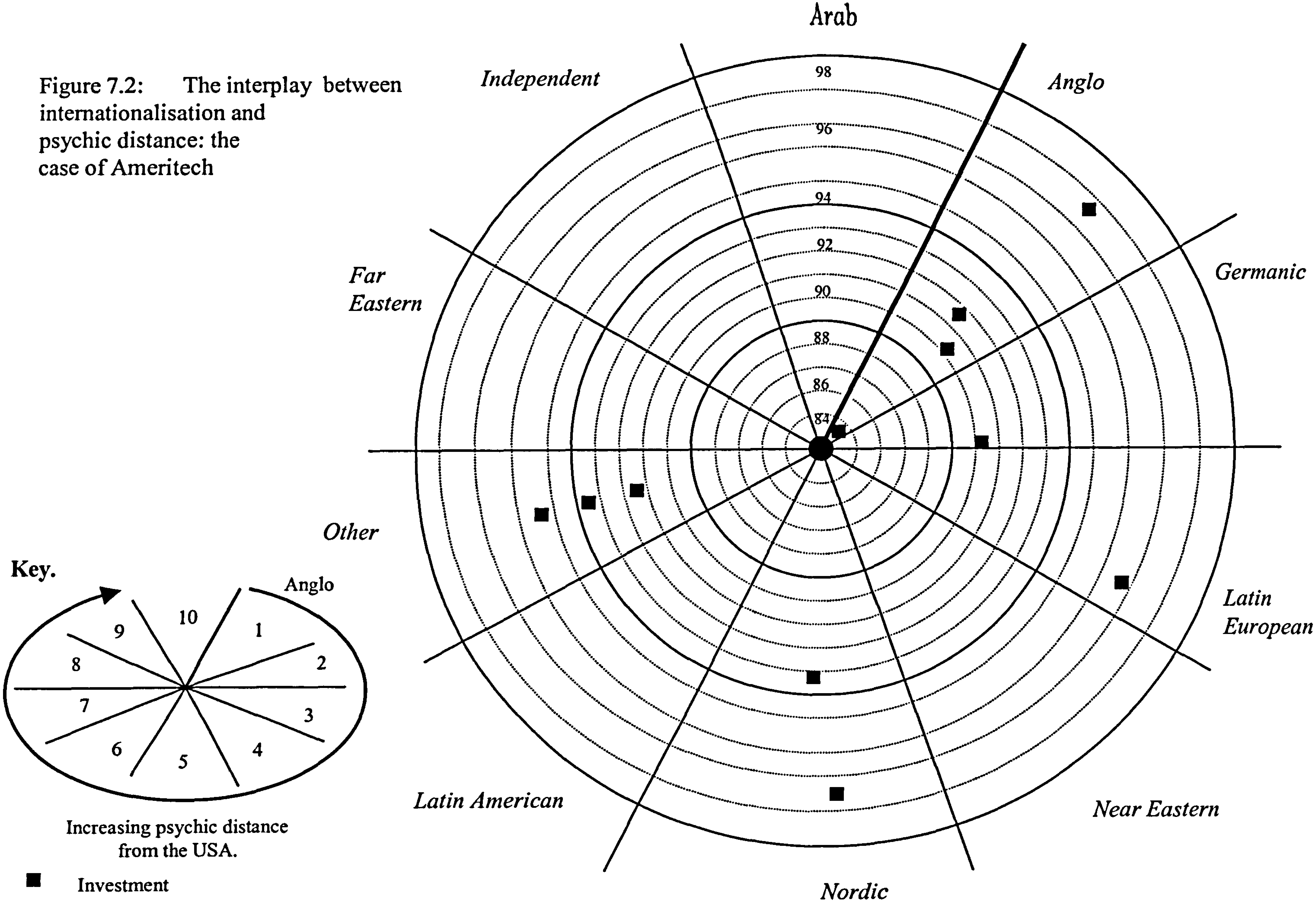


Table 7.5: The degree and pattern of the internationalisation of Bell Atlantic, 1984-1998

Zone	Initial investment		Subsequent investment	
	Year	Country	Year	Country
Anglo	1987	UK	1988 1988 1990 1990 1991 1991 1991 1992 1997	UK UK NZ UK NZ NZ Ire Australia UK
Latin European	1988	France	1988 1991 1994 1995 1995	Italy Italy Italy Italy Italy
Germanic	1988	Swiss	1988 1988 1989	Germany Austria Germany
Other	1989	Gibraltar	1991 1991 1992 1993	Czech Slovak Bermuda Czech & Slovak Republics
Independent	1991	Japan	1991 1991 1992 1995	Japan Japan Japan India
Far Eastern	1992	Thailand	1994 1995 1995 1996	Thailand Philippines Indonesia Thai
Near Eastern	1993	Greece		
Latin American	1993	Mexico		

Since 1991 Bell Atlantic has concentrated more on the expansion within zones where it already has invested and back-filling, than on expanding into zones with ever greater psychic distance form the United States. As such this represents a change of strategy on the part of Bell Atlantic, and indicated that the initial investment within the zone has been sufficient to reduce the psychic distance to the point where future investment opportunities can be evaluated. Adopting such a strategy has enabled Bell Atlantic to increase its degree of internationalisation to 80%.

Bell Atlantic as its is presently constituted is the product of a 1997 merger with fellow RBOCs, Nynex. Despite the fact that this merger was driven primarily by domestic considerations the union of Bell Atlantic and Nynex substantially increased the international scope and coverage of Bell Atlantic. The international portfolios of each RBOCs complemented the other, with the international investment activity of Bell Atlantic having favoured Europe whilst Nynex had concentrated its investment activity more towards Asia.

Until the merger Nynex had targeted its internationalisation towards two quite different areas:

> ...we saw two distinct types of opportunity, says Joe Farina, vice-president of corporate business development and president of NYNEX Network Systems, which overseas worldwide network business. One was in extremely inviting regulatory climates like the UK. The other was where penetration was low and there was a need for expertise, allowing us to participate in explosive growth - like Asia.[6]

Table 7.6: Nynex's Asian adventure

Year	Investment	Details	Country zone
1991	TelecomAsia	13.5%. Thai wireline	Far Eastern
1992	FLAG	global fibre link	Other
1993	Telecom Holding (TelecomAsia subsidiary)	Thai cable TV franchise	Far Eastern
1994	Memo of understanding	with China re network construction	Other
1995	NYNEX Asia Communications Group est.	co-ordination co	Other
1995	Excelcomindo	23%. Indonesian GSM	Far Eastern
1995	Bayantel[1]	20% Philippines operator	Far Eastern
1995	Joint venture with Reliance Industries	Indian bid for cellular license	Independent
1995	OTT[2]	23% indirect holding in TelecomAsia	Far Eastern
1996	UCOM	1.5%. parent of Thai cellular co TAC	Far Eastern

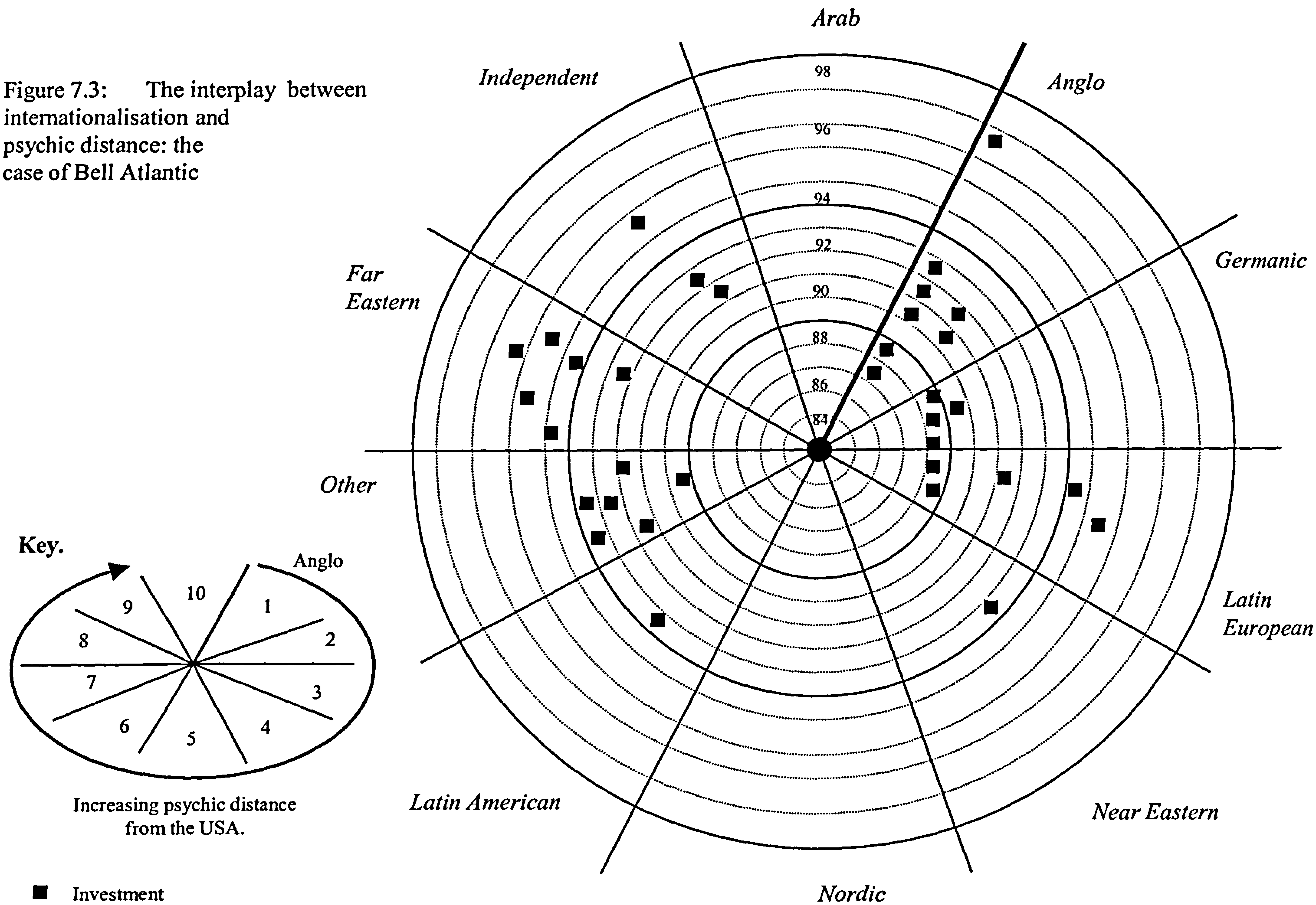
Note: 1 Bayan Telecommunications Holding Corporation; 2 Orient Telecom & Technology. *Source:* various annual reports; Daiwa (1996).

Nynex invested in both of these regions, though the significance of Asia to the company became apparent and is underlined by the formation of Nynex Asian Communications Group in 1995. Table 7.6 (above) demonstrates the wide ranging portfolio of investments that Nynex constructed, though the most important of these, and the one central to the development of the company's subsequent investments in the region, is actually the initial investment, TelecomAsia.

TelecomAsia provided Nynex with its initial entrance into the Asian market after several years of fruitless effort. Once this investment was secure Nynex rapidly expanded its Asian investment portfolio. Table 7.6 (above) shows that a large number of the Asian investment

[6] Global Telecoms Business, 1994c, pg19.

Figure 7.3: The interplay between internationalisation and psychic distance: the case of Bell Atlantic



activity can be found within the same country zone as the initial investment in TelecomAsia, that is, in the Far Eastern zone. These investments are in accordance to the notion of expansion within a zone once the initial investment has reduced the psychic distance present between the inward investor and host market. The alliance with Charoen Pokphand (CP) Group undoubtedly provided Nynex with invaluable local knowledge, in the form of an understanding of local political and financial institutions unavailable to outsiders, especially outsiders from a different cultural and political background such as the United States.

7.2.4.3 BellSouth Corporation.

Geographically BellSouth's investments are spread across Asia/Pacific Rim, Latin America and Europe which has as a result led some to assert that the "geographic focus is very loosely defined...."[7] However, it can be argued that this is not the case; not only have investments been largely confined to Latin American and continental Europe, but BellSouth's internationalisation strategy has also been shaped by psychic distance.

The international investment activity of BellSouth has not remained constant. After initially focusing on the Asia/Pacific Rim the company has increasingly focused its investment efforts in Europe and then Latin America. Moreover, this shift has also coincided with an acceleration of the pace of internationalisation. By 1989 BellSouth had just eight international investments, however, the next three years saw a doubling of the number of investments, eventually totalling 31 by 1997.

With investments in seven of the ten zones BellSouth's degree of internationalisation is now 70%. In all cases bar one, the 'Nordic' zone, the company has made subsequent investments. After the initial 'Anglo' zone investment the company rapidly extended its portfolio in this zone, with the minimal psychic distance between the United States and 'Anglo' zone member countries provided little in the way of impediment to expansion. In contrast, in the 'Other,' 'Independent' and 'Latin America' zones a time lag exists between the initial and subsequent investments. This delay can be interpreted as arising from BellSouth adjusting to the market in which it has invested. In other words the role played by the initial investment is to familiarise BellSouth with the zone, through the collection of information that was previously not available and which enables information asymmetries to

[7] Global Telecoms Business, 1994a, pg17.

be negated. This in turn allows BellSouth to assess whether or not subsequent investments opportunities are available. This is in accordance with the theory proposed earlier.

Table 7.7: The degree and pattern of the internationalisation of BellSouth, 1984-1998

Zone	Initial investment		Subsequent investment	
	Year	Country	Year	Country
Anglo	1987	Australia	1987	Australia
			1988	Australia
			1988	Australia
			1989	UK
			1991	Australia
			1992	UK
			1993	NZ
			1994	Australia
			1995	Australia
Other	1987	China	1991	Uruguay
			1993	Netherlands
			1994	China
			1996	Panama
			1997	Nicaragua
			1997	Ecuador
Independent	1988	India	1994	Israel
			1995	India
			1997	Brazil
			1997	Brazil
Lain America	1989	Argentina	1990	Mexico
			1990	Peru
			1991	Venezuela
			1991	Chile
Nordic	1992	Denmark		
Latin European	1993	France	1995	Belgium
Germanic	1994	Germany	1995	Germany

The initial presence of BellSouth within a zone enables the company to reduce the psychic distance with the host market, and in the process to evaluate whether further investment opportunities are warranted. At an individual level two countries, Brazil and Germany, have each been the recipient of more than one investment by BellSouth, though the most striking example of commitment deepening to a single country is that of Australia.

Between 1987 and 1994 BellSouth made six investments that culminated in Optus, a full service telecommunications provider. It is openly acknowledged by BellSouth that the initial Australian investment made by the company, in Link Communications, acted as a market intelligence gathering mechanism. Clendenin (Chairman & CEO, BellSouth) declared that:

> [o]ur presence in Australia is a prime example of how we've *learned from experience*. We anticipated the government would open the market there, which was one of the drivers behind our decision in 1987 to acquire Link Communications, an Australian paging and messaging company. That enables us to learn a lot about the market, the culture, and the players-information that proved to be very valuable while we were

planning for the tender for Optus to be the second general carrier in Australia.[8] ***(emphasis added)***

Table 7.8: BellSouth's continued investment in Australia, 1987 – 1995

Year	Investment	Details
1987	Link Communications	100% acquisition, paging and messaging services.
1987	BellSouth Mobile Data Australia Pty Ltd[1]	100% start-up. Mobile data.
1988	Instage Pty Ltd[1]	100% acquisition. Paging.
1988	Page Alert Pty Ltd[1]	100% acquisition. Paging.
1991	Optus Communications	24.5% acquisition of Aussat for A$800m (completed in 1992). Second general license granted.
1992	Optus Mobile	Start-up. Cellular services from Optus.
1995	Optus Vision	46.5% start-up. Cable-TV

Notes: 1 Sold during 1995. *Source:* BellSouth (1996a); Global Finance (1994); Meredith (1995).

Investments following Link Communications built on the experiences gained from this initial involvement in the Australian marketplace. Along with Cable & Wireless and three local institutions BellSouth formed Optus Communications, which bid A$880m for a 25 year network license, a cellular telephone license and AUSSAT, a government owned provider of satellite services. In effect, Optus became an alternative full service provider capable of competing against Telstra, the incumbent PTO, across the entire spectrum of telecommunications services. Subsequent to this Optus expanded into the cable-TV market through establishing Optus Vision in 1995.

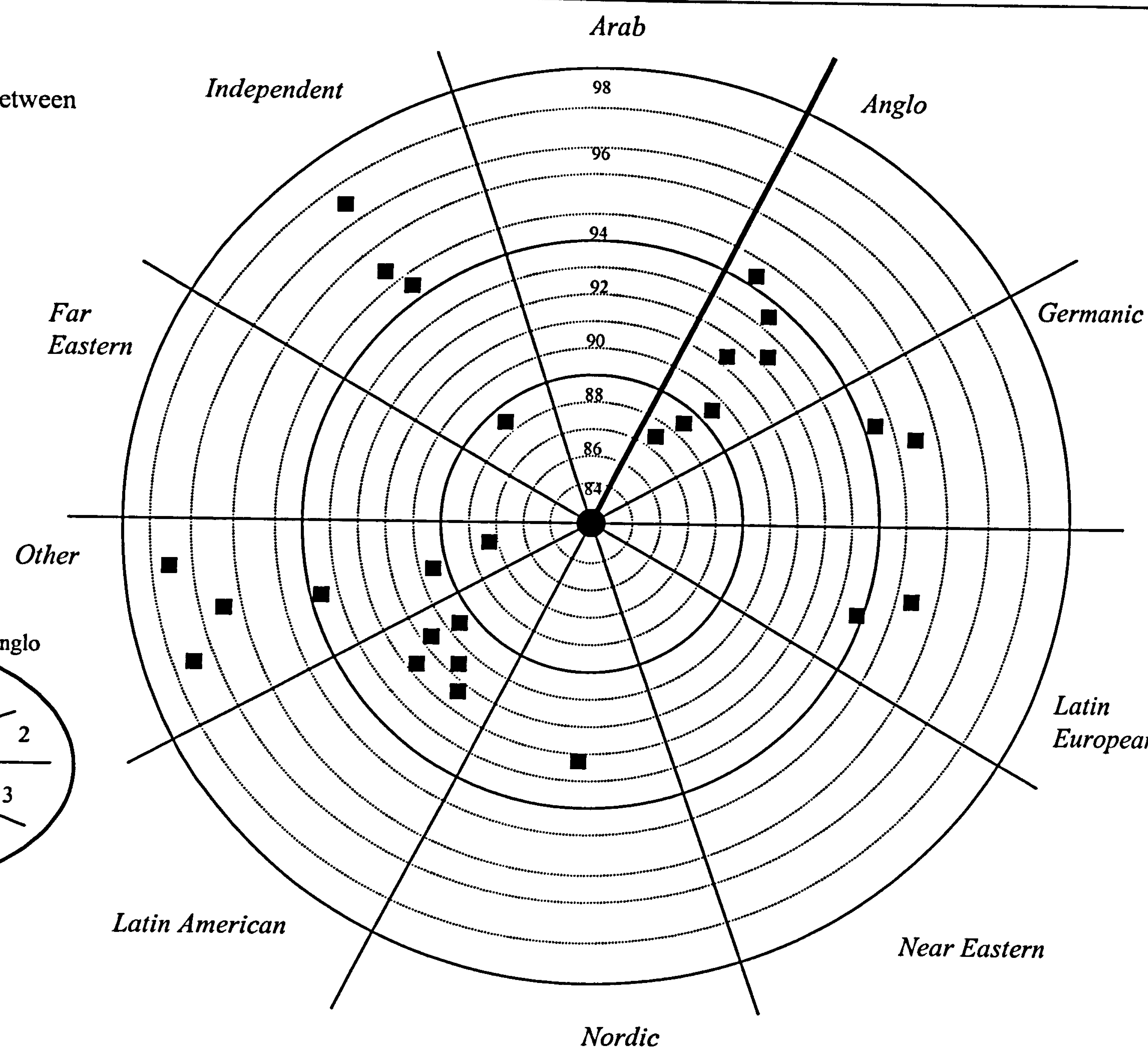
As noted in the 1992 Annual Report Optus gave "...BellSouth, for the first time, a stake in international long distance service and in satellite communications."[9] Apart from enabling BellSouth to enter new sectors of the telecommunications industry, this and other international investments such as E-Plus in Germany, also reinforced the vital role of partnerships in internationalisation:

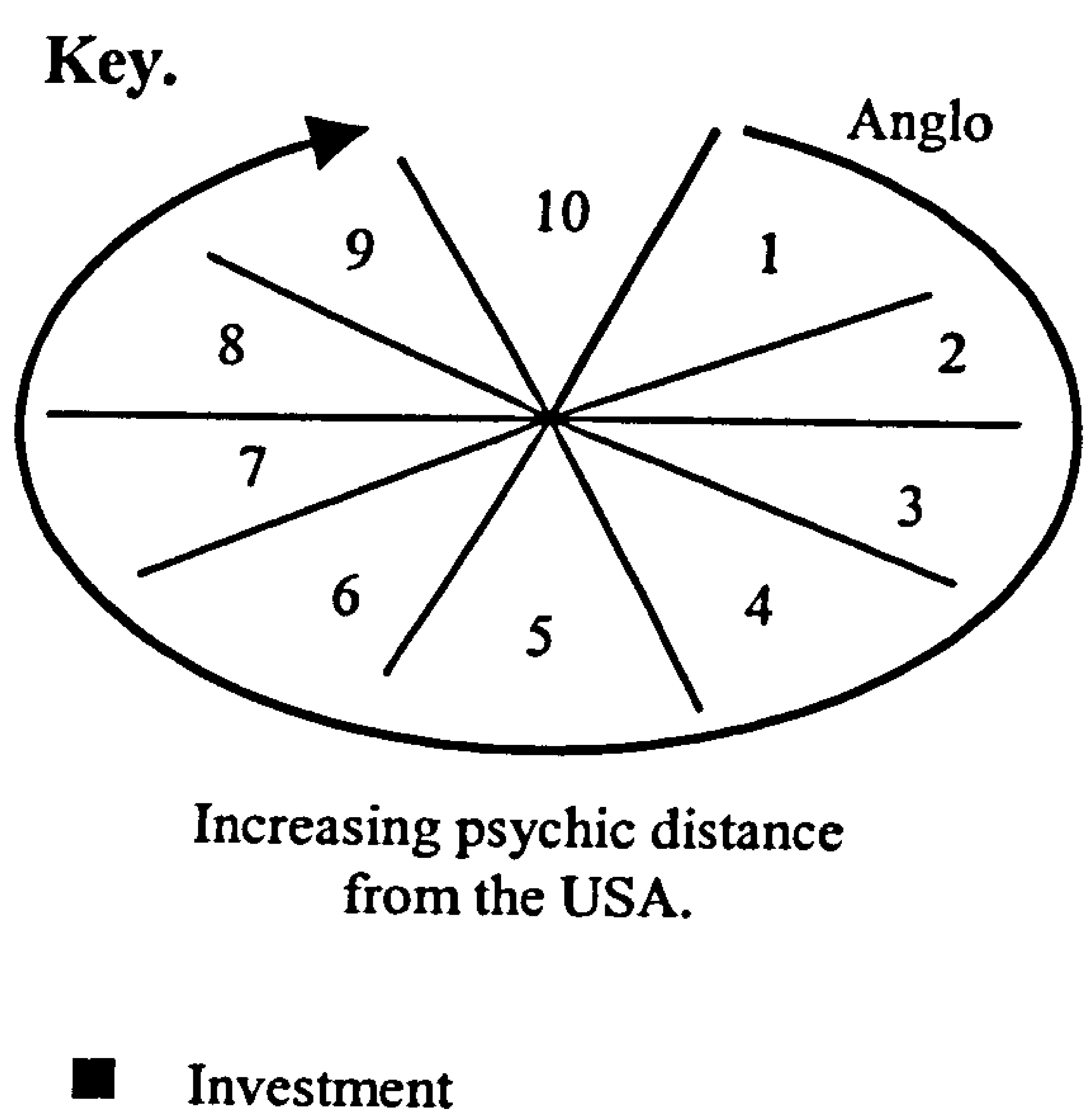
> [i]f its important to form good partnerships domestically, it's absolutely critical to form them internationally, says Charles B. Coe, president of BellSouth International. We believe BellSouth brings our partnerships as much expertise as anyone in mobile communications and network infrastructure. So we want to team up with partners

[8] Global Finance, 1994

[9] BellSouth, 1992, pg11.

Figure 7.4: The interplay between internationalisation and psychic distance: the case of BellSouth





who have exceptional complementary skills and local knowledge.[10]

In 1997 BellSouth sold its stake in Optus to fellow shareholder Cable & Wireless for A$980m plus either 22.3% of Colombian cellular company Occidente y Caribe Celular S.A. (Occel) or the case equivalent if the transfer of equity was not possible.[11] Miller (President, BellSouth International) noted that:

> This decision was a difficult one for us to make, as our experience with Optus has been overwhelmingly positive. We believe, however, it is the right decision for both Cable & Wireless and BellSouth, based on our respective strategies for international growth....

Miller continued:

> BellSouth's investment in Optus has not only been a good financial investment but has also provided BellSouth an excellent opportunity to hone competitive marketing skills, which are proving very valuable in our increasingly competitive domestic market.[12]

Not only did the company gain a satisfactory financial exit, but it also enabled BellSouth to gain a foothold in another cellular market within Latin America. In addition the Australian market provided an environment, with a comparatively low psychic distance from the United States, in which BellSouth could invest and gain valuable lessons for use elsewhere. However, it may be argued that the use of wholly owned subsidiaries before joint-ventures contradicts the theory as proposed. Prior to Optus the initial forays into the Australian market were financially minor, and thus represent a minimal level of commitment on the part of BellSouth to the marketplace. These same investments did, however, enable the company to familiarise itself with the peculiarities of the Australian market, thereby reducing the psychic distance present and to allow further investment opportunities to be appraised.

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[10] Global Finance, 1994, pg19.

[11] BellSouth, 1997c.

[12] BLS Investor News, 1997.s

7.2.4.4 Pacific Telesis Group.

The diverse nature of the recipient countries ensured that Pacific Telesis managed to investment in six of the ten psychic distance zones in the years predating the 'California First' policy. Of these six zones three, Anglo, Latin European and Independent, are clearly more important than the others, not least because they are host to the majority of Pacific Telesis's international investments. However, of these three zones the latter is the least important; the number of investments made is smaller than in the other two zones, and the investments are increasingly peripheral given Pacific Telesis's Eurocentric focus.

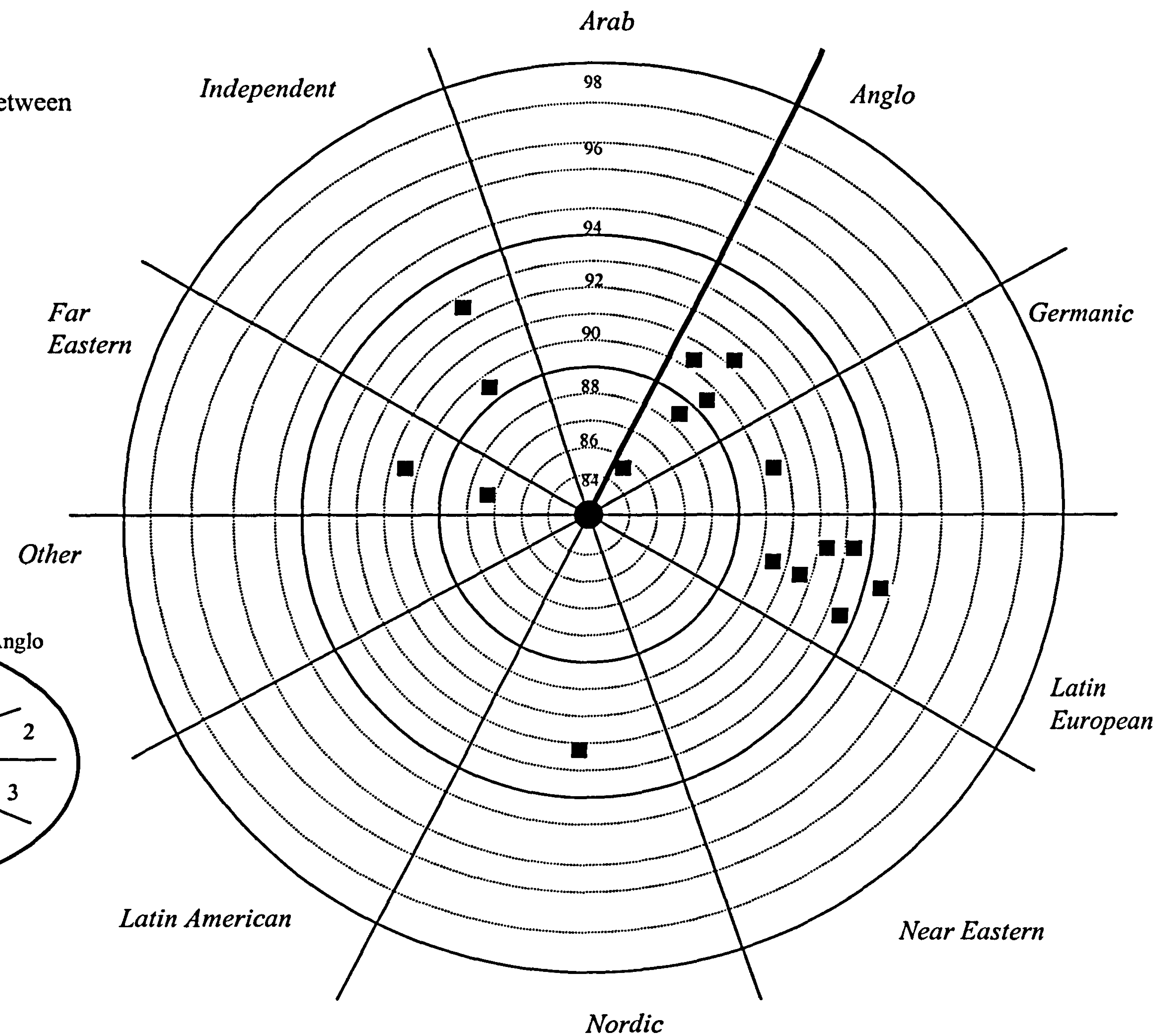
In the two dominant zones Pacific Telesis's employed different strategies. In the case of the Latin European zone Pacific Telesis expanded out from its first investment in 1991 after just one year, whereas in the Anglo zone a three year interval occurred between the initial investment in 1985 and its next investment in 1988. As all the subsequent Anglo investments were within the UK the delay is more due to the lack of investment opportunities, rather than because the company was adjusting to the psychic distance present.

Table 7.9: The degree and pattern of the internationalisation of Pacific Telesis, 1984-1998

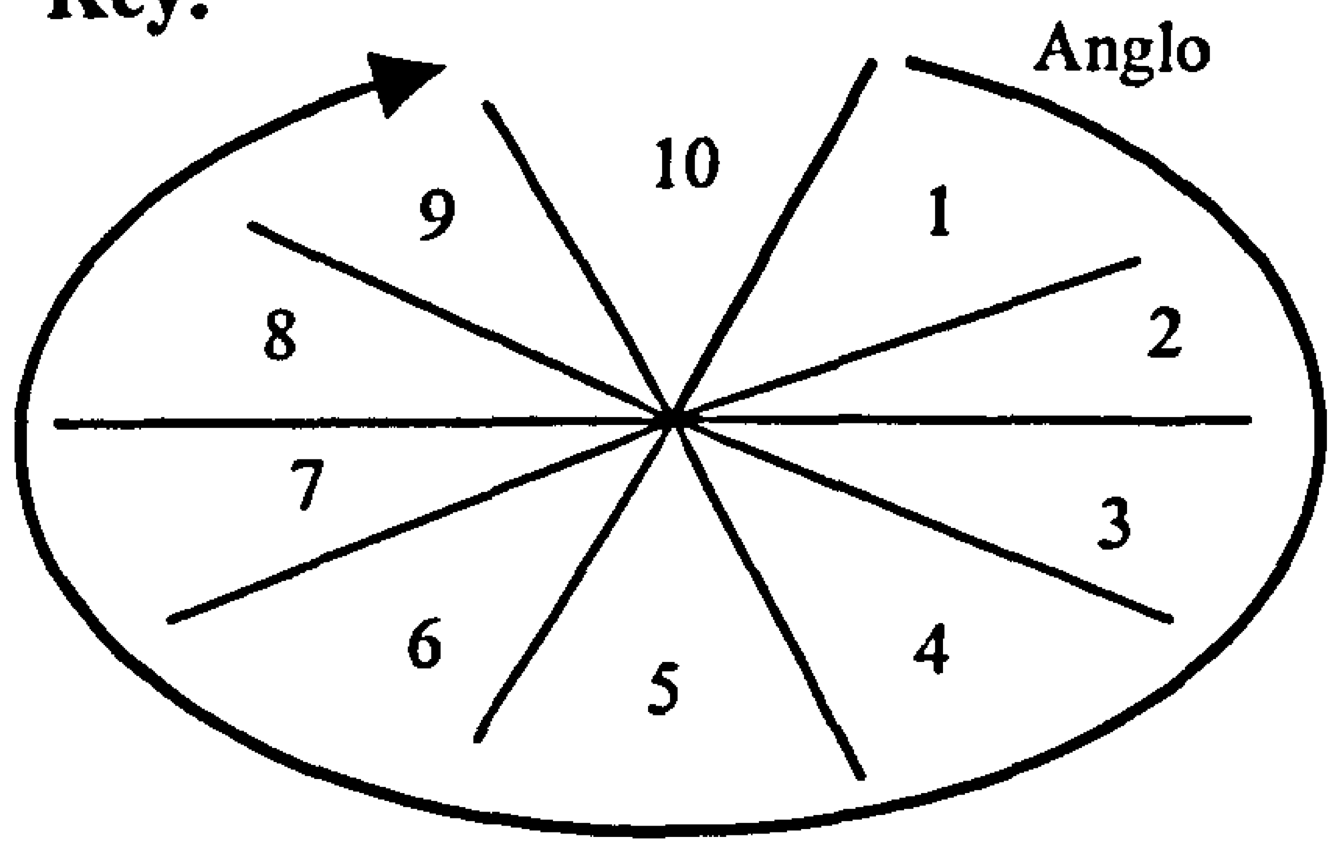
Zone	Initial investment		Subsequent investment	
	Year	Country	Year	Country
Anglo	1985	UK	1988 1989 1990 1991	UK UK UK UK
Far Eastern	1987	Thailand	1990	Thailand
Independent	1989	Japan	1992 1992 1992	Japan Japan Japan
Latin European	1990	Portugal	1991 1992 1993 1993 1994	Portugal Spain France Belgium Italy
Germanic	1990	Germany		
Nordic	1993	Sweden		

The case of Pacific Telesis also raises another interesting feature of internationalisation, namely, the relationship between the number of investments, investment value and commitment to the marketplace. One of Pacific Telesis's most valuable overseas assets is D-2 Privat, an operator of a national cellular license within Germany. Although this investment fuelled the appreciation in value of Pacific Telesis's overseas investments, Pacific Telesis did not see fit to capitalise on the strength of this investment, nor the large sunk investment or operational experience gained, and deepen its commitment to the German market. Instead

Figure 7.5: The interplay between internationalisation and psychic distance: the case of Pacific Telesis



Key.



Increasing psychic distance from the USA.

■ Investment

Pacific Telesis was content to develop D-2 Privat as a cellular operator and not to broaden its operational remit.

All in all, the internationalisation pattern displayed by Pacific Telesis contrary to that depicted in the model.

7.2.4.5 SBC Communications.

From 1984 onwards SBC has articulated an international strategy and has been able to amass what Maney (1995) describes as "brilliant international holdings."[13] These holdings are geographically diverse, so that in addition to operations in Latin America, Asia and Europe it is the only RBOC to have invested on the African continent in South Africa. With a degree of internationalisation of 60% it would appear that the company is under-internationalised when compared to the geographical scope it is activities. This under-internationalisation is directly attributable to the nature of the 'Anglo' zone which encompasses countries on the three continents of Africa, Europe and Australia.

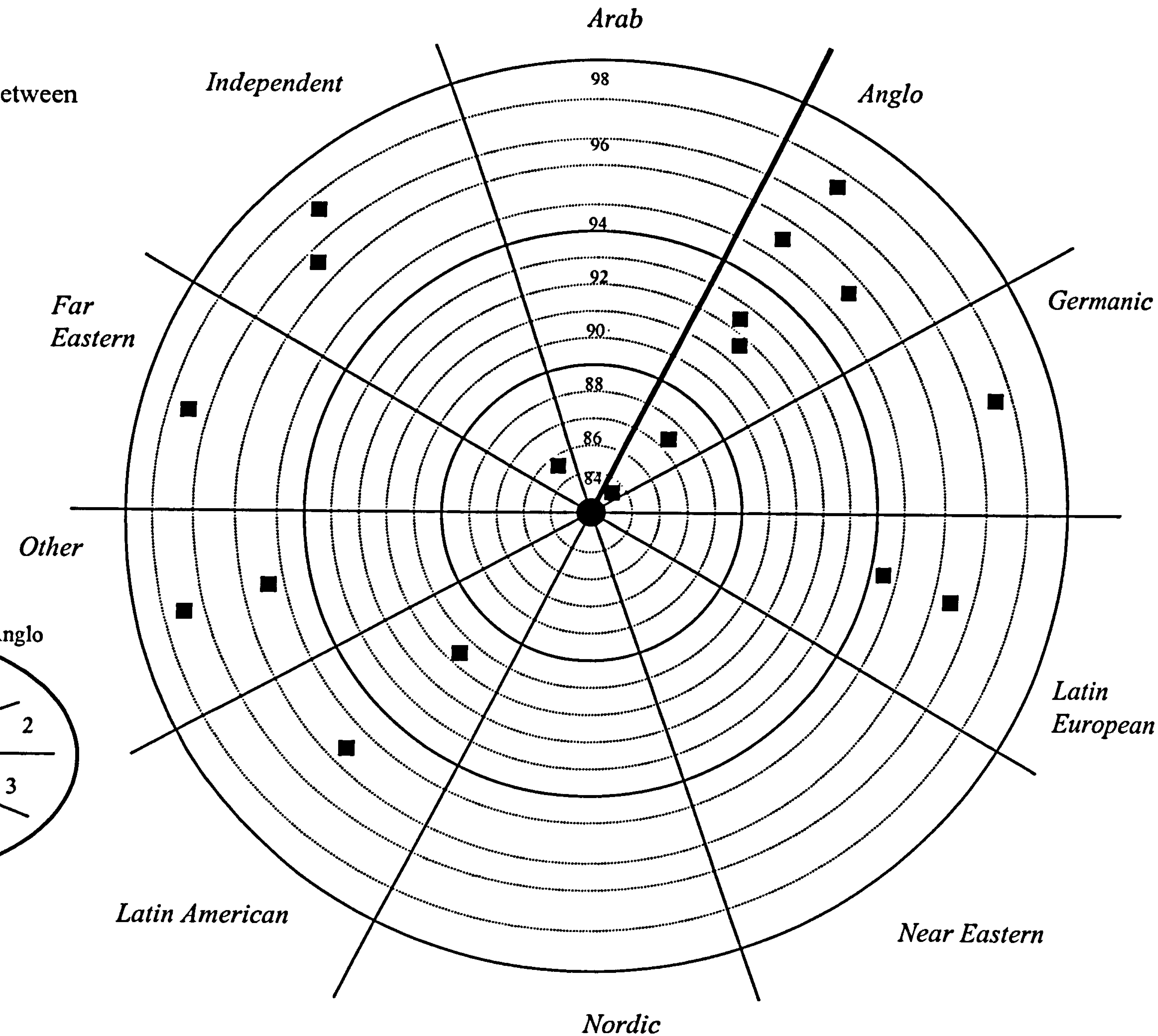
Table 7.10: The degree and pattern of the internationalisation of SBC Communications, 1984-1998

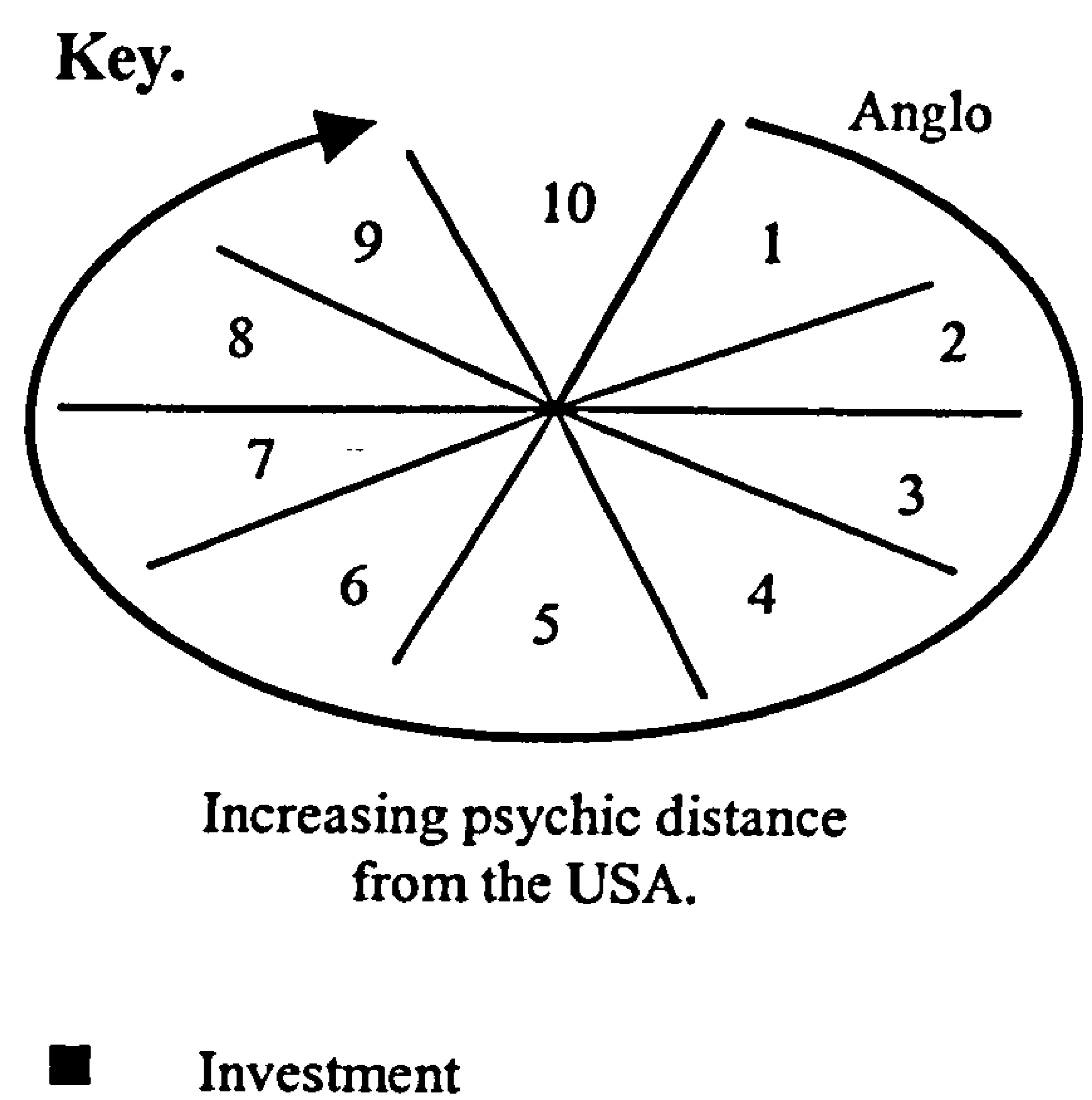
Zone	Initial investment		Subsequent investment	
	Year	Country	Year	Country
Anglo	1984	Australia	1987 1991 1992 1995 1995 1997	UK Australia UK UK RSA RSA
Independent	1985	Israel	1985 1996 1997	Israel Israel Israel
Latin America	1990	Mexico	1995	Chile
Latin European	1994	France	1996	France
Other	1995	RSK	1997	China
Far Eastern	1997	Taiwan		

Even though SBC has made multiple investments in five of the six zones that it has invested in, the company has concentrated its investment attention towards the Anglo and Independent zones. In all cases the initial investment would have enabled the company to collect market specific information, thereby overcoming information asymmetries and reducing the psychic distance between the host and the United States. In turn subsequent investments would build on this reduction and continue if not accelerate the process thereby

[13] Maney, 1995, pg98.

Figure 7.6: The interplay between internationalisation and psychic distance: the case of SBC Communications





establishing a virtuous cycle.

It is important to disassociate those multiple investments which are in effect investment restructuring, from those that represent an increase in the company's actual commitment and exposure to a given country. Examples of the former are Australia, France, the UK and South Korea whilst Israel and South Africa are indicative of the latter. In France the company folded its initial investment in SFR into Cegetel in order to further its cellular activities, whereas in Australia and South Korea the initial operations were discontinued for contractual reasons. In contrast the company's initial UK investment, Southwestern Bell Telecom (UK) Ltd, was closed after failing to meet expectations, and the subsequent investment in SBC CableComms was eventually merged with TeleWest and sold in 1998.

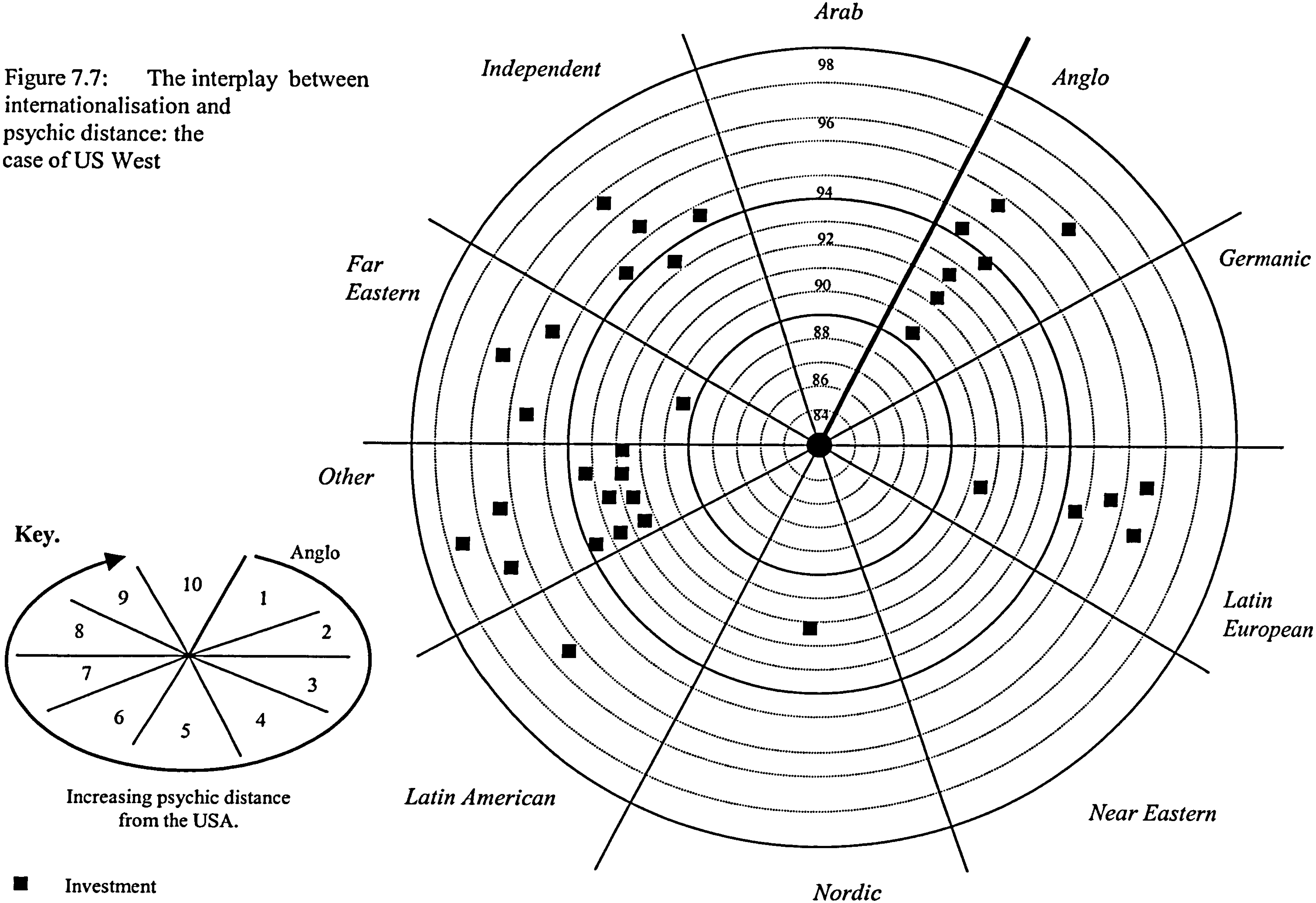
The failure of the UK investments is significant, as it demonstrates that it is not always the case that a reduction in psychic distance will enable the investing company to successfully evaluate market opportunities. Furthermore, the failure also demonstrates that investments in comparatively close psychic distance countries, as in the case of the low psychic distance between the United States and the UK, can still conspire to undermine the success of the investment. This can be taken as suggesting that a prolonged presence, which allows for a greater adjustment period, is necessary before the nuances of the market can be fully understood.

SBC has successfully and repeatedly invested in the Israeli telecommunications market through a series of inter locking joint-ventures with indigenous and international partners. SBC has expanded its exposure to the market, increasing both the number of ventures as well as financial resources committed. At the centre of this has been the RBOCs' close relationship with AUREC Group that has, in effect, reduced the psychic distance engendered barriers present and contributed to the company's success.

7.2.4.6 US West Inc.

According to measurement constructed by Sullivan (1994) US West can be accredited with a 70% degree of internationalisation. However, if the geographical location of the international investments made is examined it is clear that the Far East and the former Soviet bloc have been favoured by US West.

Figure 7.7: The interplay between internationalisation and psychic distance: the case of US West



Generally, where US West has made multiple investments within a zone it has done so relatively quickly after the initial investment. Furthermore, the internationalisation undertaken is in accordance with that laid out in the model in that successive investments have been made in an incremental fashion. The primary exception to this is the simultaneous purchase of several companies within Central and Eastern Europe in 1991. Though such radical internationalisation is directly incompatible with incremental internationalisation, it has been followed by a gradual increase in the company's exposure in this region in line with the model.

Table 7.11: The degree and pattern of the internationalisation of US West, 1984-1998

Zone	Initial investment		Subsequent investment	
	Year	Country	Year	Country
Far Eastern	1989	HK	1995	Malaysia
			1995	Malaysia
			1995	Indonesia
			1996	Singapore
Anglo	1989	UK	1991	UK
			1992	UK
			1992	UK
			1993	UK
			1994	UK
			1995	UK
			1996	Australia
Latin European	1991	France	1994	France
			1995	Spain
			1996	Belgium
			1996	Spain
Nordic	1991	Sweden	1991	Norway
Other	1991	Russia	1991	Hungary
			1991	Czech
			1991	Slovak
			1991	Russia
			1991	Hungary
			1992	Lithuania
			1992	Poland
			1993	Hungary
			1993	Russia
			1995	Czech
			1995	Holland
			1996	Poland
Independent	1993	Japan	1994	Japan
			1994	Brazil
			1995	Japan
			1995	Japan
			1996	India
Latin American	1996	Argentina		

7.2.4.7 Conclusion.

From the further analysis of the RBOCs it can be concluded that psychic distance does play a role in fashioning their international investments activity. As a group the RBOCs invested in zones with close psychic distance from the United States before those further away.

Furthermore, subsequent to the initial investment the RBOCs have expanded within a zone. The continued investment of Bell Atlantic in Asia is indicative of the psychic distance reduction role played by the initial international investment within a zone. These investments also highlighted the role of joint-venture partners in the reduction of psychic distance. Similarly, the continued investment of BellSouth in the Australian market was built upon the market familiarisation role of the initial investments. International investment activity therefore is both between and within each of the psychic distance zones.

However, the degree to which psychic distance influences RBOCs internationalisation requires qualification. None of the RBOCs have internationalised in strict accordance with the pattern laid out in the theory, that is, they have not progressively invested in Anglo then Germanic, Latin European, Near Eastern, Nordic, Latin America, Other, Far Eastern, Independent and Arab. Instead international investment activity jumps between zones, so that for example, Pacific Telesis invested in Anglo and then Independent, Latin European, Germanic and Nordic. Although a discrepancy between the geographical and psychic distance concentration of international investment activity is evident, and which is demonstrated by Ameritech, this alone is insufficient to explain why such a seemingly disjointed pattern of internationalisation occurs. Other factors must also contribute to the determination of RBOCs international investment activity.

7.3 GEOGRAPHY AS A PROXY FOR COMPETITION.

Until now the discussion of geography has been concerned solely with the relationship between psychic distance and the international expansion of the RBOCs. In this context the role of geography has been subsumed within the concept of psychic distance. However, the analysis to date has implicitly demonstrated the frequent discrepancy between psychic distance and geography, and highlighted that some countries have been more favoured than others as a recipient of RBOCs international investment.

One explanation for the discrepancy between geography and psychic distance is that the geography of telecommunications internationalisation is related to the degree of competition and liberalisation within the marketplace. The geography of internationalisation therefore reflects the degree to which the company has decided to either avoid or embrace competitive markets. Furthermore, the geography of investment activity will also reflect the degree to which the RBOCs are prepared to accept risk during the course of internationalisation. It is proposed that the more competitive and liberalised a market is, the greater the degree of risk associated with the investment. The decision to internationalise to a particular market is shaped by the interaction between the host market characteristics, primarily the degree and nature of liberalisation and competitiveness within the market, the available resources and the strategic intentions of the company. Two propositions bring together RBOCs internationalisation strategies and market characteristics such as competitiveness, liberalisation and risk:

- *Proposition 1.* The RBOCs will internationalise to any market regardless of the degree of competition within the marketplace. The competitive strengths of the company are such that the RBOCs will be drawn to markets solely on the basis of the investment opportunity and not the level of competition. Furthermore, the RBOCs will not be overly concerned by the degree of risk inherent to the international investment activity.

- *Proposition 2.* Alternatively, the international investment activity of an RBOCs may favour either the less or more competitive markets. The less competitive markets are associated with a desire to minimise the risks associated with international investment activity, whilst the more competitive markets demonstrate a willingness on the part of the company to accept a greater level of risk when internationalising.

7.3.1 Competition within markets.

How can market competitiveness be measured? It is clear from prima facie evidence that the level of competition differs between markets. However, much effort has been expended in creating more competitive markets; witness the widespread acceptance of the WTO agreement on telecommunications in 1997. More competitive markets are characterised by a greater number of operators, price and services competition, regulatory transparency in the form of an open decision making process and freely available regulations, an independent regulatory and liberalised service provision. These form criteria through which the competitiveness of markets can be assessed:

- *The status of the PTO.* A threefold distinction is observable: (1) the PTO may be either wholly owned by the State; (2) a public company though with the state retaining a substantial equity position; or (3) completely private and separate from the state. Empirical observation would suggest that the degree of competition and liberalisation are inversely related to the level of state control exerted over the PTO, with those markets where state ownership has been removed are more liberal and competitive than those markets where it has continued in some shape or form.

- *The number of cellular companies*. This is a proxy for the degree of competition and liberalisation within a country, with the greater the number of operators the more competitive and liberalised the market. However, there are exceptions to this general rule, namely, where licenses cover a region or city rather than the entire country. Argentina, Brazil, China, India and Russia have all issued either regional or city licenses, thereby inflating the number of cellular operators within the marketplace. It is nevertheless felt that the number of cellular operators remains a useful yardstick for comparing differences in liberalisation and competition regimes between countries.

- Whether or not the country is a *signatory of the WTO Agreement on Basic Telecommunications*. By signing the agreement a country commits itself to regulatory transparency, to open its market to companies from other signatories on most favoured nation (MFN) basis, and allow for domestic rule making to be challenged under international treaty.[14] Though it is acknowledged that signatories are proceeding at different paces, a country's signature of the agreement is indicative of its willingness to liberalise its telecommunications sector and introduce competition to the industry.

- The *status of the national regulatory authority* (NRA). The principal distinction here is between a NRA which is an integral part of the government apparatus, and thus susceptible to political persuasion in the determination of policy, and an authority which is organisationally separate from the government. This separation confers independence of action on the NRA, so that policy can be developed and implemented free from political interference. Thus, a liberalising and competitive marketplace will be synonymous with a separate regulatory authority. For instance, in Germany the telecommunications regulator, Regulierungsbehorde fur Telekommunikations und Post, has set interconnection prices to encourage new entrants in the face of protests

[14] Analysys, 1997.

from both Deutsche Telekom, and more recently the Schroder government, who argue that such treatment is uneven.[15]

These criteria can be used to provide an indication of liberalisation and competition, and thus a measure of market attractiveness to RBOCs international investment. However, the problem remains as how to construct a measure of competitiveness in a meaningful way, so that the internationalisation pattern of the RBOCs can be mapped onto differences in regulation regimes, competition and liberalisation.

Public Network Europe (1998) aggregate information relating to regulatory regimes, procurement policies, adherence to EU ONP directives for non-voice services and preparation for pan-European liberalisation on the 1st Jan 1998, governmental attitudes to openness and deviation from European 'norms' in the telecommunications market to produce a measure of liberalisation. This measure is then combined with two others, dominant operator strength and 1998 investment opportunities, to provide a framework for the assessment of market conditions throughout Europe.

Table 7.12 (below) provides illustrative examples of the Public Network Europe (1998) assessment of market conditions throughout Europe. From the table is can be seen that market liberalisation varies throughout Europe, ranging from on the one hand liberalised markets like Sweden and the UK to minimally liberalised markets such as Bosnia-Herzegovina on the other. These markets also differ along the other two indexes as well, so that the dominant operator is stronger in Germany than in Austria or Greece, and investment opportunities are more likely in Germany than Greece.

Table 7.12: Illustrative examples of market conditions within Europe

Country	Index		
	Liberalisation	Dominant operator strength	1998 Investment opportunities.
Austria	7	6	5
Bosnia-Herzegovina	4	2	4
Czech Republic	5	5	5
Germany	8	8	6
Greece	5	5	4
Sweden	9	8	4
UK	9	8	5

Source: Public Network Europe (1998).

[15] See, for example, Atkins (1998) and Cane & Atkins (1997).

Whilst this may offer an attractive course of action, not least because of its comprehensiveness, its replication is problematic. Due to the RBOCs investing in such a wide range of countries suitable and pertinent data is not always available. However, reliable and pertinent data is available for the criteria mentioned above, though with less comprehensive and reliable information being available concerning the key responsibilities assigned to the NRA. Even so, an index can be constructed that appropriately weights these four criteria so that countries are ranked in ascending order from the least to most competitive and liberalised.

7.3.2 Measuring the degree of competitiveness and liberalisation through a base index.

The degree of liberalisation and competition within the host countries of RBOCs international investment was evaluated through reference to a series of criteria: whether or not the country is a signatory of the WTO Agreement on Basic Telecommunications, the status of the NRA, the number of cellular operators and the level of state ownership of the PTO. The data used to calculate the base index is presented in Table 7.14, and can be found at the end of this section. Other criteria were not included in the index, primarily because insufficient information was available across all of the host countries.

For three of the four criteria the data can be considered to be reliable and irrefutable. The information is available from a variety of sources, and has been crosschecked to ascertain its validity. However, the number of cellular operators is more problematic in that operating licenses are not awarded on the same terms geographically throughout all host countries. In particular, a handful of countries such as Brazil and India award regional licenses whereas Japan and Russia combine licenses of differing scales.[16] This complicates the process of calculating the number of companies operating in any one locality. Having said this, it is possible to calculate the maximum number of licenses for any one locality and then use this figure as indicative of the level of competition and liberalisation within the marketplace. The use of the absolute number of operating companies in the index would engender

[16] In the case of Japan licenses are both national and regional in scope, whilst in Russia the licensing process has created a series of monopolies and duopolies at both the regional and metropolitan levels. As a consequence it is possible to identify 15 different operating companies in Japan, and more than 25 different companies in Russia.

distortions, unjustly elevating countries and painting a misleading picture of competition and liberalisation.

In the base index the criteria were weighted to reflect the different contributions that they make to the development of a competitive and liberalised marketplace. These weightings were derived from an understanding of the telecommunications industry. In this understanding the NRA and PTO privatisation play a key role in fashioning the marketplace. Consequently, the base index gives greatest weight to the status of the NRA, followed by the degree of private ownership of the PTO, the number of cellular operators and finally whether or not the country is a signatory of the WTO agreement. Table 7.13 details the weights allocated to each of the four criteria. The composite index was constructed in the following manner. For each criterion the value was multiplied by its corresponding weighting, and the values summed across all four variables for each country. The resulting totals were then used to rank the countries in ascending order, that is, from the least to most competitive country.

Table 7.13: Base index criteria and weightings

	Status of the NRA.	The degree of private ownership of PTO.	The number of cellular operators.	Signatory of the WTO agreement on telecommunications.
Measurement criteria coding	Independent = 1 Government = 0	0-100%	Absolute figure	Signatory = 1 Non-signatory = 0
Weighting	0.42	0.25	0.20	0.13

Although every effort was made to ensure that the index was sound it is acknowledged that certain elements, in particular the weightings, are challengeable. For instance, least weight is placed on whether or not the host country is a signatory of the WTO agreement. The argument can be made that this should be corrected to recognise the commitment to liberalisation and competition that the agreement actually represents. However, many countries negotiated exemptions from some of the agreement's provisions thus negating the degree to which they liberalised their markets. It is for this reason that the weightings place more emphasis on whether or not the NRA is independent.

Table 7.14 Index criteria and data for investment host countries

Country	The degree of PTO private ownership (%).	WTO signatory.	Status of the NRA.	Nos. of cellular operators.
Argentina	100	Y	Independent	5
Australia	34	Y	Independent	4
Austria	0	Y	Independent	2
Belgium	49.9	Y	Independent	2
Bermuda	100	N	Government	1
Brazil	0	Y	Independent	1
Canada	100	Y	Independent	4
Chile	69	Y	Government	3
China	0	N	Government	2
Czech	49	Y	Independent	2
Denmark	100	Y	Independent	3
Ecuador	35	Y	Independent	2
France	26	Y	Independent	3
Germany	26	Y	Independent	4
Gibraltar	50	N	Government	1
Greece	20	Y	Government	3
HK	100	Y	Independent	8
Hungary	65	Y	Independent	2
India	0	Y	Independent	2
Indonesia	35	Y	Government	6
Ireland	20	Y	Independent	2
Israel	24	Y	Government	2
Italy	55	Y	Independent	2
Japan	35	Y	Government	5
Lithuania	0	N	Independent	3
Malaysia	23	Y	Independent	3
Mexico	55	Y	Independent	4
Netherlands	55	Y	Independent	2
Nicaragua	0	N	Independent	1
Norway	0	Y	Independent	2
New Zealand	100	Y	Independent	2
Panama	49	N	Independent	1
Peru	62	Y	Independent	2
Philippines	100	Y	Independent	5
Poland	0	Y	Government	3
Portugal	49	Y	Independent	2
Russia	62	N	Government	3
Singapore	17	Y	Independent	2
Slovakia	0	Y	Independent	2
South Africa	30	Y	Independent	3
South Korea	32	Y	Government	3
Spain	100	Y	Independent	2
Sweden	0	Y	Independent	4
Switzerland	0	Y	Independent	1
Taiwan	0	N	Government	2
Thailand	0	Y	Independent	4
United Kingdom	100	Y	Independent	4

Uruguay	0	N	Government	2
Venezuela	69	Y	Independent	3

As a result of the weightings the index also contains several anomalies that do not conform to the intuitive expectation of competitiveness and liberalisation within host countries. In particular, several Latin American and Asian countries are accredited with a level of competition that would not be expected from anecdotal evidence. Arguably, such differences arise from the nature of economic and political structures within these regions that combine formal institutions of governance and commerce with continued familial, political, ethnic and regional ties. These ties effectively counter the transparency of institutions, detract from the unfettered operation of the market, and inform the intuitive evaluation of these countries as being less competitive and liberalised that the index suggests.

The precisely defined nature of the weightings allocated to the status of the NRA and WTO signatory are the result of attempts to align the index with intuitive expectations. These attempts reversed the most obvious discrepancies, but were curtailed so that the integrity of the index was preserved. Moreover, it was soon found that it was not possible to exactly align the index with expectations.

The resulting index can be used to group host countries together in accordance to the degree to which the markets are competitive and liberalised. Each of these groups displays maximum heterogeneity between and maximum homogeneity within. Table 7.15 (over) presents the five groups that can be identified among those countries hosting RBOCs international investment. Those countries that fall into the 'laggards' category have made the least effort to introduce competition to their telecommunications markets, whilst the converse is true of those countries in the 'rapid' category that have proactively introduced competition to their marketplaces. The intermediate categories between these two extremes are differentiated by the rate at which competition has been introduced into the marketplace. The introduction is slowest and has made the least impact in the 'minimal progress' category, and is fastest and more far reaching in the 'advanced progress' category.

Table 7.15: Grouping host countries by dominant market characteristics

Group	Member countries
Laggards	Gibraltar, China, Taiwan, Uruguay, Bermuda, Israel, Nicaragua
Minimal progress	Poland, Panama, Brazil, Switzerland, Russia, Greece, South Korea, Chile, Austria
Some progress	India, Norway, Slovak Republic, Singapore, Ireland, Lithuania, Ecuador, Czech Republic, Portugal, Belgium, Italy, Netherlands, Peru, Hungary, NZ.
Advanced progress	Spain, Malaysia, France, Japan, South Africa, Venezuela, Sweden, Thailand, Sweden, Thailand, Denmark, Germany, Indonesia, Australia
Rapid	Mexico, Canada, UK, Argentina, Philippines, HK

As observed from Table 7.15 (above) the member countries of the five identifiable groups are drawn from different geographical locations and possess quite diverse characteristics. As a consequence the five identified groups of the index of competitiveness and liberalisation constructed cannot be directly overlaid onto the ten psychic distance zones identified by Ronen & Shenkar (1985). For example, the "rapid" group identified above contains countries from four psychic distance zones, Anglo, Far Eastern, Latin American and Other. Therefore, if a RBOCs invests in all of the 'Rapid' category countries then its international investment activity is being driven, not by psychic distance similarities but instead by similar market conditions.

7.3.3 Analysis.

7.3.3.1 Ameritech.

Ameritech has invested across a broad swath of countries, ranging from those among the least competitive and liberalised to those at the forefront of introducing competition and liberalisation. As shown in Table 7.16 (over) the RBOCs has favoured those markets which have displayed only a half hearted propensity to liberalise and introduce competition. However, once those divested investments are removed the emphasis of internationalisation shifts towards those markets which are more competitive and liberalised. Such a shift confirms evidence that suggests that Ameritech has used internationalisation to competitive markets as a way to prepare for the introduction of competition within its five state domestic territory.

Table 7.16: Internationalisation and market characteristics: Ameritech

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	1	1	5	2	2
Nos. of retained investments	0	0	3	2	1

7.3.3.2 Bell Atlantic.

As befits the most internationalised of the RBOCs, as measured by the degree of internationalisation derived from Sullivan (1994), Bell Atlantic has invested across a wide spectrum of markets, though as Table 7.17 (below) clearly depicts these markets have more often than not been those which are competitive and liberalised. Therefore, the internationalisation pattern that is visible is the outcome of the interplay between Bell Atlantic's operational strengths, and its desire to exploit market opportunities as they arise.

Table 7.17: Internationalisation and market characteristics: Bell Atlantic

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	2	3	15	12	7
Nos. of retained investments	2	3	13	11	3

Taking divested investments into consideration does not affect the company's internationalisation pattern, as the focus remains the more competitive markets. Having said this, on a proportionate basis Bell Atlantic has divested more from the rapidly liberalising and competitive markets than the other categories of marketplace. This de-internationalisation is primarily the consequence of the company's exit from the UK market, initially from the software and consultancy markets and more recently from the cable-TV marketplace. The former two occurred as the result of a strategic realignment by Nynex, which switched investment attention away from diversification and a broadly defined communications industry back towards telecommunications. The retreat from the cable-TV market was brought about partly by the desire of Nynex to extract itself from a competitive and not very lucrative market in the UK, and also partly by the need to realise and reallocate the tied resources elsewhere.[17]

[17] Bell Atlantic, 1998f.

Once this realignment is taken into consideration, the markets in which Bell Atlantic has invested are characterised by a willingness to liberalise and become more competitive, but are not at the forefront of those willing to do so. In other words, these are second mover markets in terms of competition and liberalisation.

7.3.3.3 BellSouth Corporation.

The geographically diverse internationalisation undertaken by BellSouth has resulted in the host markets spanning the entire spectrum of competitiveness, from China on the one hand to the UK on the other. It is arguably the case that based on the number of investments made BellSouth has favoured those markets that are becoming steadily more competitive. Thus, BellSouth has been motivated by market opportunities instead of how competitive the marketplace is.

However, the removal of the divested investments paints quite a different picture. Table 7.18 (below) clearly shows that the retained investments favour the less competitive markets (some and steady progress) rather than the more competitive markets (rapid). The greatest degree of de-internationalisation can be found in association with those markets making steady progress towards a competitive marketplace.

Table 7.18: Internationalisation and market characteristics: BellSouth

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	5	4	7	11	4
Nos. of retained investments	5	4	6	3	3

This shift in balance away from the more to less competitive and liberalised markets is primarily due to the sale of the company's Australian investments between 1995 and 1997. Importantly, these investments were also outside of the company's preferred internationalisation markets of cellular and data. As a consequence BellSouth is left with an international portfolio that is concentrated on Latin America and Europe, where markets are on the whole less competitive than those divested. Whilst it is expected that the widespread signing of the WTO agreement, and the start of 1998 liberalisation within the EU, will increase competitive pressures, these host markets will nevertheless remain less competitive on the whole than all but a handful of the markets in which BellSouth does, or could, operate. Thus, internationalisation has been driven by the exploitation of market opportunities and the desire to increase the resources at the disposal of the company.

7.3.3.4 Pacific Telesis Group.

During the course of its international investment activity Pacific Telesis invested in those countries which have made some effort to liberalise and introduce competition, but which are at the same time neither laggard nor the most competitive in character. The only exception to this pattern is the company's five investments in the UK.

Table 7.19: Internationalisation and market characteristics: Pacific Telesis

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	0	0	4	9	5
Nos. of retained investments	0	0	4	9	3

However, as Table 7.19 (above) shows the only investments sold by Pacific Telesis prior to the spin-off of AirTouch Communications in 1994 were located in the most competitive and liberalised of the host markets. That is, within the UK. In the two years before the spin-off Pacific Telesis had begun to exit from the UK marketplace by selling its interests to its various joint-venture partners such as BCE in the case of East London Telecommunications.[18] This gives credence to the notion that Pacific Telesis's internationalisation into the UK led it to encounter strong and entrenched industry players with which it could not compete. In conjunction with a strategic realignment the company sought to extract itself from this market, selling its investments and investing the freed resources elsewhere in less competitive cellular markets. In the main those cellular markets favoured by Pacific Telesis are populated by fewer players, and are less competitive, than in the case of the UK.

7.3.3.5 SBC Communications.

The host countries of SBC's international investment activity are more or less evenly balanced between those that are more competitive and those that are less competitive. The only investments to be shed by SBC are to be found in the most competitive and liberalised

[18] Pacific Telesis announced this transaction in April 1992, and continued to restructure its international holdings in the period prior to divestiture so that it focused solely on wireless communications (Wasden, 1993).

category, and when this is taken into consideration the international investment portfolio is evenly split between the more and less competitive markets. The only case of de-internationalisation can be found within one of the rapid group of countries, that is, within the UK.

Table 7.20: Internationalisation and market characteristics: SBC

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	6	3	0	5	6
Nos. of retained investments.	6	3	0	5	4

On the basis of the even balance between more and less competitive and liberalised markets the international investment activity of SBC has been motivated by the desire to exploit market conditions as they arise regardless of the level of competition encountered. Consequently, the relationship between geography and the degree of competition and liberalisation alone cannot adequately explain the internationalisation pattern of SBC.

7.3.4.6 US West Inc.

The broad swathe of US West's international portfolio ensure that the markets it has invested in range in their competitiveness from those that have only minimally liberalised to those that are actively and vigorously introducing competition to the marketplace. This is reflected in Table 7.21 (over) that illustrates US West's preferences for those markets that have displayed some willingness to introduce competition and liberalisation.

This same table, however, also shows that this bias towards the most competitive markets is reduced once divested investments are taken into consideration. US West has reduced its presence in the most competitive markets further than for any other of the five categories of market. The move away from the more competitive markets is consistent with a company whose internationalisation has been driven by a willingness to exploit its competitive advantage in less competitive markets so that returns can be maximised. This alone presents a misleading picture of internationalisation, for as shall be shown in Chapter Eight US West has also been motivated to invest in markets where it can gain exposure to regulatory and market conditions which are forbidden within the United States. In particular, attention is drawn to the RBOCs' attitude towards the UK cable-TV market that have been the recipient of substantial investment for this very reason.

Table 7.21: Internationalisation and market characteristics: US West

	Laggards	Minimal progress	Some progress	Steady progress	Rapid
Nos. of investments.	0	6	12	14	8
Nos. of retained investments	0	5	10	11	5

7.3.4 Conclusion.

The degree to which international investment activity is influenced by market competitiveness and liberalisation is different between each of the RBOCs. For example, Pacific Telesis has favoured those countries when internationalising that have made some progress towards a competitive and liberalised market, whilst SBC has more investments in laggard than other type of markets. As a result of the different international investment strategies the degree of risk also differs between each of the RBOCs. During the course of the internationalising period Ameritech, Bell Atlantic, Pacific Telesis and US West have favoured the more competitive markets, and therefore have demonstrated a willingness to accept a greater degree of risk. SBC has balanced its international investment activity between the more and least competitive and liberal markets, and in doing so has sought to create a risk neutral portfolio of international investments. In contrast, BellSouth has progressively re-balanced its portfolio of international investments away from the more towards the less competitive and liberal markets. Through this action BellSouth has altered the level risk to which it is exposed to during its international investment activity, progressively reducing this over time. The next section shall examine in greater depth the role of changing organisational forms in international investment activity, and in particular shall address the question of how far are changes in organisational form during the course of RBOCs international investment activity related to changing exposure to risk.

7.4 ORGANISATIONAL FORMS.

Johanson & Vahlne (1977) argue that over the course of internationalisation the organisational form chosen will change, and that as the company becomes a more experienced operator overseas the organisational form will migrate along a continuum of agent to sales subsidiary to manufacturing subsidiary. The number of stages through which a company may pass during the course of internationalisation is variously defined, for example, Johanson & Widersheim-Paul (1975) identify three such stages, whilst Bilkey & Tesar (1977) identify six and Wortzel & Wortzel (1981) five.

Narula (1996), Root (1987) and Livingstone (1989) identify a wide diversity of organisational forms through which internationalisation may be effected. These are shown in Table 7.22 (below), where organisational forms are grouped into one of three categories: indirect non-contractual, indirect contractual and direct equity investments. Each of these categories can be evaluated in terms of the resource commitment required, as well as the ease of market entry / exit, the degree of control afforded to the internationalising company and the risks which they expose the company to. The resources required for each of the three groups of organisational form differ. For instance, indirect non-contractual require investment in monitoring mechanisms so that the misappropriation of licenses resources does not occur, whilst the other two groups of organisational form require increasing managerial, technological and financial resources to be used. The ease of market entry / exit is comparatively easier for indirect contractual than indirect contractual and direct equity investments.

Table 7.22: Different organisational forms for serving a foreign market

Primary category of organisational form	Sub-division
Indirect non-contractual	-indirect exports -direct agent / distributor use
Indirect contractual	-licensing -franchising -technical agreements -management contracts -turnkey projects -contract manufacturing
Direct equity investment	-joint venture. Either acquire another company. or enter into a green field investment with a partner(s). -sole venture. Acquire either another firm or establish one alone.

Source: Livingstone (1989); Narula (1996); Root (1987); Young, Hamill, Wheeler & Davies (1989).

The degree and nature of control differs between each of these three categories. Indirect non-contractual organisational forms offer least in the way of direct control, through, for example, the rights of ownership of the foreign enterprise. Instead, control is affected through ownership of the good or service that is exported, and the ability to resort to a higher authority – the law - if the terms of contract are breached. Similarly, without direct ownership control is affected in indirect contractual organisational forms by legal mechanisms, for example, copyright, patents and contract. In the case of direct equity investments, the internationalising company can also control the foreign enterprise through resorting to the rights that accrue from the ownership of equity. That is, control can be exerted over the overseas venture through the appointment of management or the voting of its equity interest in a particular manner.

The risk to which the internationalising company is exposed to differs between each of the organisational forms listed in Table 7.22 above. The main form of risk that indirect non-contractual exposes the company to arises from resource misappropriation by the overseas partner. A greater degree of risk is faced when companies invest overseas, not least because more resources are being detached from the immediate control of management. Furthermore, psychic distance compounds the normal risks inherent to business and ensures that comparable investments overseas are more risky than those conducted domestically. As such the more resources invested overseas the greater the degree of risk that the company is exposed to. However, a proportion of this risk is mitigated through the control that the resource investment affords.

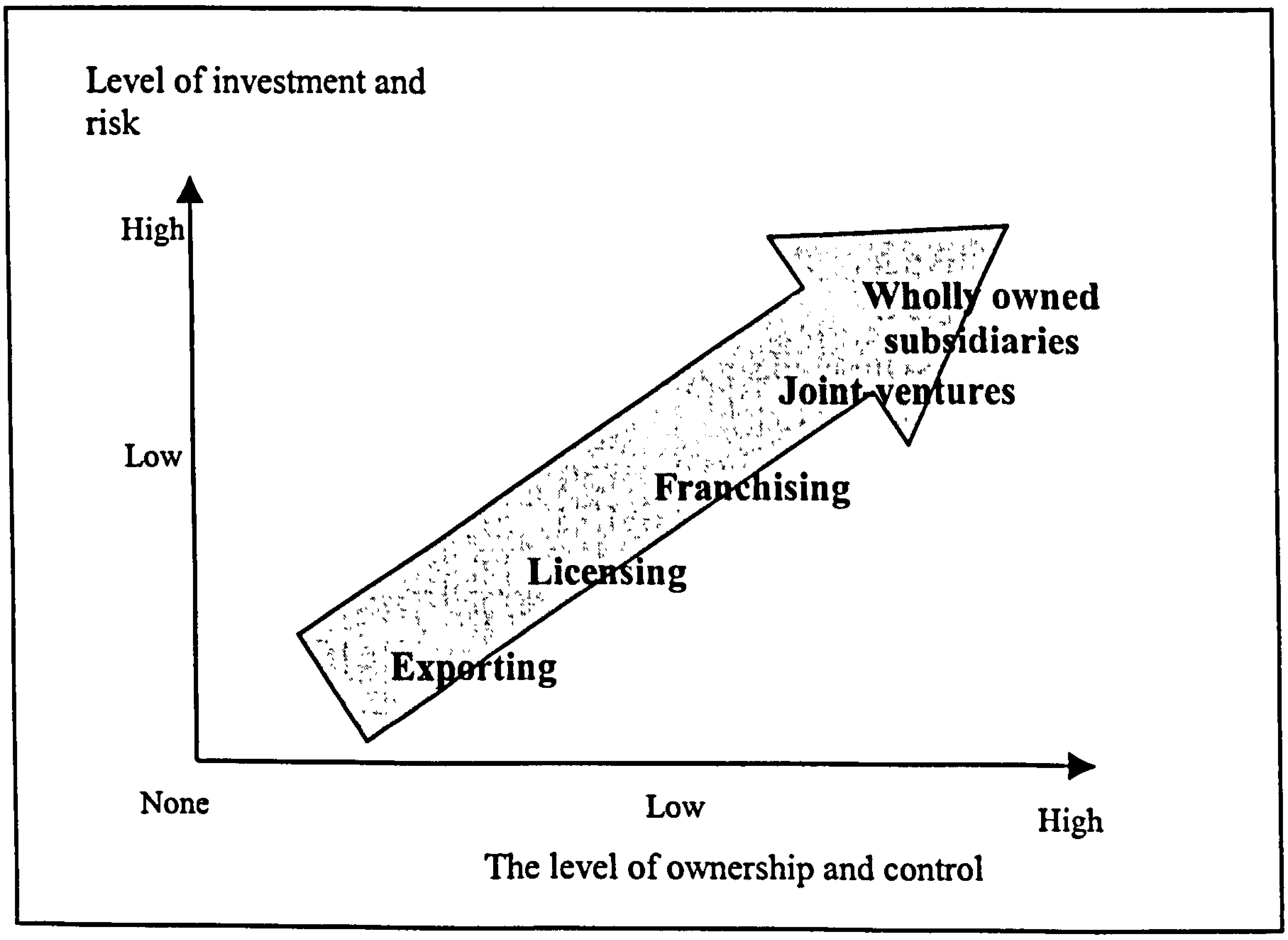
The inter-play between control, risk and resource investment is summarised in Figure 7.8 (over). In this figure it can be seen that the greater the level of investment to the international investment, the more risk that the company is exposed to. At the same time higher levels of ownership result in increased control of the international investment.

Root (1987) argues that when a company wishes to internationalise and enter a foreign market the options available are, either to export or to directly transfer resources abroad.[19] However, when examining the overseas investments of the RBOCs, and their subsequent growth as MNEs, the former option is not applicable. Furthermore, exporting, and to a lesser extent franchising and licensing, are inconsistent with the definitions of MNEs offered by Jones (1986) Julius (1990) and Dunning (1993) that stress FDI as the defining characteristics of a MNEs. Consequently, it is inappropriate to include indirect non-contractual as well as several variants of indirect contractual organisational forms in the analysis of RBOCs internationalisation and development as telecommunications MNEs.

[19] Root, 1987, pg6.

Within the direct equity investments category joint-ventures are not homogenous, and can, for example, be divided into four different categories based on the equity distribution between the partners. In the first of these de jure control is exercised through one partner possessing more than 50% of the company's equity, whilst de facto control will occur when in a multiple partners situation one owns between 40% and 49.9% of the equity. In the third category of joint-venture one of the partners controls a sizeable portion of the equity, ranging from between 10% and 39%, that enables the partner to shape and influence the joint-venture's future but only in conjunction with others. In the final variant of joint-venture the partner controls less than 10% of the equity with the consequence that it wields little influence over the venture's future.

Figure 7.8: The organisational form continuum



For a telecommunications company to expand from its domestic market and become a MNEs it must do so through commitment based international investment activity. It is possible to measure commitment through one of two measures, either the resources invested in the foreign venture or the level of ownership by the parent company. The level of ownership provides a chronological based measure through which the proposition that continued international investment activity increases the willingness of the company to invest more resources overseas. In contrast the financial resources invested are more complex to calculate, not only is the information source sometimes unavailable but is also subject to constant accounting revision. It is also proposed that the level of equity ownership of the international investment will be related to the psychic distance of the country from the United States. Hence, the greater the psychic distance of the international investment from the United States the lower the ownership level will be.

7.4.1 RBOCs international investment activity.

That the RBOCs have favoured collaborative organisational forms when internationalising is demonstrated in the data set out in Table 7.23 below. Of the 157 international investments made by the RBOCs since divestiture 130 are collaborative, and only 27 wholly owned ventures.

Table 7.23 also shows that wholly owned international ventures are primarily associated with those zones that display the least psychic distance from the United States, that is, the Anglo, Germanic and Latin European zones. Conversely, in those zones with greater psychic distance from the United States, such as Nordic or Latin America, the use of wholly owned ventures is less frequent. This differentiation, based on psychic distance, would appear to support the proposition outlined above.

Table 7.23: Overview of the organisational forms used in the international investment activity of the RBOCs, 1984 – 1998

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned Purchase	Equity purchase
Anglo	10	14		3	1	4	10	1
Germanic	2	2					4	
Latin European	6	8		1			2	
Near Eastern	1							
Nordic	3	2						1
Latin American	8	6		1			1	
Other	7	17	2	1		2		
Far Eastern	7	3	1			1		
Independent	10	14						
Arab								

The above table also demonstrated that regardless of the pyschic distance of the host market from the United States the principal organisational mechanisms through which internationalisation has been effected are either the joint-venture or joint-venture start-up. Thus, collaborative organisational forms are the preeminent means of market entry used by the RBOCs during the course of their international investment activity.

7.4.1.1 Ameritech.

At first glance Ameritech's internationalisation fits the proposition with the level of equity of equity increasing over time. However, it is not possible to generalise from the observations and state that Ameritech's internationalisation is incremental over its duration. Whilst the level of equity owned increases, as does the psychic distance of the host markets, this only occurs in the initial stages Ameritech's international investment activity.

Once the German directory publishing company Wer liefert was? (WLW) was acquired in 1990, the pattern of internationalisation diverges from that previous. The level of equity ownership is increasingly varied, though as shown in Figure 7.9 the general trend has been one of increasing ownership by Ameritech of its overseas affiliates. Table 7.24 (over) shows that Ameritech has made wholly owned international investments in low psychic distance countries in the Anglo and Germanic zones. This is in accordance with the proposition, but on a more general level no discernible pattern is identifiable.

Figure 7.9: The changing equity distribution of Ameritech, 1984 – 1998

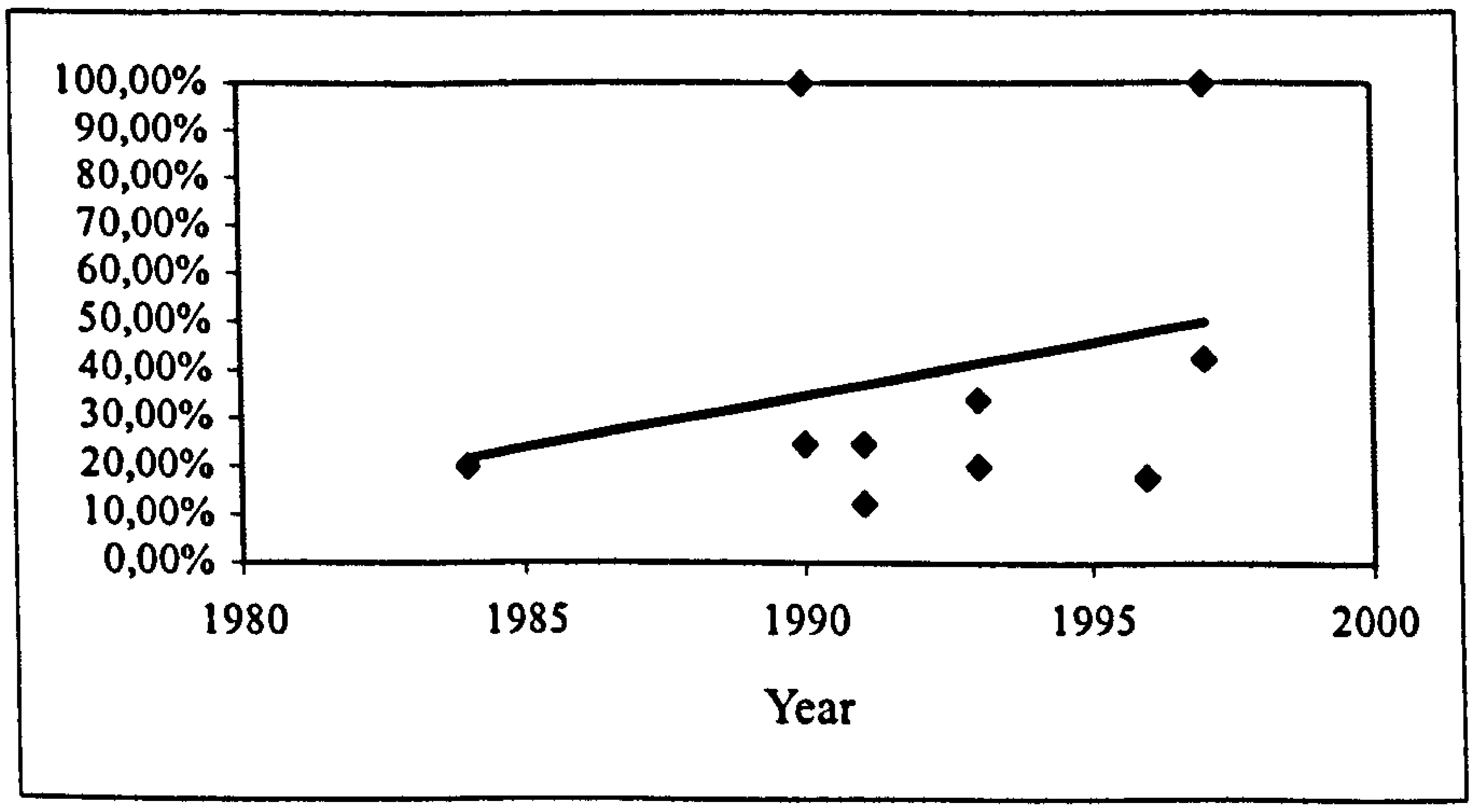


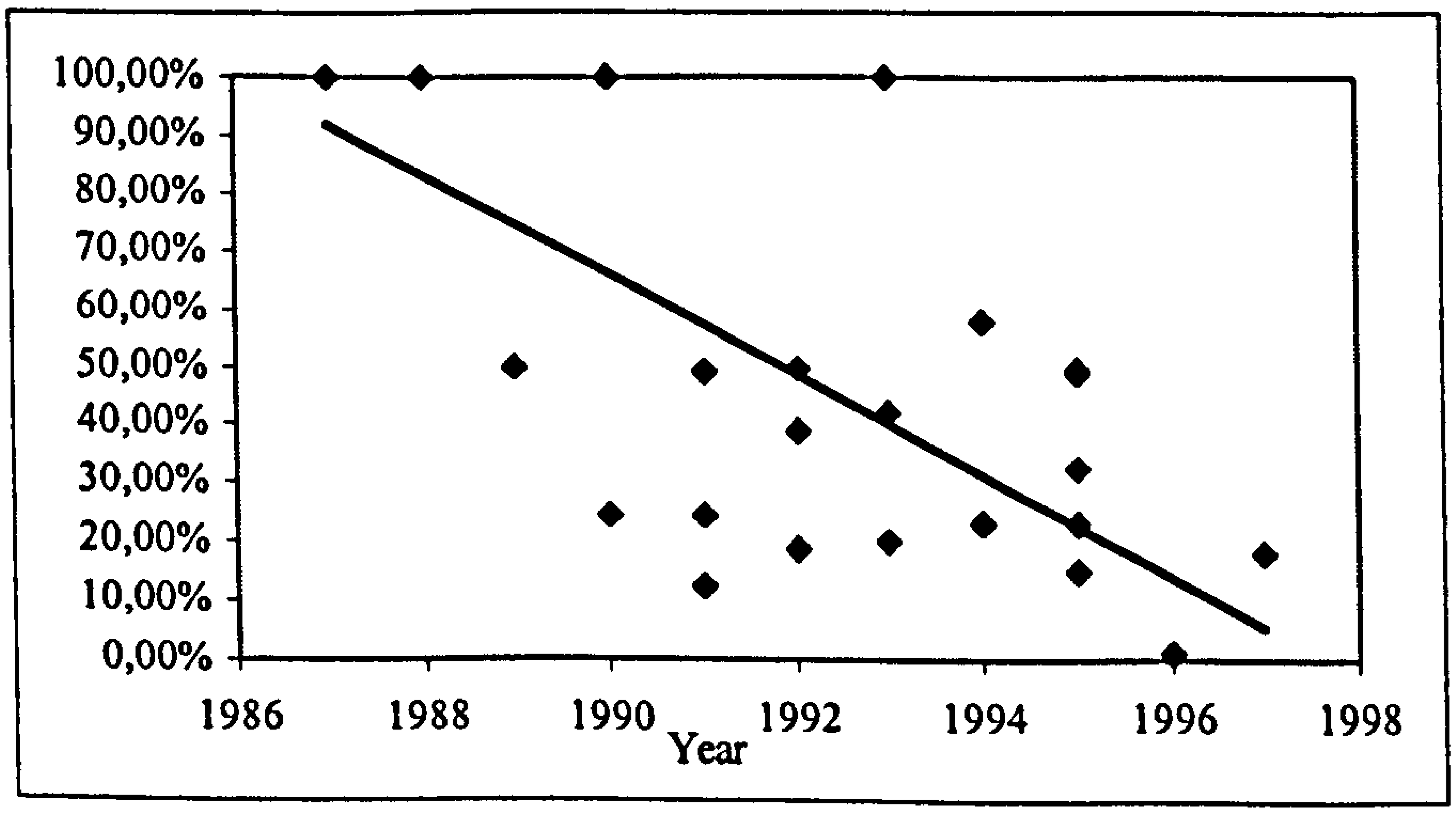
Table 7.24: Organisational form by psychic distance zone: Ameritech

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned purchase	Equity purchase
Anglo	2			1			1	
Germanic							1	
Latin European				1				
Near Eastern								
Nordic	1							1
Latin American								
Other		2		1				
Far Eastern								
Independent								
Arab								

7.4.1.2 Bell Atlantic.

The presence of a large number of wholly owned foreign subsidiaries so early on in the course of Bell Atlantic's internationalisation is clearly at odds with the theory outlined above. Furthermore, as illustrated in Figure 7.10 (over) the equity position taken by Bell Atlantic declines over time.

Figure 7.10: The changing equity distribution of Bell Atlantic, 1984 – 1998



Though Bell Atlantic is widely internationalised, with investments in eight of the ten zones, the company's expansion overseas has not been line with that suggested. This discrepancy is further reinforced when internationalisation within each zone is considered. In those cases where successive investments have been made within a zone the initial forays are either wholly or majority owned ventures, whereas the later ones are largely minority owned investments. Table 7.25 (below) shows that wholly owned ventures are associated with low psychic distance zones such as Anglo and Germanic, whilst joint-ventures are found with zones with greater psychic distance form the United States such as Far Eastern and Independent.

Table 7.25: Organisational form by psychic distance zone: Bell Atlantic

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned purchase	Equity purchase
Anglo	4	1		1		1	3	
Germanic						1	3	
Latin European		4					2	
Near Eastern	1							
Nordic								
Latin American	1	1						
Other		4				1		
Far Eastern	4							
Independent	1	4						
Arab								

7.4.1.3 BellSouth Corporation.

BellSouth's internationalisation is different from the two cases of Ameritech and Bell Atlantic. The internationalisation of BellSouth has not been gradual as suggested by the theory. However, BellSouth has displayed a propensity to internationalise to markets with ever greater psychic distances from the United States. Notwithstanding this, the overall picture of internationalisation does not conform to that implied by the model with noteworthy discrepancies including a declining level of equity held by BellSouth in its international affiliates. As shown in Figure 7.11 (over) this has shown a marked decline from the mid-1980s when internationalisation was initiated. Recent events may mark a change in this policy, as the Brazilian and Panamanian investments have demonstrated a propensity for BellSouth to acquire a larger percentage of the equity.

On several occasions, particularly in the Anglo and Other zones, the pattern of internationalisation is reversed. That is, BellSouth has made international investments that are wholly or majority owned before it has taken minority holdings elsewhere in the same zone.

Figure 7.11: The changing equity distribution of BellSouth, 1984 – 1998

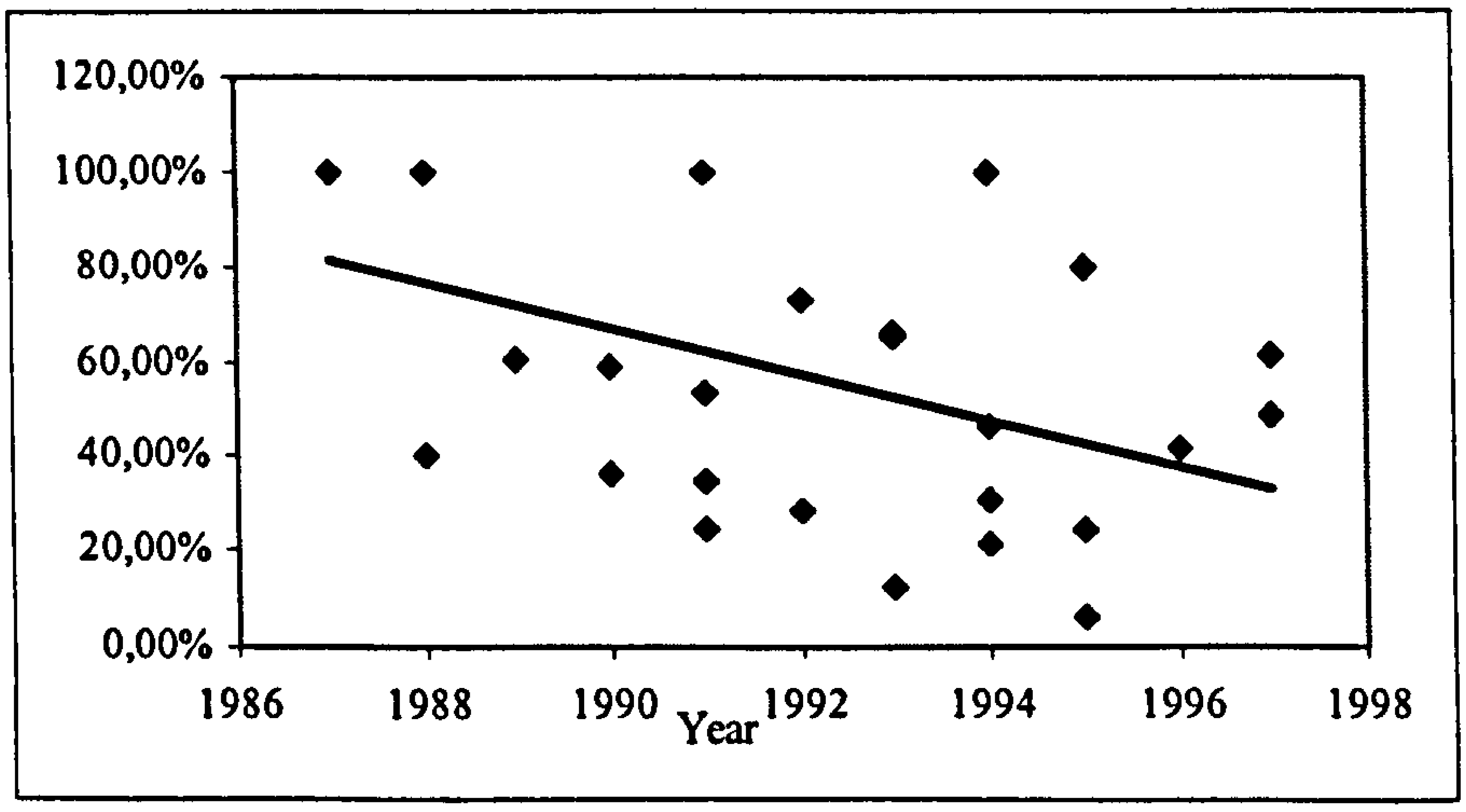


Table 7.26 below shows that five of the six wholly owned international investments were made in the Anglo zone. It is significant that BellSouth has sold all but one of these investments, whilst retaining the minority investments that it has made. It is also observable from Table 7.26 that although the majority of wholly owned investments are located in the Anglo zone, as theorised, BellSouth has increasingly favoured zones with greater psychic distance as host to international investment activity.

Table 7.26: Organisational form by psychic distance zone: BellSouth

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-Up	Wholly owned purchase	Equity purchase
Anglo	1	3				1	3	1
Germanic	1	1						
Latin European	1	1						
Near Eastern								
Nordic	1							
Latin American	4	1					1	
Other	3	2	1					
Far Eastern								
Independent	1	4						
Arab								

7.4.1.4 Pacific Telesis Group.

Unlike the previous cases of Ameritech, Bell Atlantic and BellSouth there is little in the way of observable overlap between Pacific Telesis's strategy and the theory proposed. Like both Bell Atlantic and BellSouth, and as shown in Figure 7.12 (below), Pacific Telesis has owned progressively less of its international ventures over the years. Similarly, Pacific Telesis has not gradually entered markets with an ever greater psychic distance from the United States, but instead has jumped between markets with a seemingly disregard of the psychic distances involved.

Figure 7.12: The changing equity distribution of Pacific Telesis, 1984 – 1998

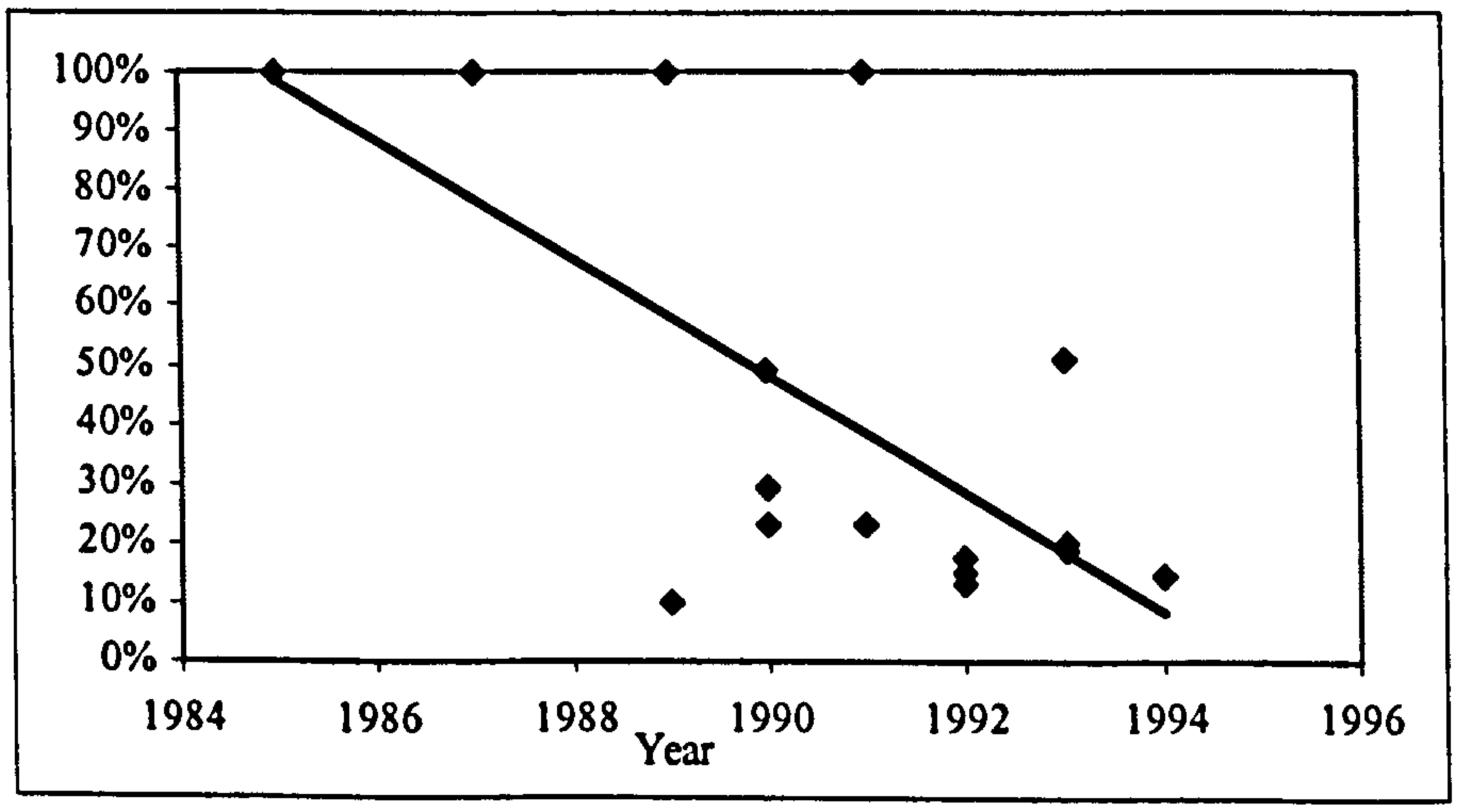


Table 7.27: Organisational form by psychic distance zone: Pacific Telesis

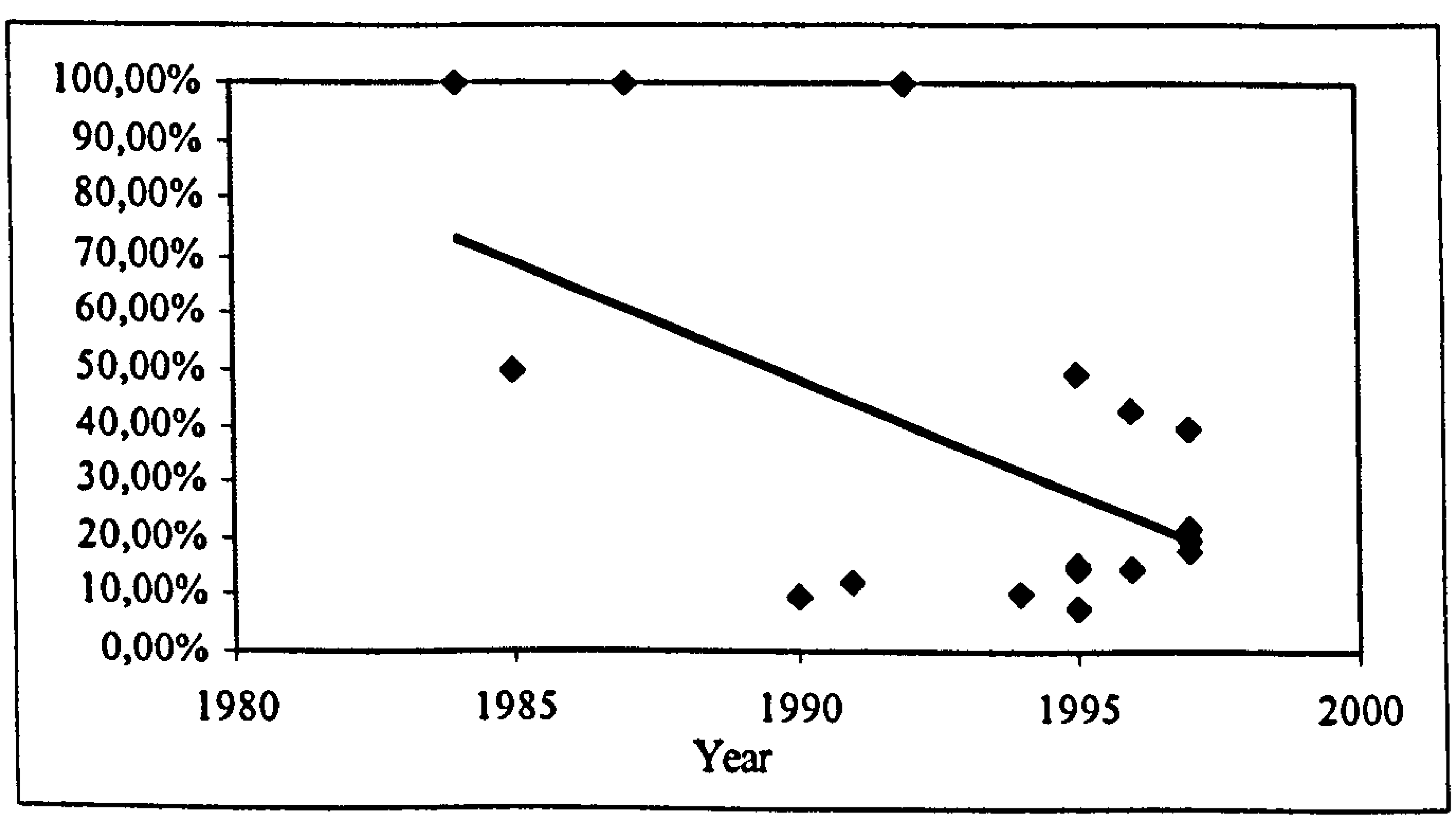
Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned purchase	Equity purchase
Anglo		2				1	2	
Germanic		1						
Latin European	3	3						
Near Eastern								
Nordic	1							
Latin American								
Other								
Far Eastern	1					1		
Independent		4						
Arab								

A closer examination reveals that with just one exception all of the wholly owned subsidiaries are to be found within the Anglo zone, whose psychic distance is closest to that of the United States. This would appear to provide support for the proposition that greater commitment is found in association with those countries whose psychic distance from the United States is smallest. Interestingly, all the wholly owned subsidiaries within this zone were sold prior to the 1994 divestment of AirTouch Communications as Pacific Telesis sought to realign its international interest towards the cellular market. It is possible to surmise that operational reasons, and not those originating from psychic distance, lead to the divestments.

7.4.1.5 SBC Communications.

On the surface SBC is the antithesis of the internationalisation proposed. Neither equity nor psychic distance display a pattern consistent with that implied. Going beyond the general observation it is possible to conclude that SBC's internationalisation does partially conform to that suggested, as the psychic distance of markets entered has demonstrated an erratic tendency to increase over time.

Figure 7.13: The changing equity distribution of SBC, 1984 – 1998



A closer examination of the international investment activity undertaken by SBC also highlights two additional areas of interest. On more than one occasion SBC has made international investments where the equity taken, and degree of control that can be exercised, are at odds with one another. In the first of these investments, Telmex, the different classes of equity have different voting powers. The result of this arrangement is that France Telecom, Grupo Carso and SBC are the controlling shareholders.[20] In the second investment, the China-US Cable Network, SBC has "joint responsibility for network oversight, maintenance and administration," and will, therefore, have a greater degree of influence than that implied by its 5.7% stake.[21]

Of the investments made within the Anglo zone, the zone with the smallest psychic distances from the United States, only one investments has lasted until 1998 within SBC's international portfolio. For whatever reason these investments have been curtailed. The operational duration of one, Australian Directory Services, was fixed by the duration of the contract, whilst Southwestern Bell Telecom (UK) Ltd was closed after failing to meet its business objectives. Similarly, SBC has systematically reduced its presence in the UK's cable market. Although SBC CableComms was formed as a wholly owned subsidiary the company sold 25% to Cox Communications in 1993, and then another 25% to the same company in the following year. In 1995 SBC CableComms merged with US West affiliate TeleWest, with the result that SBC ended up owning 15% of the combined company. In 1998 the 15% held by SBC in TeleWest was sold to US West thereby completing the exit of the RBOCs from the UK marketplace.

Table 7.28: Organisational form by psychic distance zone: SBC

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned purchase	Equity purchase
Anglo	1	4		1		1		
Germanic	1							
Latin European	2							
Near Eastern								
Nordic								
Latin American	1			1				
Other		1						
Far Eastern	1	1						
Independent	4							
Arab								

[20] See Chavolla & Samarajiva (1997) for an accounting of the Mexican market, and the privatisation of Telmex.

[21] SBC, 1997a.

SBC has made only one wholly owned international investment, in the Anglo zone as suggested by the proposition. However, as previously noted this investment, Southwestern Bell Telecom (UK) Ltd, was sold as a result of its poor operational performance. Table 7.28 (below) shows that international investment activity is only just divided in favour of those zones (Anglo, Germanic and Latin European) with the least psychic distance from the United States than other further away (Latin American, Far Eastern and Independent).

7.4.1.6 US West Inc.

US West neither unequivocally supports nor contradicts the model of internationalisation that has been theorised. In support US West has demonstrated a tendency to increase the level of equity held, both at a general level as well as within specific zones such as Latin European and Other. However, in contrast US West has not gradually expanded into fresh markets, but instead opted to jump between host markets regardless of their psychic distance from the United States. This also corresponds with a willingness on the part of US West to invest in countries whose psychic distance is further rather than closer to the United States. Thus, with the exception of those investments in the 'Anglo' zone, which is closest to the United States in terms of psychic distance, the remainder of the international investment activity has been focused towards those markets displaying larger psychic distances from the United States.

Figure 7.14: The changing equity distribution of US West, 1984 – 1998

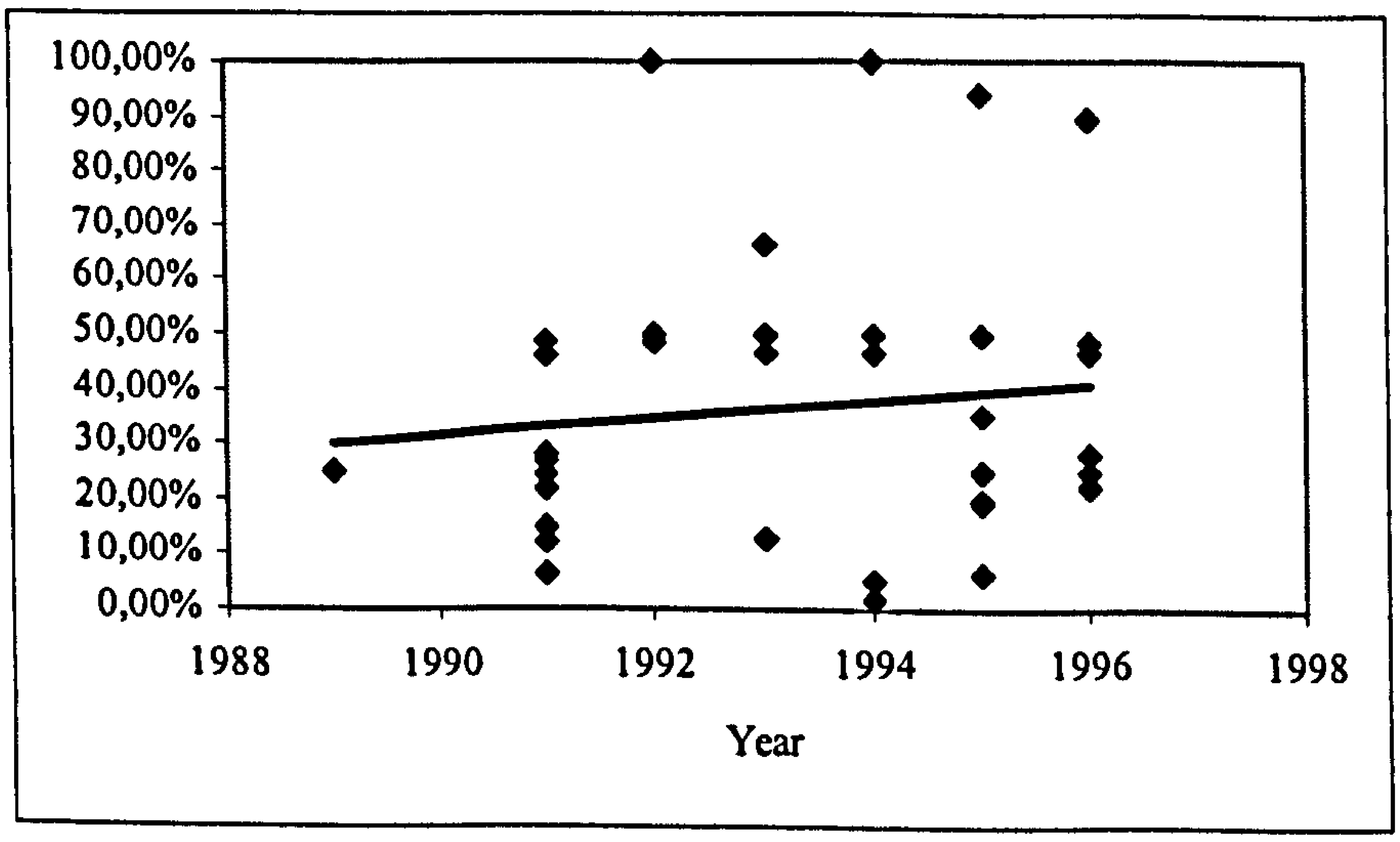


Table 7.29 (over) illustrates that US West has favoured two pyschic distance zones in the course of its international investment activity, that is, 'Anglo' and 'Other.' It is within these same zones that US West has combined collaborative and wholly owned organisational forms when investing overseas, though as shown in the table below the balance is clearly in favour of collaborative. Table 7.29 also demonstrates that US West has numerically concentrated its international investment activity towards the two zones of 'Anglo' and 'Other,' though on closer examination it can be seen that investment activity within these zones is primaril associated with the UK and Russia respectively. In both of these markets the international investment activity of US West spans a wider range of the industry, and is on a greater scale, than elsewhere. US West has been active in the Russian market since the early 1990s, and in 1993 unified its various investments under the single organisational roof of the Russian Telecommunications Development Corporation (RTDC). The RTDC was formed with the objective "to manage, develop and fund telecommunications projects in Russia."[22]

Table 7.29: Organisational form by psychic distance zone: US West

Psychic Distance Zone	Organisational Form							
	Joint Venture (JV)	JV Start-up	JV Facilities	JV Privatisation	JV Holding company	Wholly owned start-up	Wholly owned Purchase	Equity purchase
Anglo	2	4			1		1	
Germanic								
Latin European								
Near Eastern								
Nordic		2						
Latin American	2	4						
Other	4	8	1			1		
Far Eastern	1	2	1					
Independent	4	2						
Arab								

In return for contributing assets to RTDC US West received 66.5% of the equity as well as management control of the venture. The remaining equity was distributed between eight western institutional investors, including the International Finance Corporation (IFC), GE Capital and Morgan Stanley Asset Management.[23] Finally, as part of the reorganisation a

[22] US West, 1994c, pg46.

[23] US West International, 1995, pg18.

$125m loan was advanced by the Overseas Private Investment Corporation to fund further investment.[24] Together this provided RTDC with an equity and asset base of $500m to support further investment activity.

Table 7.30: The principal investments of the RTDC in the Russian telecommunications market

Investment	Details
Delta Telecom[1]	St. Petersburg and region cellular operator.
Dontelecom	Rostov and region 900 GSM cellular system.
Moscow Cellular Communications[1]	Moscow and region cellular system.
United Telecom[1]	900 GSM in 10 regions of Russia.
Westelcom[1]	International gateways.

Note: [1] Contributed to RTDC. *Source:* US West International, 1995.

All of the investments made by the RTDC are joint-ventures. In these joint-ventures the RTDC provides the technological expertise as well as some capital whilst the outside partners, which are either trade associations or local government, may contribute "assistance in certain critical business areas." Additionally, the local government will provide political backing to the investments and access to resources to ensure that they are completed.

By creating the RTDC, and then merging its existing investments in the Russian telecommunications market into the company and selling shares onto others, US West was simultaneously able to raise fresh funds, reduce the level of risk that it faced whilst maintaining control of the underlying assets. Whatever the merits of creating the RTDC it stands in contradiction to the theoretical standpoint adopted. In particular, the RTDC illustrates radical internationalisation in play as it provided a vehicle through which US West could swiftly expand into a potentially lucrative market. However, whilst this is undoubtedly the case the RTDC is also a risk minimisation tool, and as such can be construed as being in general accordance with the theory.

The RTDC also illustrates another charactersitic of RBOCs internationalisation: the tendency for the amount of financial investment made and the equity position taken to be inversely related. That is, large equity holdings are associated with small financial investments, and vice versa. Using the information available for US West it is possible to illustrate this relationship in greater depth. By the end of financial year Dec. 31 1996 US West had invested a total of $1834m overseas. This investment was not evenly spread throughout the entire international investment portfolio, but instead was highly skewed towards just three

[24] US West International, 1995, pg17.

investments – TeleWest (cable-TV), One-2-One (cellular) and Binariang (fixed and cellular). Together these three investments account for $1133m of the $1834m invested internationally.[25]

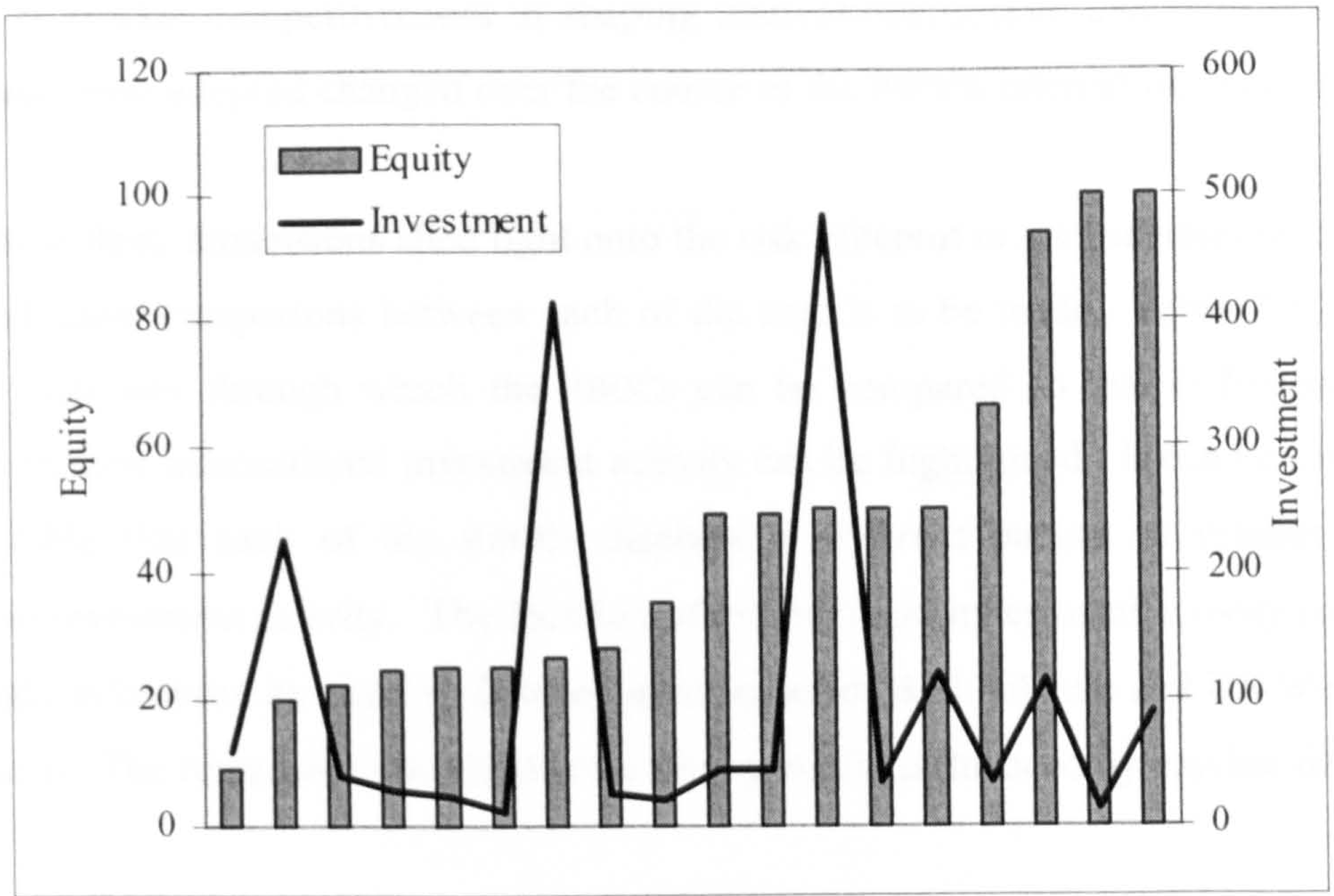
Moreover, with just exceptions all of the international investments made by US West are joint-ventures. These two exceptions account for only $110m of the $1834m that has been invested. [26] From this arises the suggestion that the larger investments are made in association with smaller equity positions. Figure 7.15 (over) charts the relationship between the equity position taken and the amount of investment made, and offers evidence to support the suggestion that an inverse relationship does exists between equity and investment. The RTDC offers one explanation, and perhaps the most frequent explanation, for the willingness of the RBOCs to enter markets through joint-ventures, in that the joint-venture structure enables the company to offset part of the inherent risk of the venture onto others whilst still being in a position to enjoy any of the benefits that accrue. An alternative explanation, and one that is explored in the following chapter is that the RBOCs have used joint-ventures to gain access to skills and competencies that they do not possess, and which are necessary not only for the venture in question but for use elsewhere in the company.

Although US West has increased the level of equity taken in overseas ventures during the course of its international investment activity, its principal foreign investments remain joint-ventures. Furthermore, of these ventures only one, the Russian RTDC, is majority owned with the remainder being minority investments. Those investments in the closer psychic distance Anglo zone, which have been the recipient of considerably more investment capital from US West, are joint-ventures. This reinforces the notion of international investment activity being risk averse; as the RBOCs has formed joint-ventures to partially offset the risk inherent to the venture.

[25] By the end of 1996 US West had invested $484m in One-2-One (UK), $414m in TeleWest (UK), $225m in Binariang (Malaysia), $120m in A2000 (Netherlands) and $117m in Cable Plus (Czech Republic) (US West, 1997e).

[26] The two wholly owned ventures are Thomson Directories (UK, directories, $95m) and US West Polska (Poland, directories, $15m) (US West, 1997e).

Figure 7.15: Equity and financial investment levels for selected US West international investment activity



7.4.2 Conclusion.

The extent to which the RBOCs have conducted international investment activity in accordance with the theory is different in each case. It has been proposed that over time the level of equity held by the RBOCs in their international affiliates will increase. The analysis has shown that the level of equity increases only in the cases of Ameritech and US West, and contrary to the proposition the level of equity declines over time in the cases of Bell Atlantic, BellSouth, Pacific Telesis and SBC. It has also been demonstrated that contrary to the model internationalisation can involve wholly owned subsidiaries before joint-ventures. The internationalising company is prepared to accept the risks involved with such a venture. However, this is misleading, as the financial sums associated with wholly owned international investments are smaller than their collaborative counterparts. The larger, and therefore those investments associated with the greater risks, are collaborative in nature.

7.5 SUMMARY.

This chapter has revisited the international investment activity of the RBOCs laid out in Chapter Six. It has been demonstrated that the international investment activity of the RBOCs can be interpreted along three different dimensions. Firstly, what has been the influence of psychic distance on international investment activity; secondly, what role has been played by the degree of market competitiveness in shaping internationalisation; and thirdly, has the organisational form adopted changed over the course of the RBOCs internationalisation.

Together these three dimensions shed light onto the risk inherent in international investment activity, and allow comparions between each of the RBOCs to be made. Table 7.31 (over) offers one such way through which the RBOCs can be compared so that differences and similarities in their international investment activity can be highlighted. It can be observed from this table that each of the RBOCs displays a different pattern in respect of its international investment activity. The location of international investment activity has been most strongly influenced by psychic distance in the cases of Bell Atlantic and US West than for Ameritech. The remaining RBOCs have all been partially influenced by psychic distance.

In contrast, the presence of competition has played a role in determining the location of RBOCs international investments in the case of Ameritech, Bell Atlantic and US West. Both Pacific Telesis and SBC have balanced their international investment portfolio between the more and less competitive markets. Only BellSouth has skewed its investments in favour of the less competitive markets.

Equity has been taken as a proxy for the risk that the RBOCs are prepared to accept in the course of their international investment activity. The changing level of equity held in international investments is also related to the degree to which the RBOCs has learnt from its past international experiences and had reduced the psychic distance present to such a point that can evaluate business opportunities in a more insightful manner. The equity held in their international investments increases over time in the cases of Ameritech, BellSouth and US West. In all other cases the trend for the level of equity is to decline over the period since divestiture. This would appear to suggest that Ameritech, BellSouth and US West have been successful in reducing the psychic distance present to such a point that market opportunities can be accurately assessed, whilst Bell Atlantic, Pacific Telesis and SBC have not.

Table 7.31: Comparing the different dimensions of RBOCs internationalisation

RBOCs	Aspects of internationalisation		
	The influence of psychic distance	The role of competition in determining investment activity	Changes in organisational form
Ameritech	◔	◕	◕
Bell Atlantic	◕	◕	◔
BellSouth	◑	◔	◕
Pacific Telesis	◑	◑	◔
SBC	◑	◑	◑
US West	◕	◕	◕

Note: ○ of no importance ◔ ◑ ◕ ● of considerable importance.

However, the examples of BellSouth and US West have shown that equity is not an infallible proxy for the risks associated with international investment activity. Large equity positions are linked with comparatively small financial investments, whilst some of the larger commitments have been made to companies where the RBOCs are minority shareholders. This complicates the analysis of RBOCs international investment activity along this dimension and demonstrates the fallibilities of relying on one measure of risk assessment and internationalisation alone.

CHAPTER EIGHT: LINES-OF-BUSINESS.

8.1 INTRODUCTION.

Chapter Eight continues the re-presentation of data begun in Chapter Seven, though with the attention here being focused on the lines-of-business where the international investment activity has taken place. In doing so this chapter will highlight those sections of the telecommunications industry where the RBOCs have been active and significant international investors, and will show how the operational focus has not remained constant over the years. The analysis will also offer a comparison of the domestic and international operational scopes of the RBOCs, and thus intimate at the relationship between internationalisation and the lines-of-business restrictions imposed on divestiture.

Consequently, this chapter is comprised of two sections. In the former of these a classifictaion of the businesses in which the RBOCs have been active internationally is presented. Central to this classification is the concept of operational distance that is defined with reference to the core activities of the RBOCs. The resulting taxonomy of international investments then informs the subsequent sections of the chapter, providing a template against which the operational dimension of RBOCs international investment activity can be compared. The second section of this chapter examines the relationship between the international investments and the domestic operational scope of the RBOC. The analysis in this section is driven by the question as to whether or not the RBOCs have used their international investment activity to gain domestic operational advantages.

Both of these sections present new ways through which the risk associated with international investment activity can be appraised. In the first section risk is expressed in terms of the operational distance of the international investment from those activities conducted in-region within the United States. The greater the distance from the in-region activities the higher the risk associated with the investment. The relationship of the second part of this chapter with risk is more complex than in the first half of the chapter. If the international and domestic investments correspond, then the degree to which the RBOCs has exposed itself to new telecommunications markets over the course of its international investment activity is viewed as minimal. In this particular case the risk encountered is more do to with psychic distance, and other forms of market imperfections, than with the entrance of the company into a new segment of the telecommunications industry. Any RBOCs following such a strategy can be said to be risk averse. However, by failing to enter new market overseas the RBOCs may be placed at a disadvantage domestically when operational conditions change. In this case a risk adverse strategy would be one where the RBOCs enters new telecommunications markets overseas, but ones that in the future may be of significance in the domestic context. Such a strategy would, in the short-term, increase the risk to which the company is exposed, but in the run would be seen as being risk averse.

8.2 CLASSIFYING THE INTERNATIONAL INVESTMENTS.

During the course of their internationalisation the RBOCs have collectively invested across many sectors of the telecommunications industry, such as in the cellular, cable-TV and software sectors. However, the broad nature of these investments masks the underlying focus of international investment activity and thereby hinders any analysis of the operational dimension of RBOCs internationalisation. Through drawing on an understanding of the American telecommunications industry that was previously outlined in Chapter Three, it is possible to construct a taxonomy that places the international investments in relation to the domestic operational scope of the RBOCs.

Although the domestic operational scope of the RBOCs has widened since divestiture, so that they are now active in areas such as security monitoring and cellular long distance, the core activity of each company remains the BOCs. As already stated these provide fixed wire-line services to customers within a geographically defined market and typically accounts for more than two-thirds of the overall revenue generated by the RBOCs. In addition to the BOCs, each of the RBOCs were also allocated on divestiture the in-region cellular and directory publishing activities of the old Bell system. Together these three activities can be viewed as the nucleus of the RBOCs, not only are they the operational areas where they have the longest experience but they also generate most of the company's revenues and by extension net income. History, heritage and experience make these activities the core activities of the RBOCs.

Outside of this nucleus are a range of other activities such as long distance, software and paging. Though these additional activities make use of the skills and competencies gained elsewhere in the company, their provision requires modification as well as additional resources. Consequently, it is possible to view these as activities informed by the core activities of BOCs, cellular and directory publishing. Finally, the RBOCs have made investments that are outside either of the two aforementioned areas. The operational dissimilarity that results ensures that when an investment is made the company brings to the investment a series of competencies relating to, for instance, financial management systems ot specific technologies within the switched network. Whilst such competencies are integral to the provision of other activities, they in themselves cannot be considered to be of sufficient strength to be classed as either a core activity or an informed skill or competency.

It is on this basis that a threefold taxonomy can be constructed. Within this taxonomy the location of certain activities could be considered to be anomalous, and thus raise questions as to its validity and usefulness as an analytical tool. Cable-TV is a non-core activity because it cannot be provided in-region except through a structurally separate subsidiary, and at an engineering level requires fundamentally different skills and competencies than those that exist within the RBOCs based on its core activities. Both alternative service providers and PTOs provide telecommunications services at the local, national and international scales. If they provided service solely at the local level then they would display similar characteristics to the BOCs, and could therefore be classed as core activities. However, through operating at a variety of geographical levels they are not comparable to the BOCs. As the alternative service provider and PTOs investments entered into undoubtedly draw on core competencies they are asigned to the informed category of international investment activity.

Notwithstanding these concerns the following taxonomy can be presented:

- *Core activities.* International investments in cellular and directory publishing are included within this category.

- *Core informed skills and competencies.* This category is more diverse and includes the following sectors of the telecommunications market: alternative infrastructure providers, facilities management, long distance, PTO, software and paging.

- *Non-core activities.* Activities in this category are ones where the RBOCs have not been able to conduct domestically in-region, and skills integral to the provision of other services. Sectors here include: cable-TV, data, equipment, international facilities, international gateway, investment company, pay-TV and security monitoring.

The three tier taxonomy enables the international investments of the RBOCs to be dis-aggregated so that comparisons can be made between the RBOCs. This enables an impression to be gained as to where the RBOCs have focused their investment attention and how these have evolved since divestiture. The taxonomy can also be employed to demonstrate in which sectors of the telecommunications industry the RBOCs have invested financially. The taxonomy can then be used in conjunction with the number of investments to investigate the risk that the RBOCs are exposed to as a consequence of their international investment activity.

8.3 INTERNATIONAL INVESTMENT ACTIVITY BY LINES-OF-BUSINESS.

An overview of the distribution of RBOCs international investment activity is presented in Table 8.1 (below). In this table the investments are categorised on the basis of the threefold taxonomy previously presented, and it is readily apparent that differences exist between the RBOCs as to the focus of their investment activity. Bell Atlantic, BellSouth, Pacific Telesis and SBC have, to varying degrees, favoured core over other types of activities, whereas Ameritech and US West alone have favoured informed activities and non-core activities respectively.

Table 8.1: The distribution of RBOCs international investment activity by core, informed and non-core activities

Line-of-business	RBOCs					
	Ameritech	Bell Atlantic	BellSouth	Pacific Telesis	SBC	US West
Core activities	4	14	17	9	9	17
Informed activities	5	11	7	7	6	1
Non core activities	2	12	7	3	4	22
Total number of investments.	11	37	31	19	19	40

Echoing this difference in operational emphasis is the divergent risk profile between Bell

Atlantic, BellSouth, Pacific Telesis and SBC on the one hand, and Ameritech and US West on the other. By skewing their international investment activity in favour of core activities Bell Atlantic, BellSouth, Pacific Telesis and SBC have constructed for themselves an international portfolio than minimises the risks faced. By balancing its investments between core and informed lines-of-businesses, Ameritech has developed an international portfolio where the greater risks of informed are counter-acted by the lesser core lines-of-business investments. This in effect has created a risk neutral portfolio of internatonal investments. In contrast, US West's substantial bias towards non-core lines-of-businesses has exposed the company to greater operational risks than any other of its fellows RBOCs. This can be taken as being indicative of not only the centrality of non-core lines-of-business, primarily cable-TV, to the overall strategy of US West, but also that the RBOCs perceived the associated risks to be acceptable. Risk here relates not only to that arising from the various investments, but also that from not being active in the particular industries.

As shall be shown below the operational profile of the RBOCs has not remained the same over time. It is possible to draw a distinction between those RBOCs whose operational balance has changed with time with the result that the international portfolio is less risky, and those whose international investment activity has progressively increased the risk that they are exposed to. A less risky profile would occur when, for example, an RBOCs invests in core or informed activities after previously investing in non-core activities. Conversely, investing in informed and/or non-core after core activities represents an increase in risks.

In this context it is important to note that risk has been defined in relation to the operation distance of the international investment from the core activities of the RBOCs. This should not be taken as suggesting that international investment activity in core activities are without risk, but rather that the inherent skills and competencies of the company will mitigate some of the risks faced when undergoing internationalisation. Like any other international investment those that have been made in the core activities are susceptible to the uncertainty and risk that arises from the interaction between operational, geographical, cultural and market characteristics.

Through favouring core and informed activities it may be argued that the risks with which Bell Atlantic, BellSouth and Pacific Telesis are faced have declined. In contrast the risks facing Ameritech, SBC and to a lesser extent US West have all increased as a result of the focus of their international investment activity. In the case of US West a balance exist between core and non-core activities, that is, between the more secure and risky forms of investment respectively. This balance has remained relatively constant throughout the course of the RBOCs' international investment activity. In contrast, the shift towards greater risk for both Ameritech and SBC is more pronounced due to an increasingly greater emphasis on informed activities.

8.3.1 Ameritech.

Table 8.2 (below) demonstrates that the focus of international investment activity for Ameritech has marginally favoured informed in preference to core activities. This would appear to suggest that Ameritech has sought to construct for itself an internaitonal portfolio of investments that minimises the risks encountered when operating overseas. However, once the impact of divestments is taken into account then this focus is in fact reversed, so that half of the company's remaining international investments are to be found within the informed category.

Table 8.2: The location of international investment activity by lines-of-business for Ameritech, 1984 – 1998

Lines-of-business	Total number of investments made	Number of divestments	Number of retained investments
Core activities	4	2	2
Informed activities	5	2	3
Non core activities	2	1	1
Total number of investments	11	5	6

A closer inspection of the informed category reveals that all of the international investments are in PTOs. Although the impact of such an investment focus on the risk profile of Ameritech's investment portfolio is dealt with below (Section 8.3.7), it is necessary here to state here that as a consequence of the financial aspect of these three investments the risk to which the RBOCs has exposed itself to is under-estimated when the number of investments alone are the evaluatory criteria.

Ameritech also illustrates that core investments are not without risk. In 1991 Ameritech invested in Polska Telefonia Komorkowa, a newly formed Polish company that aimed to develop Poland's first cellular system. The company invested $200m towards acheiving this objective and sought a GSM spectrum license when these became available. However, in 1995 the Polish government refused arguing that the law prohibited the award of a license when a partner is a state agency. Both Ameritech, and the other foreign shareholder France Telecom, objected to this ruling. Ameritech took the Polish government to international arbitration arguing that they had reneged on a promise to award Polska Telefonia Komorkowa a license once they became available.[1] To resolve the impass that resulted Ameritech sold its 24.5% holding in Polska Telefonia Komorkowa in 1996. This example demonstrates that it should not be taken for granted that investments in core activities are not without risk. In this case the legal framework in which the company operated changed, whilst in other cases the uncertainty may be due to commercial or technological reasons.

8.3.2 Bell Atlantic.

From 1987 onwards the number of international investments has steadily increased, though the balance between the three different catergories has changed over time. From the initial international investment in 1987 until 1991 the focus for Bell Atlantic was either informed or non-core activities, but from 1991 onwards core activities investments have become an increasingly prominent element of the international portfolio.

Table 8.3: The location of international investment activity by lines-of-business for Bell Atlantic, 1984 – 1998

Lines-of-business	Total number of investments made	Number of divestments	Number of retained investments
Core activities	11	0	11
Informed activities	11	4	7
Non core activities	12	1	11
Total number of investments	34	5	29

The number of investments suggests that the international portfolio of Bell Atlantic exposes the RBOCs to operational risks. The majority of the investments made have been made in the informed and non-core activities. However, that Bell Atlantic has divested informed and non-core instead of core activities suggests that the company has sought to counter the inherent risks and align the internationalo portfolio towards a less risky stance. Therefore, although the

[1] France Telecom asked the International Court of Justice for mediation, and to award the company $500m in damages (Financial Times, 1996).

portfolio is skewed in favour of more risky informed and non-core investments the risk has declined as some investments have been devested in recent years.

8.3.3 BellSouth Corporation.

Figure 8.1 (over) vividly demonstrates how the composition of an international portfolio can undergo restructuring. After initially favouring informed activities BellSouth has steadily increased the number of its core activity investments, and when this is combined with the divestment of certain other subsidiaries the end product has been to move the focus of the international portfolio overwhelmingly in favour of core activities. As shown in Table 8.4 (below) fifteen out of the twenty-two investments are core activities. The inference of this for the risk of the international portfolio is that this has changed over time, declining through BellSouth's concentration on core activities.

Figure 8.1: The changing composition of the international investment portfolio of BellSouth between 1984 and 1998

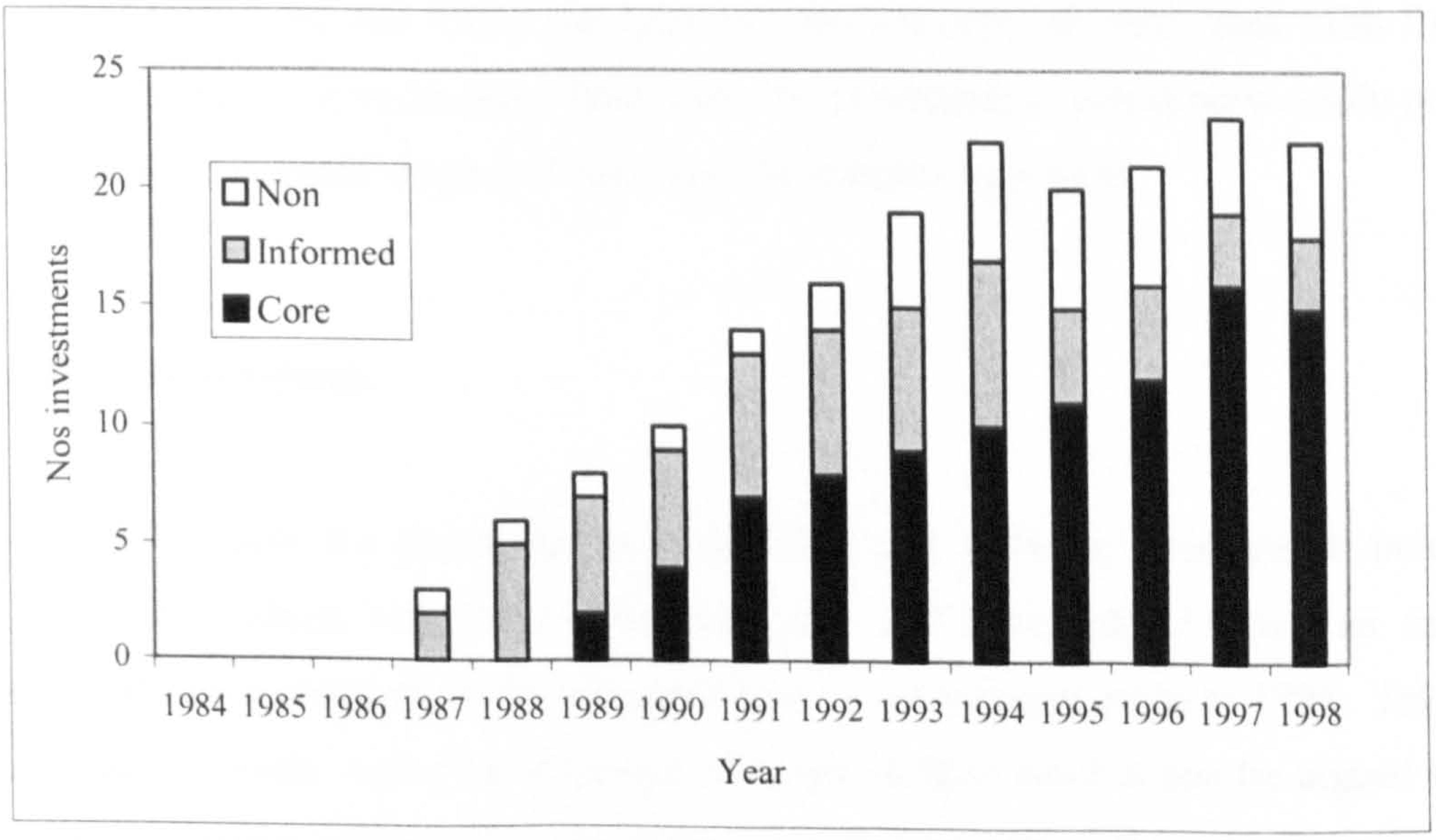


Table 8.4: The location of international investment activity by lines-of-business for BellSouth, 1984 – 1998

Lines-of-business	Total number of investments made	Number of divestments	Number of retained investments
Core activities	17	2	15
Informed activities	7	4	3
Non core activities	7	3	4
Total number of investments	31	9	22

To equate the progressive shift in investment emphasis with a desire on the part to reduce the risks that it faces when operating overseas may be premature. The numerous cellular investments made by BellSouth are not without risk, from both the large investment required and the concentration of most of the investments in developing countries that are associated with more volatile currencies and political regimes. For instance, BellSouth has invested in cellular companies throughout Latin America. Although these investments were initially comparatively small the more recent investments have involved larger sums. One such country where BellSouth has invested considerably in the cellular market is Brazil. As a result of the recent volatility in the currency market in general, and in the case of Brazil in particular which has moved to a floating exchange rate, BellSouth has been forced to reassess the value of its Latin America investments. To this effect the company has wrought off more than $1bn from the value of its international investments. Therefore, the international investments made probably expose BellSouth to a greater degree of risk than was initially appraised.

8.3.4 Pacific Telesis Group.

It is evident from Table 8.5 (over) that between 1984 and 1994 the international investment activity of Pacific Telesis was focused towards core and informed activities, an emphasis reaffirmed by the divestiture of all the non-core activity investments prior to 1994. Taking the greater emphasis towards core over informed activities at face value it can be argued that the international investment activity of Pacific Telesis sought to minimise the risks encountered.

The location of Pacific Telesis investment activity did not remain constant, with from 1990 onwards investments in the area of core activities playing an ever prominent role. Indeed, of the fourteen investments made from 1990 onwards only five were not in one of the core activities.

Moreover, all nine core activities were in the cellular market. That Pacific Telesis has so heavily skewed its investment towards the cellular sector would appear to reinforce the desire on the part of the company to minimise the risks inherent to its international portfolio of investments.

Table 8.5: The location of international investment activity by lines-of-business for Pacific Telesis, 1984 – 1994[1]

Lines-of-business	Total number of investments made	Number of divestments[2]	Number of retained investments
Core activities	9	0	9
Informed activities	7	0	7
Non core activities	3	3	0
Total number of investments	19	3	16

Note: 1. 1994 marks the endpoint of Pacific Telesis's international investment activity, as it was in this year that the company divested AirTouch Communications to existing shareholders. 2. Number of investments divested prior to divestiture of AirTouch in 1994.

8.3.5 SBC Communications.

On first glance it is possible to identify two changes to the balance between core, informed and non-core activities. Firstly, SBC progressively expanded the operational range of its investments by initially investing in core activities in 1984, then informed in the following year and finally in non-core in 1987. The second change to the balance between the three different categories of international investments is the jump in the number of informed investments between 1996 and 1997. This increase came one year after the number of core investments increased in 1995.

Figure 8.2: The changing composition of SBC's international investment portfolio, 1984 – 1998

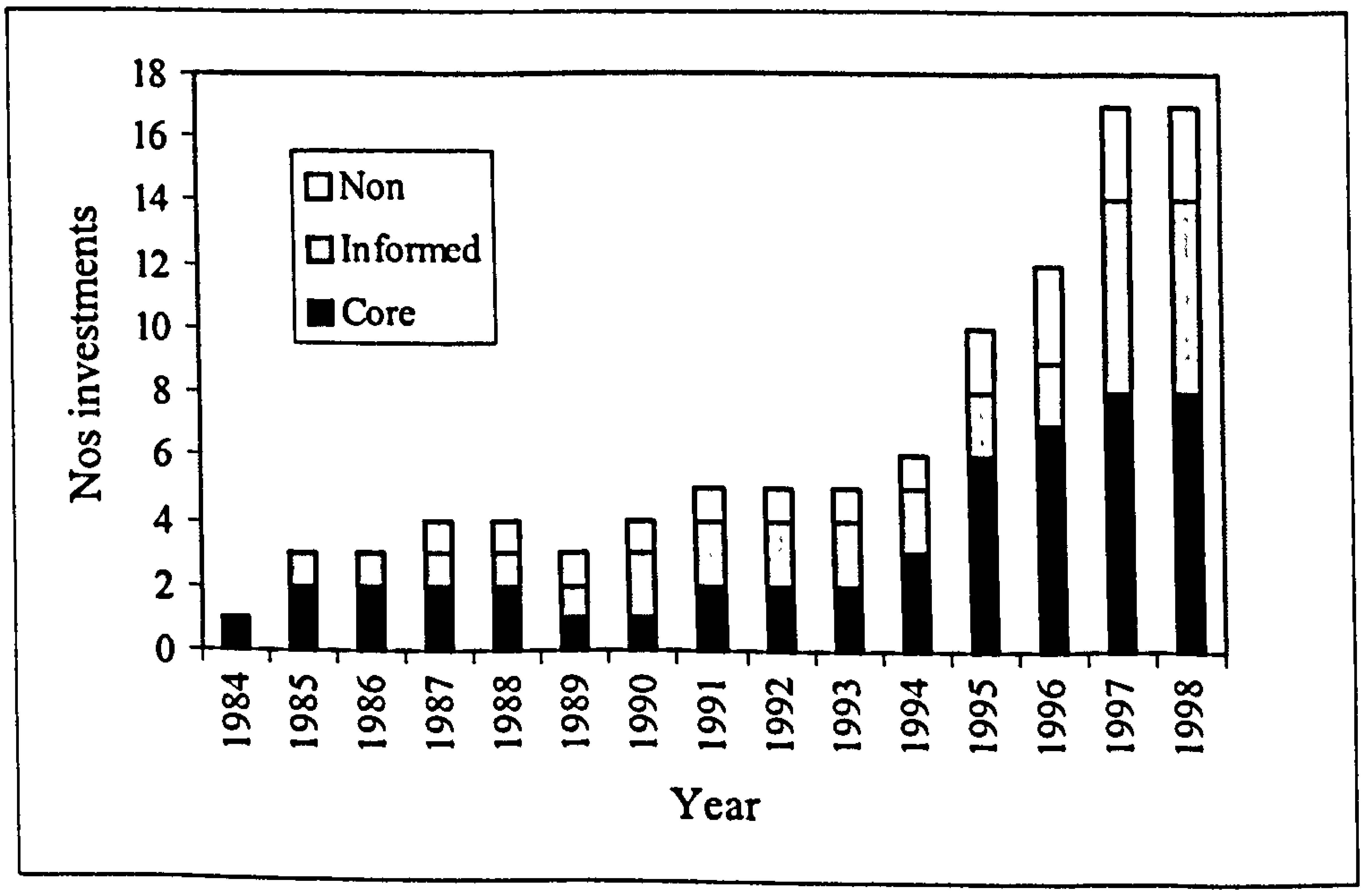


Table 8.6 (over) shows that the largest number of investments have been made in the core lines-of-business, though a sizeable minority are to be found in the informed lines-of-business. A predominance of core over informed and non-core is indicative of the company's desire to minimise the risks associated with its international investment activity. However, a closer scrutiny reveals that SBC has twice invested in the privatisation of developing country PTOs. Both of these privatisations, Telmex in 1990 and Telkom South Africa in 1997, involved SBC investing more than $1bn. None of the other overseas investments has required SBC to invest this amount of capital. When the capital requirements of the various international investments are taken into consideration it can be argued that the initial assessment of risk was an underestimate.

Table 8.6: The location of international investment activity by lines-of-business for SBC, 1984 – 1998

Lines-of-business	Total number of investments made	Number of divestments	Number of retained investments
Core activities	9	1	8
Informed activities	6	0	6
Non core activities	4	1	3
Total number of investments	19	2	17

8.3.6 US West Inc.

US West is unique among the RBOCs in the extent to which the company has invested in non-core lines-of-business. On this basis it would be argued that the international investment activity has not been conducted with risk reduction in mind, but has instead been driven by other factors. The question therefore arises, what are these other factors? If international investment activity is viewed as a signal as to where US West believes its long term future lies, then the emphasis on non core lines-of-business would suggest that the RBOCs regards these activities as being central to its future well being.

Table 8.7: The location of international investment activity by lines-of-business for US West, 1984 – 1998

Lines-of-business	Total number of investments made	Number of divestments	Number of retained investments
Core activities	17	3	14
Informed activities	1	0	1
Non core activities	22	6	16
Total number of investments	40	9	31

Of the non core lines-of-business investments made by US West nineteen out of a total of twenty-two have been made in the cable-TV market. The remaining three investments are spread between international gateway, investment company and pay-TV. The overwhelming bias in US West towards cable-TV suggests that the RBOCs considers this market to be vital to its long term future. The investment by US West in the cable-TV market is not without risk, not least because the company possessed no prior experience in the field when it made its first investment. In 1994 US West acknowledged the experimental nature of its investment in the UK cable-TV market:

> [t]he UK has proved to be the ideal market for US West International to implement its corporate strategy. ... Its concentrated population and *progressive regulatory environment* make it an attractive market for introducing new services and learning how to compete effectively with strong incumbents. As a result US West has gained *critical experience* – in packaging video and telephone services – that we're applying in others parts of the world, including the US. Out initial international strategy in the UK was "entry and positioning." After securing strategic market positions ... US West is firmly established as a market leader in the UK.[2] *(Emphasis added).*

The UK market provided US West with the opportunity to evaluate whether or not its entrance into the cable-TV market was viable, and the nature of the strategy to be adopted. Using the UK investments as an experiment, so that a strategy could be formulated within a cultural and economic context similar to that of the United States, would appear to be a sensible and risk reducing strategy on the part of US West. However, it should be borne in mind that by the end of 1994 US West had invested $420m in the UK cable-TV market.[3] Therefore, the initial years

[2] US West, 1994c, pg41.

[3] US West, 1994c, pg39.

of the investment, when US West was 'finding its feet' in the UK cable-TV market was not without risk.

All in all, the large number of non-core lines-of-business investment expose US West to a significant level of risk. To a certain degree this is offset by the company's equally large presence in core lines-of-business activities. Whilst a handful of these investments – three – were in the directory publishing industry, the remainder where cellular investments. As has been shown earlier, cellular investments are themselves not without risk and require considerable capital investment for their buildout etc. Therefore, the risk faced by US West as a result of the large number of cable-TV investments is compounded, and not mitigated, by the RBOCs' fourteen cellular investments. All things considered, the international investment portfolio is of greater risk than initially observed.

8.3.7 The relationship between lines-of-business and capital investment.

Until now the debate has focused on the lines-of-business in which the RBOCs have invested, and has sought to ascertain the risk that their international investment activity has exposed them to by reference to the threefold taxonomy. On more than one occassion the discussion above has commented on the amount of capital that the RBOCs have invested during the course of their investment activity. Several times it has been commented that when the amount of capital associated with the international investments is taken into consideration the initial assessment of risk has often been underestimated. This section will seek in greater detail to map the threefold taxonomy presented above onto the location of capital invested overseas by the RBOCs. This will provide a more accurate assessment of the risk to be made. This section will also seek to reiterate that core activity investments are not necessarily less risky than informed activity investments, which in turn are less risky than non-core activities.

It should be noted that the analysis in this section is incomplete as insufficient data covering all of the international investments made by the RBOCs since 1984 is available. One explanation for this is that the RBOcs have financed their international investment activity through general debt, and have not therefore specifically raised capital to fund an investment. Another explanation is that the press release accompanying the investment does not state the amount of investment that is to occur. For instance, BellSouth acquired stakes in two Brazilian cellular companies in 1997 without stating in the accompanying press release the level of investment that these two investments would require. Alternatively, sometimes the RBOCs only mention the initial investment to be made and do not make reference to the subsequent capital investment that is required. This is particularly true in the case of cellular investments where only the cost of the license and not network buildout costs are stated. Finally, the revaluation of investments due to currency fluctuations means the calculation of the level of investment becomes bogged down in accounting changes and is ultimately unrewarding. Both Bell Atlantic in respect to its investment in Mexico, and BellSouth with regards to Latin America in general have revalued their respective investments in light of the currency fluctuations that have been experienced. As a consequence the analysis here is limited to Ameritech and US West, though still worth pursuing as it demonstrates that core activity investments are not necessarily always the least risky when the level of capital required is included within the calculation.

Table 8.8: Ameritech's international investments by lines-of-business

Lines-of-business	Investment	Initial investment $m	Market value $m[1]
Core activites	Netcom		230
	WLW		80
	Cantel		
	Centertel		
Informed activties	Belgacom	865	1010
	TCNZ	1200	2000[2]
	Tele Danmark	3100	3150
	MATAV	843	1610
	Joint-venture with China Communications	Neglible	N/A
Non core activities	Cross-Global Alarms	800	N/A
	Sky Network TV of NZ		

Note: 1 Estimated at year-end 1997. 2. This is approximate value of the retained stake that was realised in 1998 through the open market sale of the equity. Ameritech was able to recover its initial $1200m investment prior to this through a combination of equity sale and dividends. *Source:* Ameritech, 1997d.

As shown above in Section 8.3.1 the international investment activity of Ameritech has focused on informed over core activities. If the initial level of investment of each of the investments is categorised according to lines-of-business category then it is clear that the sums involved are considerably more for informed activities than the other lines-of-business. This imbalance is due to PTOs investments being classified as informed activities, and as shown in Table 8.8 (above) this is the main area where Ameritech has invested its capital overseas.

With this in mind the initial risk assessment for Ameritech, which stated that the company had attempted to minimise its risk profile through balancing core against other activities, can be viewed as erroneous. When the location of investment is taken into consideration then it can be argued that the international porftolio of Ameritech is in fact more risky than the initial assessment. In the same way that the appreciation of the investment portfolio has been driven by the various PTOs investments, particularly through the sale of shares to outsiders, a downturn in any one investment will overturn the profitablility acheived until now. Consequently, a more accurate assessment of the risk inherent to the international investment activity of Ameritech would be one that takes into due consideration the high level of investment in PTOs within Europe that are subject to an hitherto unprecedented level of competition due to liberalisation. In other words, it is higher than the initial assessment made.

The larger number of international investments made by US West allow a similar exercise as above to be repeated for this RBOCs, though the level of investment for some companies is unavailable. From the above division of investment capital it would appear that the initial assessment of risk for US West of neutrality, reflecting the even split in the number of investments between core and non-core activities, is again subject to doubt. Core lines-of-business investments were the recipient of $680.5m, whilst non-core lines-of-business received $1076m in all. The balance of $226m was held by the single informed activity made by US West. Thus, with nearly the same number of investments non-core lines-of-businesses received considerably more investment capital than the other areas. Therefore, the risk to which US West is exposed to is not balanced by the range of its investments, but instead is skewed in favour of greater than less risk.

Table 8.9: US West's international investments by lines-of-business, 1984 – 1998

Lines-of-business	Investment	
Core activities: $680.5m	One-2-One $376m	Polska Telefonia Cyfrowa
	Eurotel companies $26	US West / BPL Cellular $45m
	Binariang Maxis Mobile $226m[1]	Thomson Directories $95m
	Moscow Cellular $7m	US West Polska $15m
	TU-KU Cellular $1m	Listel $33.5m
	Bouygues Telecom $11m	ARIA WEST4 INTL $14m
	Mobilios Telecommunikacijos $2m	Delta Telecom $7m
	Westel companies $48m	
Informed activities: $226m	Binariang (fixed) $226m[1]	
Non core activities: $1176m	TeleWest $414m	Swedish Cable & Dish $115m
	A2000 $222m	Kabelcom
	Lyonnaise Communications $14m	Cable Plus $90m
	Norkabel $145m	TITUS Communications $17m
	Telenet	Flextech $59m
Total : $ 1982.5m		

Note: 1. Investment for fixed and mobile combined. *Source:* US West International 1995, Global Telecoms Business, 1994b and 1998.

From the cases of both Ameritech and US West it has been shown that the initial assessment of the risk to which their international investment activity exposed them to has been under estimated. As a consequence, it is likely that the threefold taxonomy constructed downplays the risks inherent to international investment activity. In other words, RBOCs international investment activity has greater risks associated with it than was initially stated.

8.3.8 Conclusion.

It is clearly evident that differences exist between the RBOCs in terms of the focus of the lines-of-business of their international investments. These differences expose each of the RBOCs to differing degrees of operational risk. Both Pacific Telesis and SBC have balanced core and informed plus non-core activities in their international investments. As a result their international portfolios are the most risk neutral of all the RBOCs. In contrast, by constructing a portfolio that favours non-core activities US West has an international portfolio that contains the most risk of the RBOCs. In between these two extremes are BellSouth, Ameritech and Bell Atlantic. As BellSouth's portfolio only slightly favours informed and non-core over core activities its international portfolio is marginally risky. As the balance between informed and non core versus core activities is greater for Ameritech and Bell Atlantic the risk to which they have exposed themselves to during the course of their international expansion is more than BellSouth, Pacific Telesis and SBC but less than US West. The initial assessment of risk is illustrated below in Table 8.10. It is important to remember that this table shows risk relative between the RBOCs.

Table 8.10: Differences in risk between the RBOCs

RBOCs	Initial risk assessment.	Adjusted risk assessment
Ameritech	◑	◕
Bell Atlantic	◑	◕
BellSouth	◔	◑
Pacific Telesis	○	◔
SBC	○	◑
US West	◕	●

Note: ○ minimal risk ◔ ◑ ◕ ● considerable risk.

When the implication of Ameritech and US West capital allocation is taken into consideration some changes to the above initial assessment are required. Because all of the RBOCs have made cellular investments it is necessary to raise all the initial risk assessments cited above. This can be further increased in the case of BellSouth because of the geography of the investments made, as well as the large network buildout commitments made. Likewise, the large capital sums associated with the PTOs investments of Bell Atlantic and SBC serve to increase the initial risk assessments made. Whilst these changes raise the risks faced by the RBOCs the relative balance between each of the companies largely remains intact.

8.4 EVALUATING THE INTERNATIONAL - DOMESTIC INTERPLAY.

As has been shown in Chapter Three the operational purview of the RBOCs has been shaped by the interaction of regulation, technological advances and the courts. At the heart of both the MFJ and the Telecommunications Act of 1996 are limits to the operational remit of the RBOCs. In the belief that the RBOCs would follow their erstwhile parent, and only provide 'plain-old-telephone-services,' the MFJ placed considerable operational limitations on the RBOCs. Of the limitations imposed the four most significant were:

- The provision of inter-exchange telecommunications services.
- The provision of information services.
- The manufacture of telecommunications products or consumer premises equipment
- Offering any other product or service, except telecommunications and exchange access services, that is not a natural monopoly service actually regulated by tariff.[4]

From divestiture onwards the RBOCs sought to overturn the lines-of-business limitations that had been imposed. Despite gaining permission to enter non-regulated operational areas in 1987, and to provide information services in 1991, the RBOCs were still barred from entering the long distance market in 1996 when the Telecommunications Act was passed. This Act, when fully implemented, will remove those barriers that exist between the long and local markets and create a more competitive and innovative telecommunications market in the process. RBOCs entry into the remaining prohibited sectors of the telecommunications market is dependent not only on the RBOCs demonstrating that their local markets are competitive as defined in the fourteen point competitive checklist, but also on the expiry of certain time limitations.

8.4.1 Internationalisation as the circumvention of domestic regulatory prohibitions.

At a global level regulatory regimes display countervailing tendencies. On the one hand regulatory regimes are supra-national and impart on their members a set of common obligations and standards. Examples here include the ITU and WTO that impart upon their signatories a set of

[4] Brotman, 1986, pgi.

requirements that require adherence by member states. The regulatory agenda is also set at the national and regional level as well. Regional institutions such as the EU or APEC contain a telecommunications dimension that seeks to promote their interest over that of others. Similarly, individual countries have acted to promote the national interest in the face of opposition from others.

As a result of these countervailing tendencies telecommunications regimes are not uniform, and display considerable variation between countries. The practical impact of such diversity is to create market differences, where the extent to which competition and liberalisation is prevalent and international investment is possible all vary. Through fragmenting the telecommunications market these differences create an asymmetrical landscape where market opportunities are dissimilar. These differences also perpetuate the global telecommunications market as a series of national markets, where each national market is constituted by a unique set of market and regulatory conditions, and which are by definition different from those in other markets.

It is proposed here that the presence of regulatory differences between countries has not only encouraged investment activity, but also has been exploited by the RBOCs. Where regulatory gaps exist between the United States and the host markets, and which enable the RBOCs to enter markets that they are prohibited from domestically, international investment will be encouraged. However, the RBOCs will only invest in these markets if the investment opportunity corresponds to a strategic imperative. In other words, the RBOCs will expand into those countries where it is able to operate in markets that are of strategic value and which it is excluded from domestically. Through making such an investment the RBOCs will be able to develop or gain access to skills and competencies that it presently lacks, though which it believes in the future will be necessary and of long term strategic value. Therefore, investment activity will demonstrate a propensity to be in those sectors of the telecommunications industry where prohibitions are present. Ancillary to this is the suggestion that these sectors may also be the ones where the RBOCs surmise regulatory prohibitions are to be overturned in the near future.

8.4.2 Determining the interplay between domestic and international developments.

Chapter Five demonstrated that the RBOCs have been active domestic investors across a wide range of different lines-of-business. Not only do these lines-of-business include those within the telecommunications industry, but also non-telecommunications industries such as financial services and property development as well. Similarly, Chapter Six showed that internationally the RBOCs have not limited themselves to investments within the telecommunications industry. Instead of examining the interplay across all of the different lines-of-business that the RBOCs have invested in, the analysis here is restricted to those lines-of-business within the telecommunications industry. In doing so, the analysis reflects the trend of recent years for the RBOCs to exit non-telecommunications industries and concentrate on their core telecommunications lines-of-business.

Therefore, the interplay between the domestic and international dimensions of RBOCs strategy is explored through comparing those sectors of the telecommunications industry where international investments have been made, with those where domestic prohibitions are present. Drawing on the analysis of American telecommunications outlined in Chapter Three, and the investment activity depicted in Chapters Five and Six, it is possible to identify several areas where interplay may occur. These areas largely correspond to the main lines-of-business restrictions imposed on the RBOCs by the MFJ in 1984, and are as follows: cable-TV, and its integration with telephony services, long distance, international services and facilities and service integration. Service integration here is defined as the ability of the RBOCs to offer services across the broad spectrum of telecommunications in a fashion similar to that of a PTOs

If the RBOCs have been investing to gain domestic advantages from the foreign acquisition of skills and competencies, then there will be a high degree of overlap between the five aforementioned areas and the international investments made. In contrast, if international investment activity has been driven by the exploitation of existing skills and competencies then the overlap with the five identified areas will be minimal, if any at all. Table 8.11 (over) starts to map out the nature of the interplay between the domestic and international investment activity for each of the RBOCs. The table shows that the RBOCs have not used their international investment activity as a means for acquiring new skills and competencies to the same extent. For example, both BellSouth and SBC have invested in all five of the identified areas whilst US West has been an active investor in only three. On this basis it is possible to argue that the description of international investment as a means to acquire new skills and competencies is more appropriate for BellSouth and SBC than it is for US West.

One immediate explanation for this difference is that unlike its counterparts US West has not invested in PTOs. Unlike the RBOCs, PTOs provide end-to-end telecommunications infrastructure and services that encompass the national space. The national scope that results, and the structural separation imposed within the United States, ensure that PTOs are operationally quite different from the RBOCs. By investing in PTOs the RBOCs will gain access to an array of skill and competencies relating to service integration, long distance and international services, that they are presently denied in the domestic environment.

Table 8.11: A framework for evaluating the interplay between the domestic and international dimensions of RBOCs strategy

	RBOCs					
	Ameritech	Bell Atlantic	BellSouth	Pacific Telesis	SBC	US West
Cable-TV / telephony combination	×	✓	✓	✓	✓	✓
International facilities & services	✓	✓	✓	✓	✓	✓
Service integration (as defined by PTOs)	✓	✓	✓	✓	✓	×
Long distance	✓	✓	✓	×	✓	✓
Long distance (outside PTOs)	×	×	✓	✓	✓	×

As 'one-stop shopping' becomes increasingly important within the telecommunications industry the service integration aspect of the PTOs investment are likely to be invaluable. Domestic regulation prohibits many aspects of service integration, imposing, for example, in-region structural separation to prevent anti-competitive behaviour. Moreover, the 1996 Telecommunications Act continues structural separation in-region. PTOs investments provide the RBOCs with experience of integrating services, not only at the technical level but also in terms of billing and marketing as well. Given the potential importance of service integration it is perhaps surprising that the RBOCs do not explicitly refer to this type of benefit when detailing the advantages gained from their various PTOs investments.

It has been shown previously in Chapter Six that PTOs investments have proved to be extremely lucrative, not least because the RBOCs possess the necessary skills and competencies to implement the operational efficiencies that have underpinned these returns. When coupled with appreciating stock markets the result has been to provide the RBOCs with substantial financial returns on their investments. Thus, not only are PTOs investments financially risk averse but they also provide the RBOCs with the opportunity to acquire skills and competencies that they are forbidden from accessing domestically. That US West has gained less new skills and competencies during the course of its internationalisation than the other RBOCs is a direct result of its failure to invest in PTOs.

Outside of the role of PTOs what other characteristics of the interplay between domestic and international investment activity can be identified? The international investment activity of US West allows another area of interplay to be identified, namely, cable-TV. In contrast to its abstinence from PTOs investments, US West has been an active investor in cable-TV companies outside the United States. The principal way through which US West has benefited has been from the integration of traditional cable-TV services with telephony. Of the large number of international investments made of particular importance was the investment in TeleWest in the UK. Through this investment US West has been able to benefit from the integration of traditional cable-TV services with telephony in a highly competitive and liberal environment. Domestic regulation prohibited such a combination of services within the 14-state region of US West, though the RBOCs was able to combine the services together out-region in areas such as Atlanta where MediaOne, a cable-TV subsidiary, operated.

With the exception of Pacific Telesis all of the RBOCs have invested internationally in the long-distance market. In doing so they have demonstrated the importance that they place on this market. Within the United States the RBOCs were excluded from operating in the long-distance market by the MFJ, though the 1996 Telecommunications Act does provide for the possibility of the RBOCs entering the market once they have satisfied a fourteen point competitive checklist. The long-distance market is the most significant that the RBOCs are presently excluded from. Given the size of this market, and the move towards one stop shopping within the telecommunications industry, the RBOCs cannot afford to be excluded from this market indefinitely. Quite simply, continued exclusion places the RBOCs at a competitive disadvantage. The international investments provide the RBOCs with a way to acquire those skills and competencies that they are presently missing, and which are necessary because they will facilitate their swift entrance into the market once regulations permit.

The investment of Bell Atlantic in FLAG highlights the importance placed on international facilities and services by the RBOCs. To differing degrees all of the RBOCs have invested in this segment of the telecommunications industry, though on closer examination the majority of investments are minor in comparison to FLAG or the China-US Cable Network investment made by SBC. For example, through the RTDC US West invested \$18m to acquire 35.5% of Westelcom. Westelcom operates international gateway switches in Moscow and St. Petersburg. Outside of this investment, the RBOCs have acquired companies providing international facilities and services not for their own sake but as part of larger companies. The acquisition of equity stakes in PTOs have provided the main route through which the RBOCs have been exposed to this segment of the market, and thus the main way through which they have been able to acquire those skills and competencies that they were lacking. That the RBOCs have not been more active investors would suggest that of all the areas where the interplay between domestic and international could occur this has been accorded the least importance.

Therefore, the majority of investments that provide the RBOCs with new skills and competencies are located in either the PTOs or cable-TV segments of the telecommunications industry. The propensity of the RBOCs to invest in these two areas is indicative of the importance that they place on these lines-of-business. The RBOCs also view long-distance as an important market, primarily because this is the largest domestic line-of-business that they are presently excluded from. However, the importance attached to each of these lines-of-business is not uniform across all of the RBOCs. US West stands apart from the other RBOCs through its lack of international investment in PTOs, and by its unparalleled willingness to invest in overseas cable-TV markets. This reflects the belief of US West that cable-TV companies possessed technologies essential for the forthcoming multimedia driven industry, and that without these technologies the RBOCs would in the future be placed at a competitive disadvantage.

In contrast, Bell Atlantic and BellSouth share a largely similar vision of the telecommunications industry. The international investment activity of both of these RBOCs underline the view that cellular will play a pivotal role in the future. However, other aspects of their international investment activity demonstrate that Bell Atlantic and BellSouth have different views on which lines-of-business in the telecommunications industry will be important in the future. In addition to its investment in FLAG, Bell Atlantic has also assembled a range of directory publishing investments as well. In contrast, BellSouth has invested in a line-of-business that complements its focus on cellular, that is, in mobile data. After initial diversification BellSouth has limited its international investment activity to just these two lines-of-business. Thus, Bell Atlantic's view of the future, and its role within the new telecommunications industry that is taking shape, is more broadly based than that of BellSouth.

This broadly based view of the telecommunications industry is taken one step further by Ameritech. Between 1993 and 1997 Ameritech assembled a series of equity holdings in European PTOs that provide long distance, local access, cellular, directory publishing and other services. Through these investments Ameritech would be well placed to acquire those skills and competencies that it was missing domestically due to regulatory prohibitions. The broadly based international strategy of Ameritech is reflected domestically in the RBOCs' entrance into complimentary markets such as security monitoring and cable-TV markets that enhance the core BOCs operations. Two interpretations of Ameritech's broadly based investment activity are possible. Either Ameritech is 'hedging its bets' because it lacks a firm understanding of how the industry is likely to develop in the future, or the RBOCs is implementing a strategy that it believes will leave it well placed to take advantage of new opportunities as they arise. Given the uncertainty inherent within the telecommunications industry only time will tell which one of these interpretations is the correct one.

A similar comment can be made about the international investment activity of SBC. Although the RBOCs has not invested in PTOs to the same extent that Ameritech has, its investment activity has been broadly based. The RBOCs has invested across the broad spectrum of the telecommunications industry, and in all five areas where prohibited skills and competencies may be acquired. However, some of the investments made by SBC are clearly more important than others. As noted in Chapter Six a key if not pivotal investment in the international expansion of SBC was Telmex. This PTOs investment was not only financially very lucrative, but also demonstrated the attractiveness of foreign markets and provided the opportunity for the RBOCs to acquire new skills and competencies. Of the other investments made perhaps the more significant are those in Israel and the China-US Cable Network. The former of these has provided access to service integration, whilst the latter will enable the RBOCs to gain access to those skills and competencies necessary for the provision of international facilities and services. This would suggest that the RBOCs views service integration and international facilities as being key to future developments within the telecommunications industry.

Until its 1994 exit from all out-region markets, international as well as domestic, Pacific Telesis was also investing broadly across the telecommunications industry. As shown in Table 8.11 (above) these investments provided the RBOCs with the opportunity to acquire skills and competencies relating to cable-TV / telephony, international facilities and services, service integration and non-PTOs long distance. Given the nature of Pacific Telesis's domestic investment activity detailed in Chapter Five, the areas where the RBOCs could gain the greatest advantage are cable-TV / telephony, service integration and long distance. Having said this, the extent to which Pacific Telesis actually benefited from its international investment activity is questionable. Quite simply, the April 1994 spin-off of AirTouch Communications curtailed any benefits, including the acquisition of skills and competencies, which might arise from common ownership. In most cases the period in which any skills and competencies acquisition could occur was relatively short, and the domestic investment activity outlined in Chapter Five suggests that little occurred.

8.5 SUMMARY.

This chapter has examined those operational areas in which the RBOCs have invested, and two taxonomies have been constructed to facilitate this process. The first of these divided the recipient sectors of the telecommunications industry into three distinct categories based on their distance from those activities conducted domestically. As a consequence the international investments were categorised as either core, informed or non-core. Due to the risk associated with each of these three categories being different, the taxonomy can also be used to gauge the level of risk to which the RBOCs have exposed themselves during the course of internationalisation. Arguably, US West, through its numerous investments cable-TV investments has a greater exposure to risk internationally than either Bell Atlantic or BellSouth that have concentrated their investments in core activities, especially cellular.

The second taxonomy evaluated internationalisation as a strategic process, allowing the degree to which the RBOCs have used international investments to gain access to new skills and competencies to be gauged. In addition, the second taxonomy drew attention to internationalisation as a signalling process, where the investments correspond to those sectors that the RBOCs view as being important and necessary for their future development. The progressive shift in RBOCs international portfolios, away from a multi-sector focus towards a concentration on a limited number of sectors, highlights the specialist nature and role of operators in the future telecommunications industry. Such a broad generalisation ignores the differences evident between the various RBOCs. By acquiring PTOs Ameritech has highlighted service integration as a skill and competency that its believes it requires to prosper in the future, similarly by heavily investing in cable-TV US West aligned its future prosperity with cable-telecommunications convergence.

In contrast the other RBOCs have all favoured cellular whilst internationalising, thereby underlining the view that cellular will play a central role in the future development of the telecommunications industry. The central, if not pivotal role of cellular is further reinforced when it is remembered that both BellSouth and Bell Atlantic have exited from other sectors of the industry whilst increasing their commitment to cellular. Furthermore, in favouring cellular these RBOCs also have demonstrated a desire to avoid risk whilst internationalising.

Finally, the two taxonomies have also demonstrated how the lines of business in which the RBOCs find themselves is determined by the interplay between a whole host of factors. Not only is RBOCs strategy influenced by the nature of the regulatory environment in which they find themselves, but also the organisational form adopted to enter a market as well as the partners that they have chosen to facilitate this entry and development of a business. RBOCs international strategy has also been strongly fashioned by their domestic regulatory environment. The following chapter will draw these various strands together, and present conclusions as to the motives and infsluences apparent in RBOCs internationalisation.

CHAPTER NINE: SUMMARY AND CONCLUSION.

9.1 INTRODUCTION.

The aim of this thesis has been to examine international investment activity in the telecommunications industry during a unique period. The establishment of the seven RBOCs in 1984 by the MFJ corresponded with beginning of a period of fundamental change for the telecommunications industry. Liberalisation, along with rapid technological advances and the introduction of competition irrevocably changed the telecommunications industry, creating both a more uncertain environment but one where investment opportunities arose that could be exploited in hitherto unimaginable ways. This thesis also explores the usefulness of theory for understanding RBOCs international investment activity. The changing and uncertain telecommunications landscape provides a challenging environment in which to test both the validity and insight of theoretical tools. The telecommunications industry challenges many of the traditional and commonly accepted ways in which MNEs development is conceptualised.

The international economy is comprised of a series of market imperfections that engender asymmetries, uncertainty and risk for those companies investing overseas. Internalisation, transaction cost economics and the eclectic paradigm are all theoretical perspectives on the development of the MNEs that argue that companies mitigate the risk that they face through bringing the overseas investment within the control of the investing company. However, the radical internationalisation that this would entail is it self, not without risks. An alternative theoretical school is the Uppsala internationalisation school. In this school it is argued that the risk associated with internationalisation can be negated through gradually expanding the presence of the company overseas.

A framework was proposed that built upon the insights of Johanson & Vahlne (1977). They argued that international expansion is incremental so that the psychic distance between the host and home markets can be overcome. Through the incorporation of asset specificity a theoretical framework was proposed. This framework viewed international expansion as being incremental in nature thereby reflecting the presence of uncertainties from psychic distance. Knowledge asset specificity limited the ability of the investor to transfer knowledge between markets. Finally, the framework proposed that the risk adverse nature of companies would be demonstrated along a series of dimensions, namely, organisational form, geography, line-of-business (operational) and commitment deepening.

The appropriateness and insightfulness of this framework was tested through its application to the RBOCs. The RBOCs provide a unique laboratory in which the framework can be tested. Emerging out of the 1984 break-up of the Bell system they shared a common managerial, organisational and technological ancestory. Importantly, even though these companies lacked any experience of operating outside of the United States they have all to varying degrees invested abroad. From their creation in 1984 the RBOCs have been active participants in the internationalisation of the telecommunications industry, and in the creation of telecommunications MNEs in an industry previously dominated by nationally proscribed companies.

A great deal of information concerning the regional Bell operating companies has been presented in the proceeding chapters. Not only has the domestic regulatory context under which the RBOCs operate been detailed, but also in addition their domestic and international investment activity has been discussed at length. The international investment activity of the RBOCs has also been reinterpretated to highlight geographical, operational and organisational aspects as well. From the information presented, and analysis undertaken it is possible to identify a series of conclusions that have been reached:

- Market imperfections play an important role in shaping the development of MNEs and the international investment activity that they undertake.

- When applied to the telecommunications industry traditional theoretical tools for understanding international investment activity are lacking in one way or another. Their focus on internalisation (wholly owned foreign subsidiaries) starkly contrasts with the highly collaborative nature of the telecommunications industry, and the strong motivations for companies to enter into joint-venture investments.

- Johanson & Vahlne (1977) was extended by incorporating the TCE notion of knowledge asset specificity. In the resulting model of international expansion the RBOCs are risk averse. International expansion is an incremental process, with companies favouring markets with smaller psychic distance from their home market and collaborating with other companies when they enter the foreign market. This minimised the information asymmetries faced by the investing company. Over time the company will invest in countries with greater psychic distance than was previously the case, and as it becomes more adept and experienced at operating overseas it reliance on collaboration will decline.

- The complex nature of international expansion necessitates that the analytical approach adopted is multi-dimensional in nature. The thesis examined RBOCs international investment activity through reference to five measures: the psychic distance of the host markets from the United States, the degree to which international-domestic linkages (regulatory circumvention) occurs, the lines-of-business invested in and the degree of competition and liberalisation of host markets. The thesis also proposed a series of criteria for the determination of how competitive and liberalised host telecommunications markets are.

- Companies offset the uncertainty of international expansion through collaborating with partners that are often indigenous to the market that they are investing in. Local companies help level the information asymmetries faced by expanding MNEs. Collaboration also occurs when the company lacks some of the necessary skills and competencies. Both of these motives for collaboration are borne out by the experience of the RBOCs.

- Knowledge asset specificity has encouraged several of the RBOCs to deepen their commitment to a particular market. For example, detailed knowledge of the Australian market encouraged BellSouth to make further investments in that market.

- The RBOCs have exploited new investment opportunities as they arose with the result that the lines-of-business that they have invested in since 1984 have not remained constant. After initial diversification efforts the RBOCs have realigned their investments to concentrate on fewer lines-of-business. This change has altered the risk profile of the RBOCs. The least risk averse of the RBOCs is US West, which has invested in a large number of cable-TV, franchises overseas, whilst Pacific Telesis and SBC are the least risky. In between these two extremes are Ameritech, Bell Atlantic and BellSouth.

The aim of this chapter is to provide a summary of the discussion and conclusions reached, and then to draw these together through a synthesis of the findings. As a consequence this chapter is organised into three main parts. In the first of these Chapters Five to Eight are summarised, whilst in the second a synthesis of the findings is presented. The third section suggests areas of further research.

9.2 INDIVIDUAL PROFILES OF THE RBOCS.

A profile of the investment activity of each of the RBOCs was presented in Chapters Five and Six. In the former of these chapters the domestic investment activity of the RBOCs since divestiture was recounted. The domestic investment activity can be divided into that focused towards the in-region territories of the RBOCs, and that intent on building a national presence. The international investment activity of the RBOCs was addressed in Chapter Six.

9.2.1 Domestic.

Over the course of their domestic investment activity the RBOCs have all invested in those lines-of-business that they inherited from the Bell system on divestiture. However, the degree to which they have done so varies between each of the RBOCs. Ameritech, Bell Atlantic, BellSouth and SBC are those RBOCs which have continuously expressed the pivotal role played by their in-region telephone networks, and have invested accordingly in this network. As a consequence the growth that each has enjoyed since 1984 is in no small measure attributable to their in-region telephone network. In contrast are Nynex, Pacific Telesis and US West. These three RBOCs did not invest on the same scale in their in-region telephone network and have been chastised on more than one occasion for their failure to do so. Often cited as being directly attributable to this lack of investment is the poor quality of service reputation, especially of Nynex and US West.

Each of the RBOCs has also enacted a cellular strategy. In this strategy the RBOCs initially expanded in-region, but soon became interested in out-region cellular investment opportunities. For most companies theses went hand-in-hand, but for US West the out-region expansion was a way to grow and thus overcome its inherent geographical disadvantage of providing services in fourteen sparsely populated states. As a consequence

US West developed an aggressive strategy that ultimately failed to deliver the necessary growth sought, and which led the company to focus its investment activity in another market, namely, the cable-TV market. For the other RBOCs cellular provided an opportunity for expansion. Bell Atlantic, BellSouth, Pacific Telesis and SBC all expanded their cellular activities, both in and out-region. With limited exceptions Ameritech targeted its cellular investment in-region. The decision by Pacific Telesis to divest its cellular and out-region investments in 1994 illustrated how comparatively small revenue generating lines-of-business such as cellular were in fact the creators of considerable (shareholder) wealth.

The Pacific Telesis-AirTouch separation also illustrates the role of geography in the post-divestiture strategies of the RBOCs. Pacific Telesis spun off AirTouch so that it could concentrate on its in-region market, US West expanded out-region to compensate for its limited in-region population. Bell Atlantic, BellSouth and SBC have all expanded from their entrenched in-region positions to other parts of the United States. Bell Atlantic, BellSouth and SBC have all done so through a combination of organic growth, joint-ventures and acquisitions though it is Bell Atlantic and SBC that have made the greatest impact through their purchase of Nynex and Pacific Telesis respectively. Bell Atlantic and SBC are creating national telecommunications companies that are grounded on local markets. This combination allows these RBOCs to simultaneously defend their home in-region markets through offering greater geographical scope, whilst entering new markets. It is only with the passage of the 1996 Telecommunications Act that these two RBOCs could begin to create a national telecommunications through acquisition of other large service providers.

It is harder to identify other strategies that pervade across all or most of the RBOCs. It is a common goal rather than strategy that unites the RBOCs, namely, a desire to diversify the sources of revenue so that BOCs become less significant in this respect. Ameritech, Nynex and US West have all engaged in a diversification strategy. Ameritech has entered the security monitoring and in-region cable-TV markets, Nynex became a computer retailer and financial services company whilst US West entered and exited a multitude of different markets before settling upon the cable-TV market. The presence of Nynex in all its diversification markets was short-lived, whilst Ameritech's investments have only recently been made. US West invested the most in its diversification into the cable-TV market, yet exited in 1997 when MediaOne was divested. It would therefore appear that the RBOCs have not been able to diversify with any success into new markets, and that as a consequence the BOCs remain the main revenue generators.

9.2.2 International.

Chapter Six continued the analysis of the RBOCs at the individual level, though this time focusing on the international investment activity that has been undertaken since divestiture. The examination of the international expansion of the RBOCs demonstrated that as a group they have invested widely, not only in terms of the geographical location of the investment but also with respect to the lines-of-business in which they have invested. As a group the primary host regions for RBOCs investments are the Far Eastern part of Asia, Europe and Latin America. In addition to these regions, SBC has invested in South Africa and US West in Russia.

Within the geographical diversity that is evident it is clear that several of the RBOCs have deepened their commitment to certain markets. For instance the United Kingdom in the case of US West, Israel in the case of SBC and Australia for BellSouth. Within these markets the RBOCs have sought to widen their operational scope with the result that they have invested considerable sums. Unlike its counterparts, US West also sought to generalise its UK experience through exporting what it referred to as the 'UK strategic model.' At the core of this model was the delivery of cable-TV and telephony over the same network. The other services operated by the company, such as cellular, were subservient to cable-TV. Through a series of investments BellSouth established a significant presence in the Australian market. However, the RBOCs exited the market and re-deployed the freed resources elsewhere. The commitment of BellSouth to the market enabled the RBOCs to realise that it did not possess the necessary skills and competencies to compete head-to-head against the incumbent PTOs.

BellSouth's presence in Australia also illustrates the role of key investments within the international expansion process of the RBOCs. These investments are pivotal points within the overall expansion of the RBOCs, and inform the subsequent course taken. In the case of BellSouth the investment in Optus showed the RBOCs that it possessed neither the necessary skills and competencies, nor the desire to engage in an expensive battle against the incumbent. Subsequently BellSouth has focused on the cellular industry. In the case of Ameritech and SBC key investments in PTOs encouraged the RBOCs to continue their international investment activity. Whilst this encouragement was general for SBC, the success of the investment in TCNZ resulted in Ameritech almost solely investing in PTOs from 1990 onwards.

All of the RBOCs have affected their entry into foreign markets through joint-ventures. Only a handful of the investments made are wholly owned, and several of these later became joint-ventures. The advantage of joint-ventures is that they help to overcome those asymmetries that in some way affect the RBOCs. The RBOCs face two broad types of asymmetries when investing overseas. Firstly, the RBOCs may lack some of the necessary technical skills and competencies. Such a lack of appropriate skills and competencies motivated US West to form its cable-TV joint-venture with TCI in the United Kingdom. Secondly, joint-ventures have been formed with companies from the host market so that geo-political aspects of the market can be understood.

However, it can be argued that the RBOCs have no choice but to collaborate when investing overseas. In many countries the telecommunications industry is viewed as being strategic in nature, and thus an industry that cannot be controlled by foreigners. Moreover, many former colonies are weary of investment by western companies. Combined these present a formidable barrier to inward investors. Therefore, the use of joint-ventures allows the RBOCs to offset any fears that may be encountered and create a localised image of the investment. It was only when Nynex had invested in TelecomAsia, thereby allying itself with a local company, was the RBOCs able to break into the Asian market.

Due to the lack of financial transparency it is difficult to determine one way or the other the degree to which RBOCs have benefited financially from their international investments. BellSouth is unusual among the RBOCs for stating its international cashflow and net income. Moreover, BellSouth is also unique in that it has made a financial success of its international investments without investing in a PTOs. For several RBOCs, Ameritech, Bell Atlantic and SBC, their early investment in a privatisation and the subsequent appreciation of telecommunications stocks has been the principal way in which they have benefited financially. To a lesser or greater degree all of the RBOCs have suffered at the hands of currency instability, though this has been particularly significant for those operating in non-OECD countries. On more than one occasion BellSouth, Bell Atlantic and SBC have all seen the value of their international investments, and the dividend income received reduced by currency instability.

9.3 GEOGRAPHY AND THE ORGANISATIONAL FORM.

In Chapter Seven the role of geography in RBOCs investment activity was examined in two different ways. The first way in which investment activity was examined was through ascertaining the influence of psychic distance on the choice of host country. From the theoretical framework it was proposed that in the early stages of international expansion the RBOCs would favour countries with lower psychic distance from the United States, but that as the companies became more experienced in operating overseas this would change. Not only would the RBOCs invest in markets with an ever greater psychic distance from the United States, but also through the influence of knowledge asset specificity they be would likely to invest in groups of countries with similar cultural characteristics.

It was found that differences were evident between each of the RBOCs. Psychic distance does play a role in shaping the location of RBOCs international investment, but this role is a qualified one. None of the RBOCs expanded overseas exactly in accordance with the proposed framework. International expansion frequently was radical in nature when between the zones. (The ten zones and their constituent countries are detailed in Section 7.2.1.2 of Chapter Seven). The RBOCs made subsequent investments in other countries within the ten zones of Ronen & Shenkar (1985), although sometimes this was in the same year as the initial investment whilst on other occassions it was several years later. The failure of both SBC and BellSouth to successfully enter the UK and Australian markets respectively suggests factors other than psychic distance play a significance role in determining the success of a venture. Finally, it was clear from the analysis that psychic distance zones transcend political and economic geography. For instance, the Anglo zone contains the United States and the United Kingdom as well as Ireland and South Africa. The former two countries share many similar economic and political characteristics with one another, whilst the latter two countries are in many respects unique in these areas. Similarly, the Far Eastern zone contains a large number of countries that economically are quite different.

The second way in which the role of geography in investment activity was examined was by mapping the competitive and liberalised status of markets onto the location of the investments. For this to be accomplished a composite index of competition and liberalisation was developed. If RBOCs expansion was driven by competition avoidance this would be reflected in the choice of host countries. From the analysis it was found that over the course of their international expansion Ameritech, Bell Atlantic, Pacific Telesis and US West had favoured the more competitive markets, whilst SBC had sought to invest in the extremes of either the least or most competitive markets. BellSouth alone progressively shifted the location of its international investment towards the less competitive markets.

Finally, the organisational form through which international expansion was effected was commented upon. This was acheived through firstly charting the progression of the RBOCs along a continuum of organisational forms. The more international experience of the RBOCs the further along the continuum would be the organisational form of market entry would be. Secondly, the analysis also looked at the amount of equity taken in the overseas venture. Lower equity was associated with greater psychic distance from the United States, and vice versa. It was proposed that as the RBOCs become more experienced international operators this would increase, as they would be better placed to evaluate the risks associated with the investment. The analysis found that only in the case of Ameritech and US West did the level of equity increase. In all other cases the level of equity taken by the RBOCs declined. For all of the RBOCs the most common organisational form was the joint-venture. This reflected a desire to ally with indigenous capital to overcome local market information asymmetries. Joint-ventures also offset part of the risk of the investment and allow the RBOCs to gain access to the skills and competencies of their partners.

9.4 LINES-OF-BUSINESS.

In Chapter Eight the operational dimension of RBOCs international investment was examined. A threefold taxonomy against which the various investments were compared was constructed. The starting point of this taxonomy was those lines-of-business inherited on divestiture in 1984 from AT&T. These activities - BOCs, cellular and directory publishing - were classified as core. Those lines-of-business that rely in some way on the skills and competencies gained from these core activities were categorised as 'informed.' The final category of activities that were identified is referred to as 'non core,' as they require skills and competencies that cannot be provided by the core activities.

The balance of the lines-of-business for each of the RBOCs is not the same. Pacific Telesis and SBC have balanced the number of core plus informed investments against non-core activity investments. This was taken to indicate that their international portfolio of investments was the most risk averse of all the RBOCs. In contrast to these two RBOCs is the case of US West. By investing proportionately more in non-core activities, primarily cable-TV, than in core and informed lines-of-business US West has constructed for itself the most risky international portfolio of any of the RBOCs. Ameritech, Bell Atlantic and BellSouth form the middle ground between these extremes. However, by investing more in cellular than other lines-of-business BellSouth has constructed for itself a marginally less risky international portfolio than either Ameritech or Bell Atlantic.

It was also observed that a misaprehension that could arise was that core activities, especially cellular investments, were without risk. The analysis sought to rectify this misaprehension by noting that cellular investments, as well as PTOs, are often associated with substantial capital investment. It was also shown that regulatory changes could adversely effect the viability of cellular investments. As a consequence the initial risk assessment gained from the threefold taxonomy was reappraised. The reappraisal increased the risk inherent to the international portfolio of each of the RBOCs.

The final area of enquiry in Chapter Eight was the notion that the RBOCs had used their international investments to enter markets that the domestic regulatory regime prohibits them from entering. Such investments would allow the RBOCs to gain access to skills and competencies that they were denied domestically. The extent to which the RBOCs have used their international investments to gain new skills and competencies differs, with this being more appropriate description for BellSouth and SBC than US West. Differences exist because of the uneven propensity of RBOCs to invest in PTOs. Investing in PTOs provides the RBOCs with a wider range of opportunities to gain new skills and competencies than other investments. The location of international investments was also taken to be a 'signal' effect as to where the RBOCs view the future of the telecommunications industry to lie. Ameritech, BellSouth, Pacific Telesis and SBC have all focused on one area more than others. BellSouth and Pacific Telesis have both focused on the cellular market, whilst US West alone has concentrated its investments in the cable-TV market. By investing in PTOs Ameritech is signalling its belief that telecommunications operators will need to be broadly based to prosper. The wide ranging investments of Bell Atlantic and SBC have also been taken as indicating a similar belief as Ameritech's.'

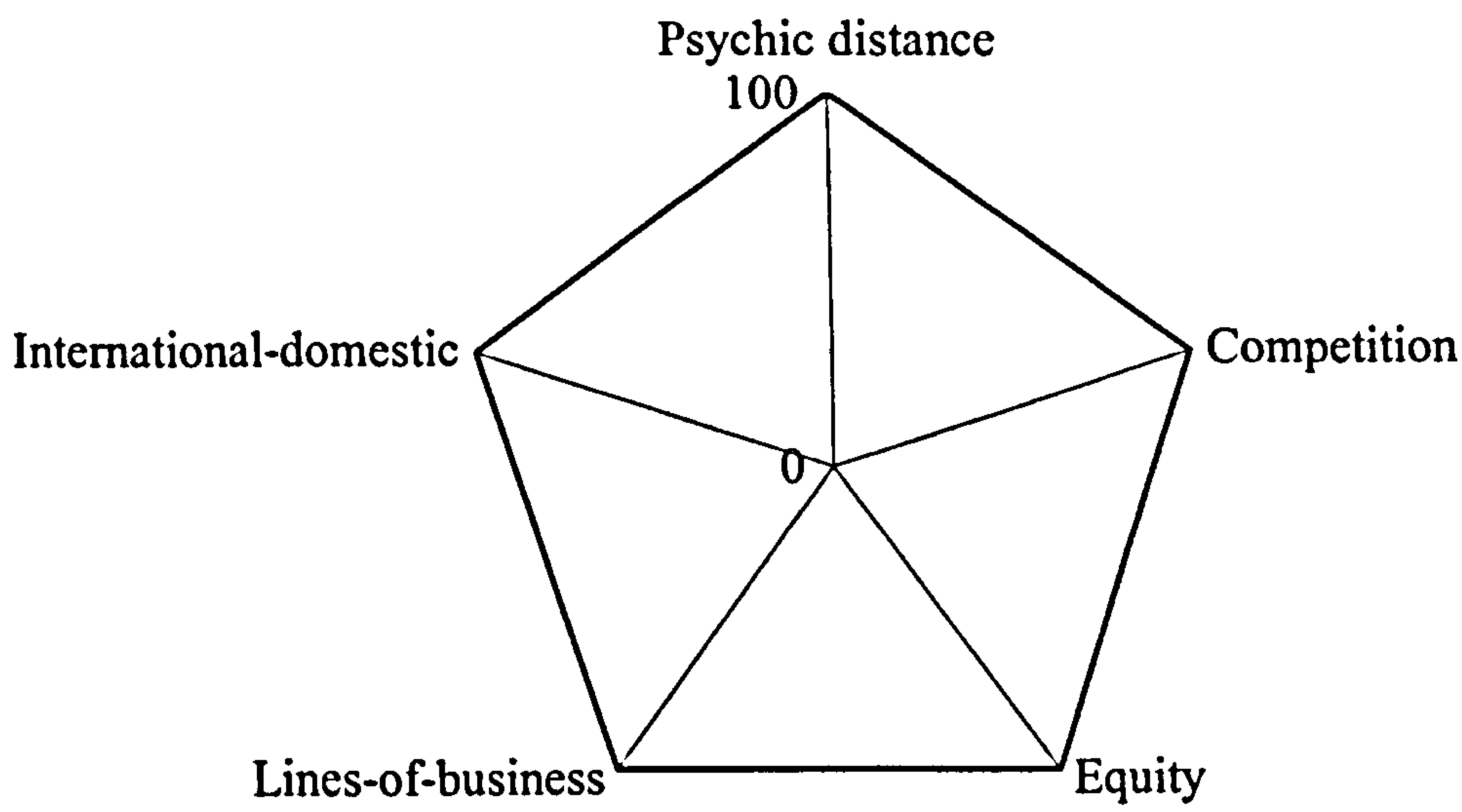
9.5 SYNTHESIS.

The preceding sections have presented a summary of the findings reached as to the nature of RBOCs investment activity in the period since 1984. These findings relate not only to the in-region investment activity of the RBOCs, but also their out-region and international activity as well. This section shall draw together the various conclusions reached as to the nature of RBOCs international investment activity. In doing so the synthesis of the various conclusions reached will provide a multi-dimensional analysis of RBOCs investment activity. Consequently, a richer and more fruitful insight into the nature of RBOCs investment activity will be provided.

Figure 9.1 (over) is one way through which a synthesis can be presented. This figure combines all of the principal dimensions of RBOCs international investment activity that have been discussed. As a consequence the diagrams demonstrates not only the totality and complexity of international expansion, but also how the different dimensions are inter-related and can not be discussed in isolation. The different dimensions reflect issues that arose from the theoretical framework. Importantly, each of the dimensions is also a measure of the risk present within the international expansion process. Therefore, the figures provide a clear and simple way through which the theoretical framework and empirical findings can be related to one another. It is recognised that the dimensions are sensitive to the way in which they were measured, and that different measuring techniques will affect the relationships between each of the five dimensions. Notwithstanding this concern it is felt that the robust methodology applied, and the advantages that accrue from the use of the pentagons in terms of their ability to readily highlight inter-relationships, outweigh any problems that may occur. Before the inter-relationships between the dimensions can be detailed it is necessary to state how they should be interpreted.

What characteristics would a telecommunications company that faced no risk display when expanding overseas? Such a company would invest in any market regardless of the psychic distance, would effortless move information between the home and foreign markets, would invest in any line-of-business and finally, would take as large an equity share as the situation permitted. In other words psychic distance and friction in the international economy would not exist for such a company. In Figure 9.1 (over) the pentagon would be completely shaded grey. However, the international economy is characterised by the presence of psychic distance and other forms of friction that detract from the above ideal scenario.

Figure 9.1: Visualising RBOCs international investment activity



In the figures that follow the dimensions should be interpreted in the following manner:

- *Psychic distance.* The larger the number the more successful that the RBOCs has been in entering markets with large psychic distance from the United States.

- *Competition.* The larger the number the more competitive and liberalised have the markets been in which the RBOCs have invested.

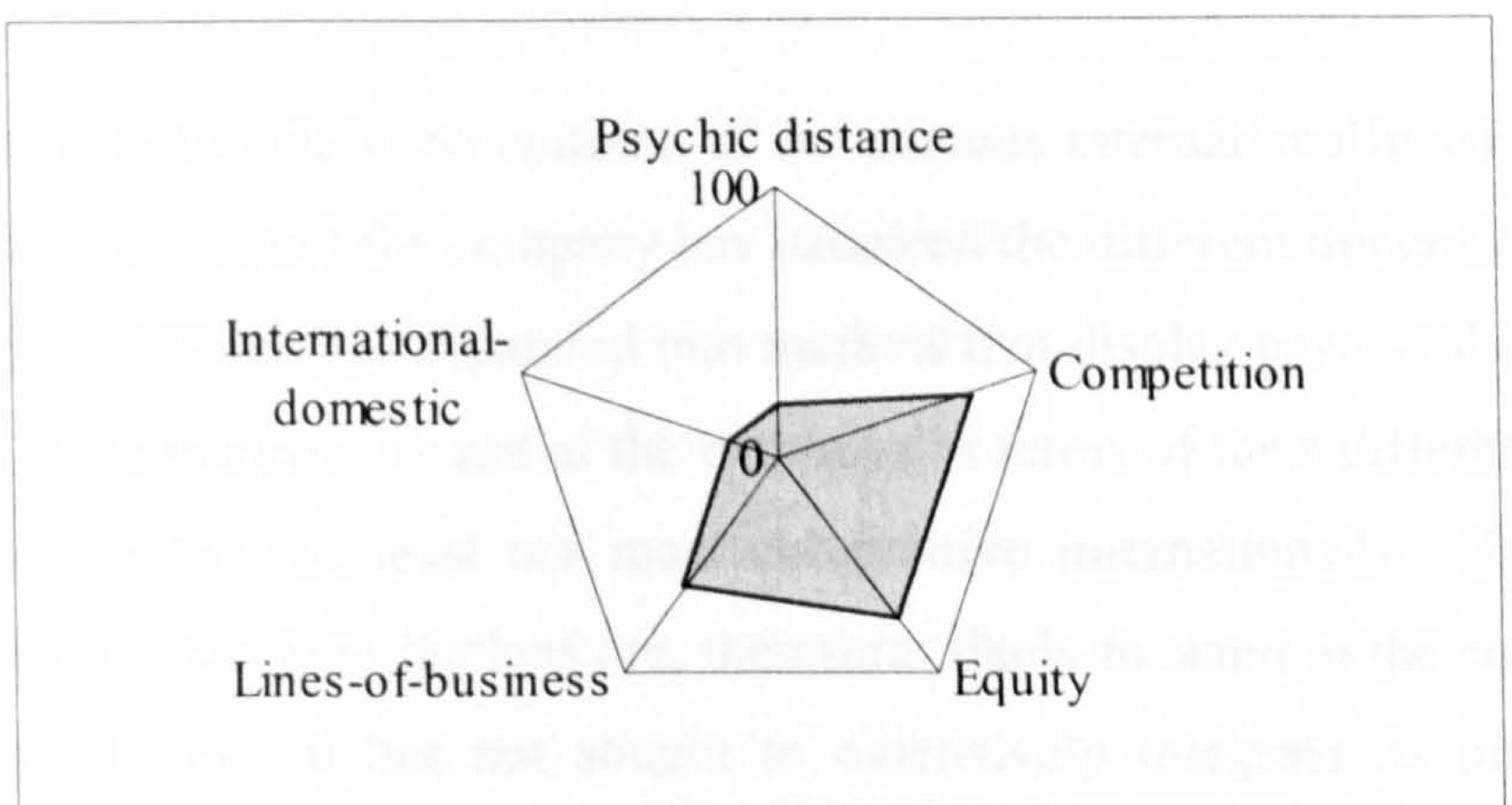
- *Equity.* If the RBOCs displayed a propensity to acquire increasingly larger equity positions in its overseas investments a higher score will be granted.

- *Lines-of-business.* The more the RBOCs has invested outside of its core lines-of-business the larger the score given to the company.

- *International-domestic linkage.* If the RBOCs has invested outside its domestic operational scope to gain new skills and competencies the score will be larger than if this was not the case.

With this in mind what do the figures below demonstrate about the nature of RBOCs international investment activity? Ameritech illustrates the paradoxes evident within the international investment activity of the RBOCs. As shown in Figure 9.2 (below) the RBOCs has been risk averse in respect to psychic distance and international-domestic linkage. The markets that the RBOCs has invested in have generally displayed some but not significant psychic distance from the United States, and little attempt has been made by Ameritech to integrate in any fashion its overseas investment with domestic subsidiaries. In fact, the principal way in which the investments in the two geographies are linked together is financially. Countering the above risk aversion is Ameritech's willingness to invest considerable sums in public telephone operators located within competitive markets. Moreover, as times passes it is more likely that competition will increase rather than decrease.

Figure 9.2: Ameritech

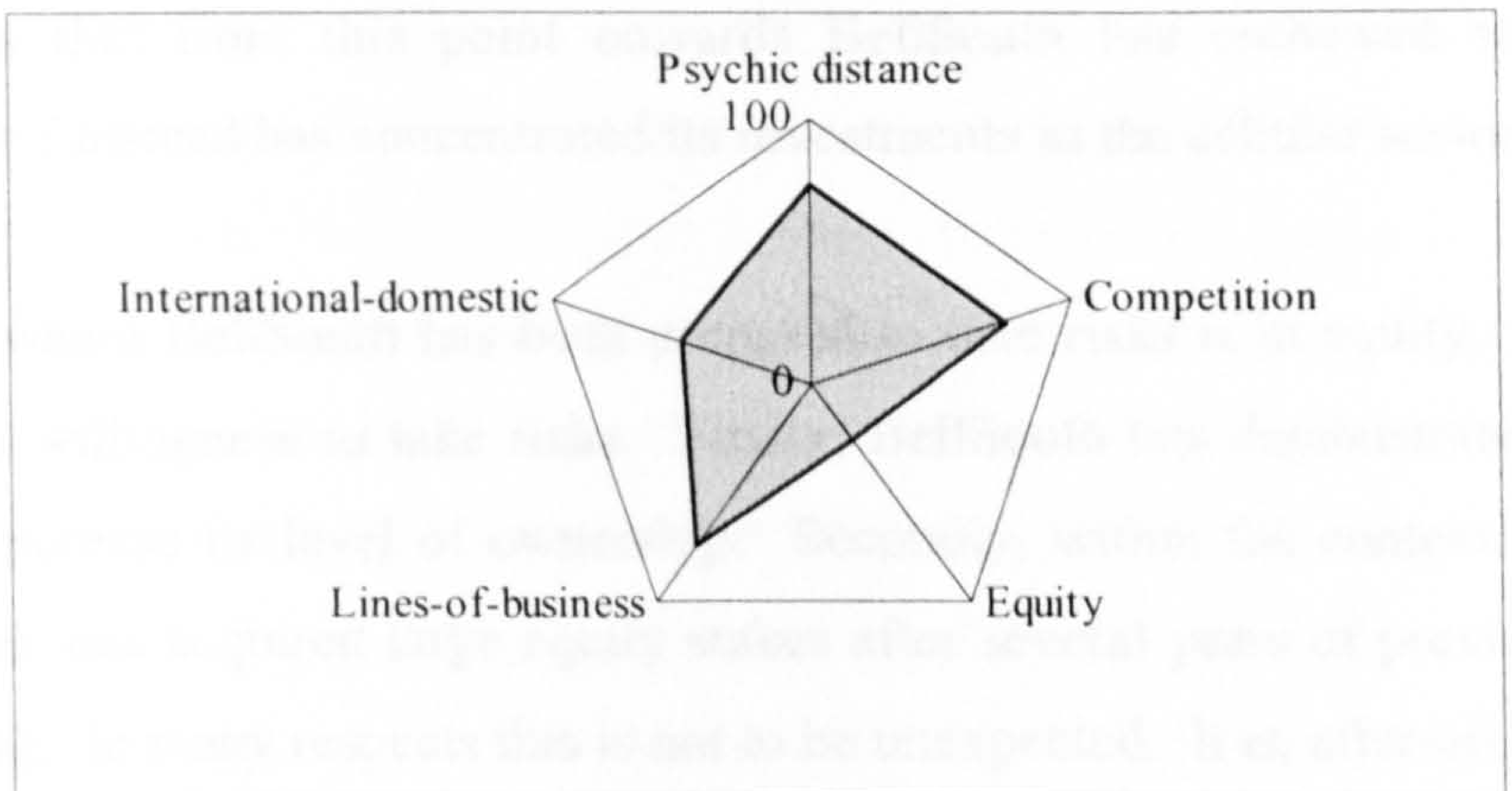


In contrast to Ameritech is the case of Bell Atlantic. On balance it can be concluded that Bell Atlantic has been prepared to accept a higher degree of risk when engaging in international investment activity. (See Figure 9.3 over). Bell Atlantic has shown a willingness to invest in competitive markets and expand outside its traditional service areas and enter new markets. Furthermore, Bell Atlantic has expanded into markets with considerable psychic distance form the United States.

One reason why Bell Atlantic has been prepared to expand aggressively overseas is that the company has avoided acquiring significant equity holdings in its overseas ventures. The largest equity holdings were 'inherited' as part of the acquisition of Nynex. Both Nynex CableComms (later merged into Cable & Wireless Communications) and FLAG involved significant financial investment. In 1998 Bell Atlantic sold its equity in Cable & Wireless

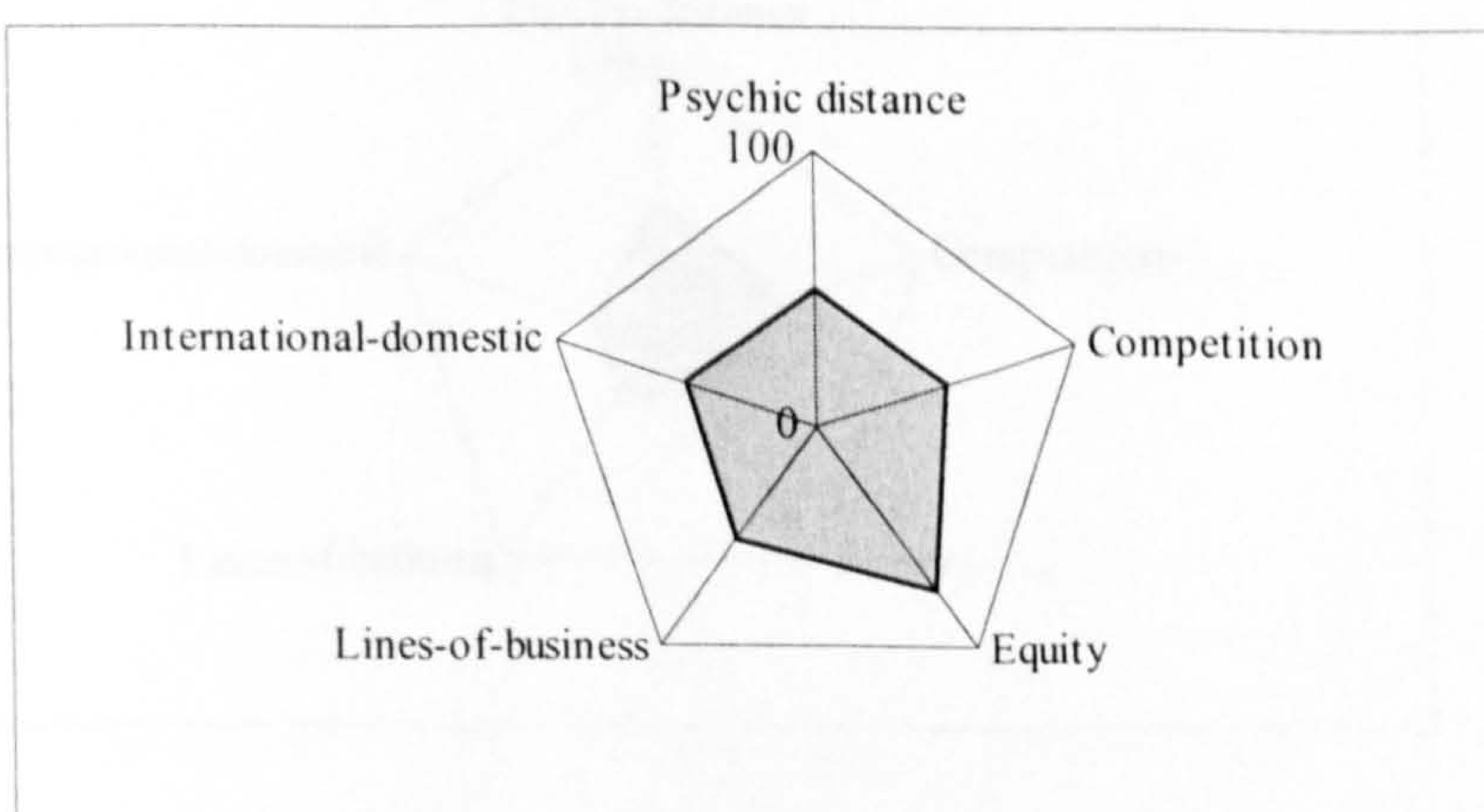
Communications. This is in line with a refocusing of its international portfolio away from wire-line towards cellular investments. There are instances of Bell Atlantic increasing its overseas investment. Bell Atlantic invested additional financial and management resources in order to gain greater control of Iusacell.

Figure 9.3: Bell Atlantic



In many respects BellSouth is the epitome of the cautous internationally active RBOCs. As shown in Figure 9.4 (below) the company has balanced the different dimensions against one another. Whilst BellSouth has expanded into markets that display psychic distance from the United States, these markets are not at the extremes in terms of their difference. Similarly, the markets are neither the least nor most competitive internationally. The competitive nature of the RBOCs in-region markets are, therefore, likely to stand to the company in good steed overseas. BellSouth has not sought to extensively integrate its international and domestic investments, and has not entered new lines-of-business overseas in a significant manner.

Figure 9.4: BellSouth

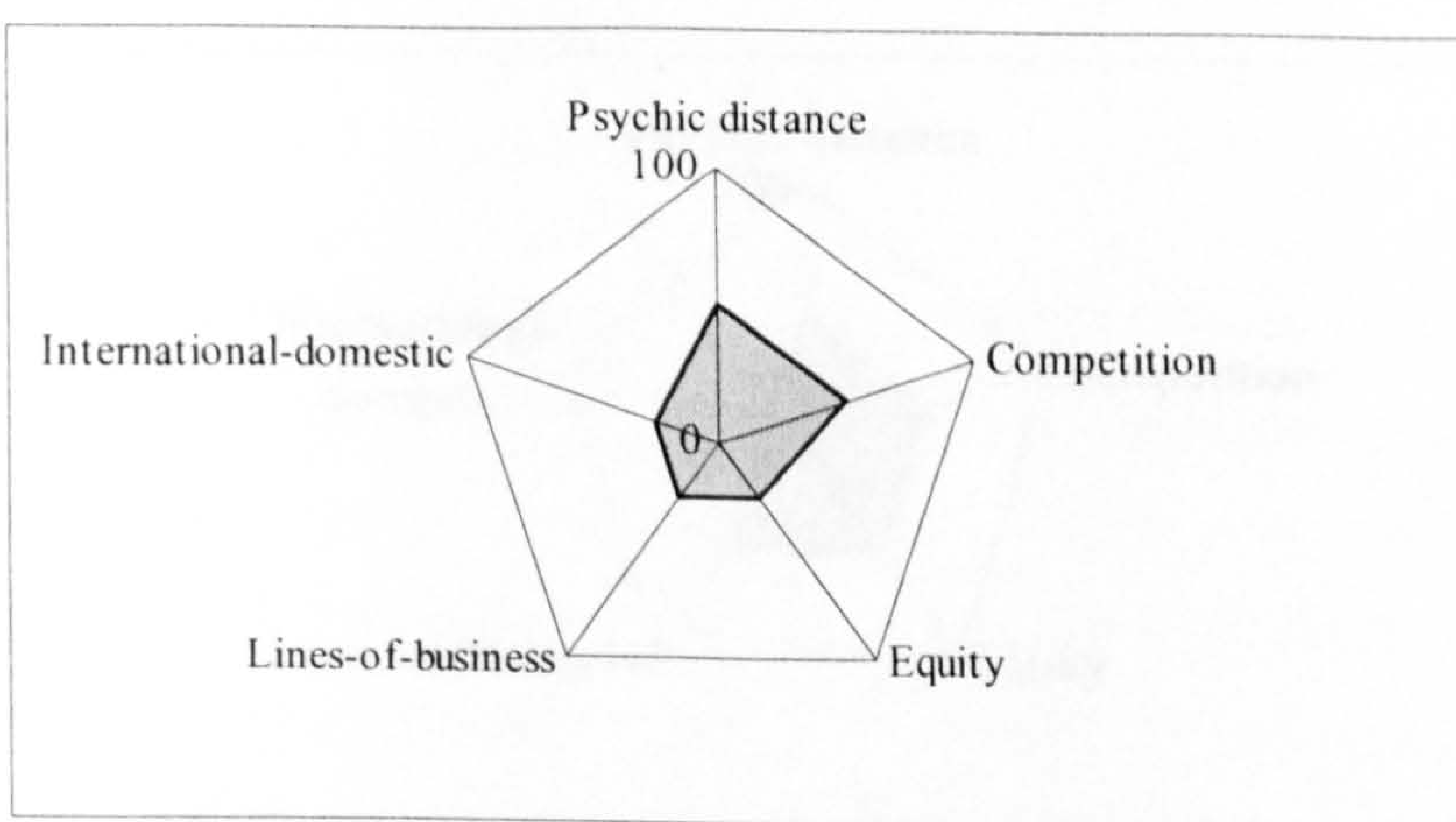


On the few occasions that BellSouth has entered new markets overseas its involvement has been limited. One such involvement was Optus in Australia. Of all the investments made by BellSouth Optus was unique. Not only did the Optus investment involve the privatisation of a state owned company (AUSSAT), but is also brought the RBOCs into head-to-head competition with an ILEC, Telstra. Like other RBOCs involvement in privatisation issues the investment made by BellSouth in Optus was financially rewarding. Perhaps of greater significance is that from this point onwards BellSouth has eschewed wireline (fixed) investments, and instead has concentrated its investments in the cellular sector.

The one area where BellSouth has been prepared to take risks is in equity. There are two aspects to this willingness to take risks. Firstly, BellSouth has demonstrated a propensity over time to increase its level of ownership. Secondly, within the context of this general trend BellSouth has acquired large equity stakes after several years of previously owning a smaller holding. In many respects this is not to be unexpected. It is, after-all, inline with the gradual expansion of international activities that the framework suggested.

It is clear from Figure 9.5 (below) that the international investment activity undertaken by Pacific Telesis is markedly different from that of any other of the RBOCs. The primary reason for this difference is that the international expansion of Pacific Telesis was curtailed in 1994 when the company voluntarily divested its out-region businesses and implemented the 'California First' strategy. In the final analysis this is the ultimate risk aversion strategy. For fear of competition in the domestic market the company retreats to devote all its resources on the competitive challenges that it is facing.

Figure 9.5: Pacific Telesis

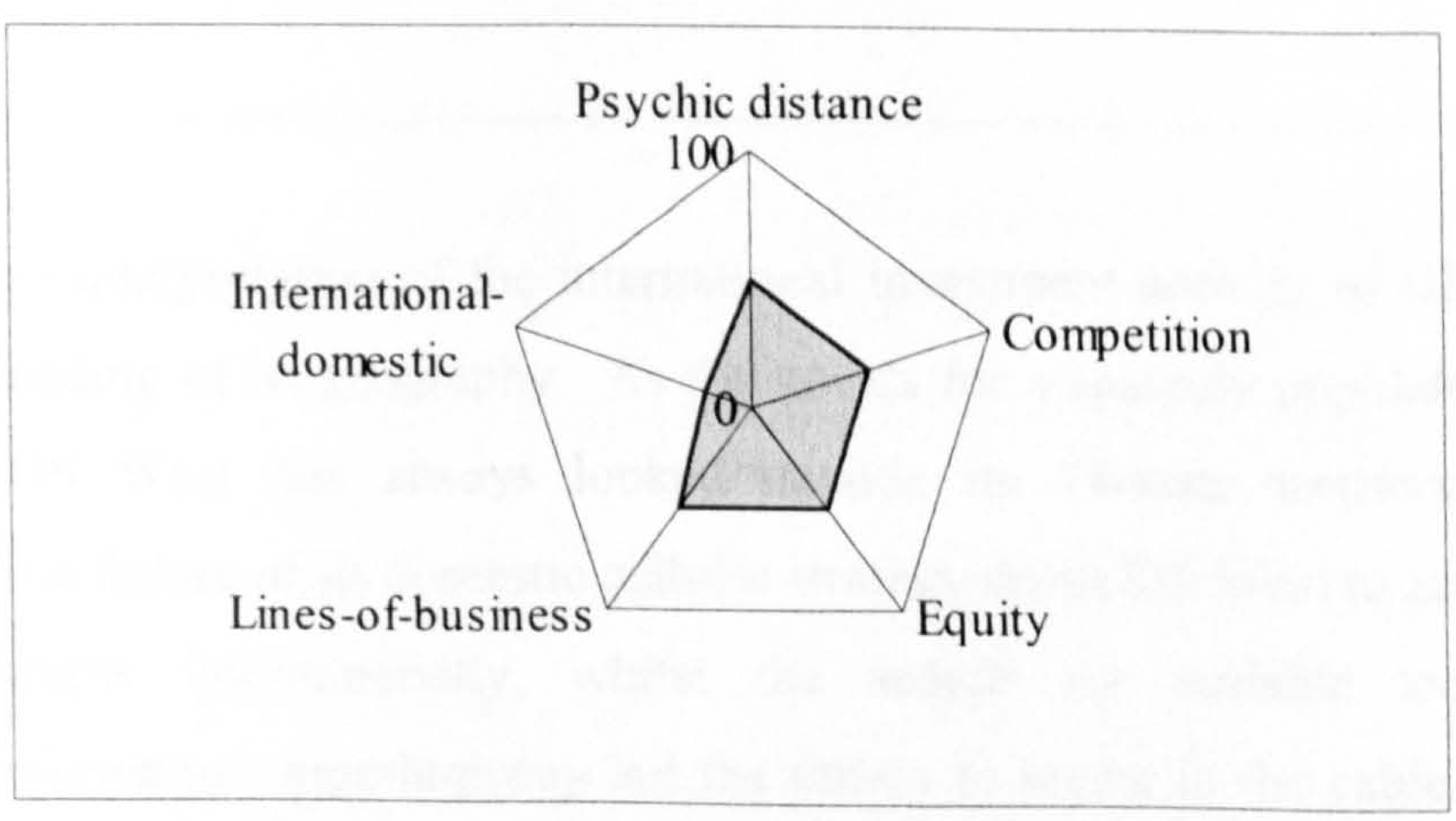


This does not, however, address the issue of what insight can be gained into Pacific Telesis's international strategy. Using Figure 9.5 (above) as a guide Pacific Telesis was prepared to expand into markets with increasing psychic distance from the United States and where competition was prevalent. In doing so Pacific Telesis would take on board the risks that it faced. The other dimensions are, however, indicative of risk aversion.

Comparing Figure 9.4 (above) and Figure 9.6 (below) suggests that BellSouth and SBC Communications display a similar pattern to their respective international investment activity. That is, both are the typical cautious RBOCs with just one exception. In the case of BellSouth it was equity, whilst for SBC it is international-domestic linkage. Moreover, whilst in the case of BellSouth the exception demonstrated a willingness to take on aboard risk, in the case of SBC the opposite is true. With respect to international-domestic linkages SBC is risk averse.

This aside, what else can be said about SBC? Figure 9.6 (below) indicates that SBC has a propensity to invest in those markets that have made some progress in the introduction of competition and liberalisation but are neither the forerunner nor laggard in this area. Similarly the line-of-business, equity as well as psychic distance indicators suggest a company that is cautiously expanding overseas. The cautiousness is, of course, indicative of a risk adverse company. The principal difference between the risk aversion shown arising from international – domestic linkages and that from the other dimensions of internationalisation is that SBC is markedly more risk averse in the case of the former than the latter.

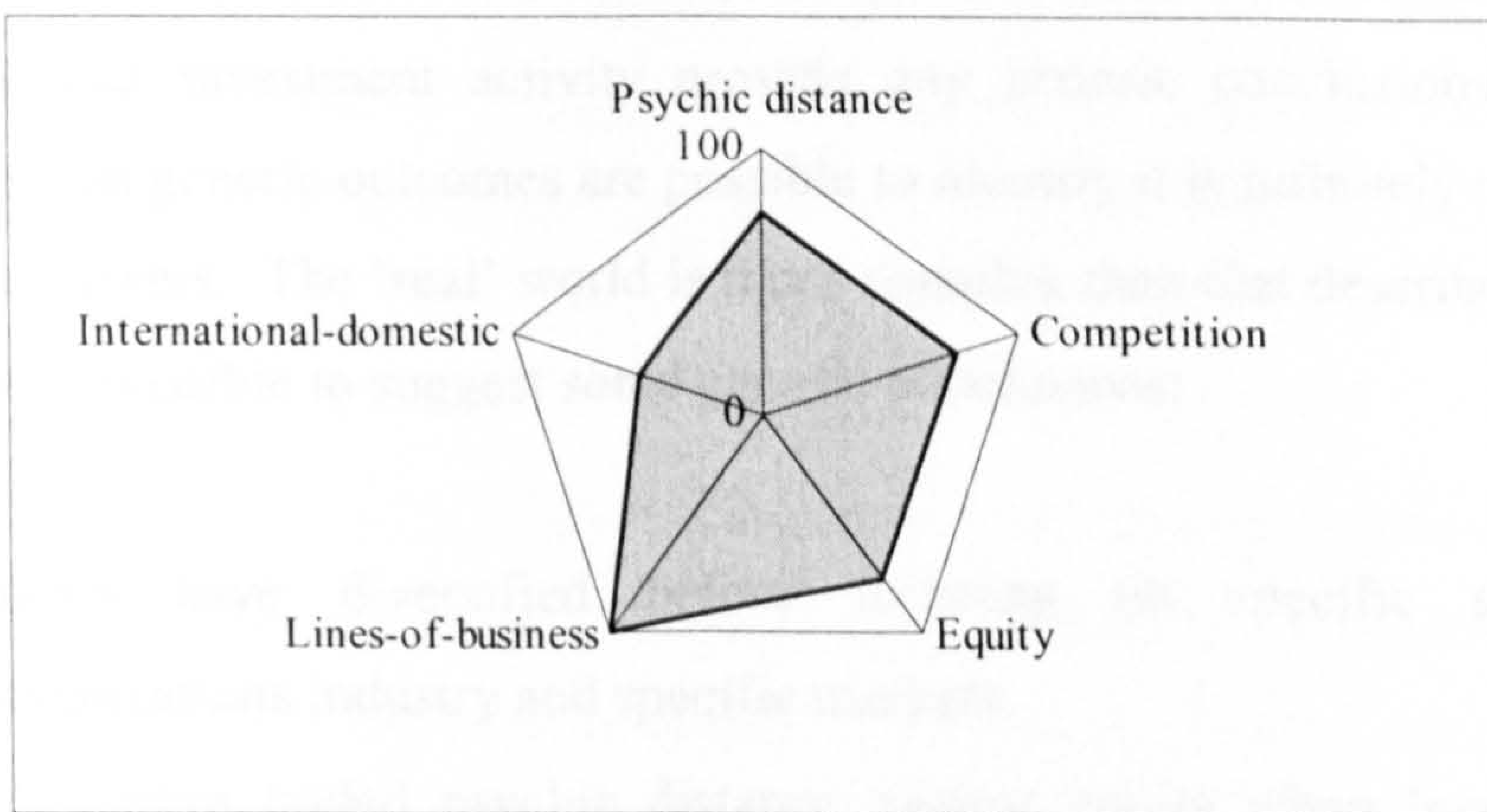
Figure 9.6: SBC Communications



The failures within SBC's international portfolio have arisen when the RBOCs has strayed outside its cautious strategy. The entry into the UK cable-TV market through SBC CableComms involved a different line-of-business, as well as large equity and capital investment. SBC reduced its equity through selling shares to an existing cable operator and eventually exited the market altogether. All things considered SBC has adopted a risk aversion policy towards its international expansion. In this respect the international strategy of SBC mirrors that domestically.

It is easy to depict US West as an aggressive company internationally. As illustrated in Figure 9.7 (below) US West has entered markets that are competitive, show a large psychic distance from the United States and acquired large equity stakes in those investments that it has made. Perhaps most strikingly of all, US West has invested a large proportion of its entire overseas investment in the cable-TV market. The cable-TV industry is, of course, a non-traditional RBOCs line-of-business. As such the international investments undertaken would take US West into new operational areas. Consequently, the international investment activity can easily be described as not being risk averse.

Figure 9.7: US West Inc.



A more reflective interpretation of the international investment activity of US West stems from an understanding of its geography. As the RBOCs for a sparsely populated part of the United States US West has always looked outside its 14-state territory for growth opportunities. The failure of its domestic cellular strategy drove US West to actively expand this line-of-business internationally, whilst the search for suitable technology for convergence / information superhighway led the RBOCs to invest in the cable-TV industry. These features were brought together in the RBOCs' entrance into the cable-TV industry overseas.

US West sought to exploit differences in national regulatory regimes to gain a strategic advantage domestically. The RBOCs developed an overseas cable-TV line-of-business prior to entering this market within the United States. The RBOCs then sought to replicate the 'UK strategic model' in the domestic cable-TV marketplace, though United States regulation prohibited this from happening in-region. As a result US West was effectively bifurcated into a predominantly BOCs focused in-region company on the one hand, and an increasingly cable-TV orientated company on the other. Due to these two sides of US West having different requirements it was inevitable that tensions would arise, and the tension that did arise between the in-region and out-region lines-of-business ultimately led to the separation of US West Media Group from US West Communication Group. Hence, it was not a desire to avoid the risks associated with its out-region businesses that drove the two sides apart, but the failure to integrate the two.

9.6 THEORETICAL CONTRIBUTIONS OF THE THESIS.

Although it can be concluded from the literature review that generic theories / observations are at best problematic, and at worst flawed, can the framework and resulting analysis into RBOCs international investment activity provide any generic conclusions? The RBOCs illustrate that whilst generic outcomes are possible to identify it is infinitely more difficult to identify generic drivers. The 'real' world is more complex than that described theoretically. Nevertheless, it is possible to suggest some generic conclusions:

- The RBOCs have diversified before focusing on specific sectors of the telecommunications industry and specific markets.
- The RBOCs have traded psychic distance against equity when investing overseas. Larger equity positions are taken in those host markets that are closer in psychic distance to the United States than those further away. Conversely, smaller equity positions are taken in investments located in host markets with large psychic distances from the United States.
- The extent to which the international and domestic investment strategies have been interlinked is hard to pinpoint with any precision. Although some regulatory gap investments have been made the primary link appears to be financial.

- The success of a single investment encourages subsequent overseas investment activity.
- The RBOCs are not MNEs as traditionally understood, as the principal entry mode is collaborative in nature.

The latter point requires elaboration. Although as a group the RBOCs have used wholly owned subsidiaries as a means of market entry, their use has in general been relegated to those lines-of-business that are peripheral to the main operational activities of the RBOCs. The RBOCs have made the vast majority of their overseas investments in collaboration with partners, from other countries as well as the host country. The RBOCs have used collaborative ventures to offset the cost of expansion, to play down nationalistic fears, to gain access to skills and competencies that they lack and to overcome local market asymmetries. These motives for collaboration are as true for the large key investments as for the lesser ancillary investments that have been made. Key investments are differentiated from their ancillary counterparts by the amount of equity held and the management control that the RBOCs has. Importantly, the RBOCs have not sought to offset risk and uncertainty through outright ownership of their foreign ventures (internalisation). Instead they have refined the collaborative process. Key investments are differentiated from their ancillary counterpart by the amount of equity held and the management control that the RBOCs has. Thus, the RBOCs as MNEs can be characterised by collaboration, a web of relationships and the differentiation of investments into key and ancillary based on the amount of control exercised.

The theoretical contribution of this thesis is, however, more than highlighting that the RBOCs demonstrate what we understand by MNEs needs to be rethought. Through the development of a theoretical framework for investigating international investment activity in emerging industries such as telecommunications, this thesis has added to the existing body of knowledge in several areas. Firstly, the theoretical framework adopted allowed for a multi-dimensional analysis of international investment activity to be undertaken. Like the other theoretical perspectives outlined in Chapter Two, the framework acknowledges the influence of information asymmetries on internationalisation, but then goes further by showing the complexity of the influence that information asymmetries have on internationalisation. Internationalisation is the end product of the interaction between a series of variables: psychic distance, the international-domestic interplay, competition, equity and lines-of-business.

Arising out of showing that a variety of factors influence internationalisation is the second contribution of the thesis, that is, the highlighting of the role that geography plays within the internationalisation process. Often, the role of geography as a shaper of internationalisation is overlooked, casually mentioned or subsumed within other factors. Here, the role of geography has been explicitly mentioned because of its significant influence on internationalisation. In the course of the analysis two ways in which the influence of geography on internationalisation can be understood have been proposed: psychic distance and competition. Although the analysis using psychic distance draws on existing literature this is extended both chronologically and by the notion of asset specificity. Through examining the influence of competition on internationalisation the thesis developed an index of market competitiveness that drew together several variables. Not only is this index more sophisticated than that found elsewhere in the literature, but it also enabled the relationship between competition and geography to be mapped out more solidly than has hitherto been the case.

The next area in which the thesis has contributed is the direct result of its focus on internationalisation within an emerging industry. Internationalisation in emerging industries, which are commonly service industries, is different from that in manufacturing industries which existing theories of internationalisation draw on for empirical support. In emerging industries companies lack international experience, and are in sectors of the economy that are viewed as 'strategic' by governments and subject, as a result, to significant regulatory burdens. Consequently, theories derived from the manufacturing sector cannot be transferred to emerging industries without first taking into account the specific circumstances of the industry in question. The theoretical framework articulated in this thesis takes into account the unique characteristics of the telecommunications industry, and demonstrates their influence on internationalisation.

In particular, the international-domestic interplay dimension allowed for the identification of regulatory gaps within the telecommunications industry that, to a lesser or greater degree, influence international investment activity. Not only did this link international investment activity to the wider socio-economic environment in which it takes place, but it also demonstrated that international and domestic investment strategies are intimately linked. The linkage occurs in terms of the flow of resources, a flow that is financial, experiential and knowledge based in nature. The analysis has demonstrated the significance of this flow of resources, and the impact that it has on internationalisation. This flow draws attention to the fact that the relationship between parent and subsidiary companies, and between subsidiaries, is more complex than other theoretical perspectives suggest. Resources flow from parent to subsidiary, from subsidiary to parent and from subsidiary to subsidiary. It is not the case that the flow of resources is from the parent overseas, and that the parent company is the sole depository of resources within the company.

The complex flow of resources within an internationalising company leads onto another contribution of the thesis, namely, the vivid demonstration that radical international, which is advocated by many existing theoretical perspectives is inappropriate when endeavouring to understand international investment activity. Radical internationalisation is effectively an 'all or nothing' view of internationalisation. However, companies are risk adverse, especially in emerging industries like telecommunications as they lack international experience on which they can draw for guidance. This is recognised by the theoretical framework articulated. Moreover, the framework also recognises that over time the international experience of internationalising companies will change, and that this has repercussions for the internationalisation that occurs. On some occasions enhanced international experience will result in further resource commitment, whilst on others the company may withdraw from the market altogether.

Although the theoretical contributions of this thesis occur in a number of areas, the empirical evidence that has been used in support comes from just one emerging industry, that is, from the telecommunications industry. As a consequence, to determine the validity of the theoretical contributions it is necessary for the analysis to be repeated in other emerging industries such as financial services. If the analysis of internationalisation in the financial services sector confirms the validity of the theoretical framework greater weight is given to the theoretical contribution that this thesis has made. Alternatively, if the analysis refutes the theoretical framework it raises the question as to why internationalisation in the financial services and telecommunications industries are different. Moreover, it would also raise the question as to the worth of generic internationalisation theories. Other areas of future research are detailed in the following section.

9.7 FUTURE RESEARCH AREAS.

Over the course of researching the international investment activity of the RBOCs several questions have arisen that are outside the scope of the work presently undertaken, but would if investigated build on in some way the research conducted. Such questions are concerned with the nature of internationalisation and the impact of new media, electronic in nature, on the traditional forms of international expansion and market presence. Technological advances are challenging traditional business models that have guided investment decisions until now. The questions also address theoretical aspects as well, for instance, how general is the theoretical framework.

9.7.1 Internet and electronic commerce.

Common to all of the international investments of the RBOCs is their physical presence in the overseas market. Integral to FDI, MNEs and international investment is a phsyical investment in the host market. It is only through such investment can customers within a local market be served by inward investment. In contrast the Internet in general, and electronic commerce in particular, allows foreign markets to be accessed without resorting to a physical presence. The geographic extension of markets is at the heart of much of the debate concerning the promise of electronic commerce. As such the rationale for international investment activity is undermined, as market access can be acheived without the necessity of a direct physical presence in the marketplace.

The impact that electronic commerce will have on international investment activity by companies such as the RBOCs has not been addressed. It is possible to imagine a scenario where telecommunications companies compete on the global stage, not through a network of infrastructure investments but through a series of electronic presences located in cyberspace. The 'traditional' paradigm saw Ameritech gain a European presence through investing in a series of PTOs across Europe, but under the 'Internet' paradigm the company would have established an electronic presence in each of these markets.

Another plausible scenario would see the RBOCs combine traditional and electronic investment activity. Several combinations of these two distinct types of investment activity can be envisaged. The RBOCs, or for that matter any would be telecommunications MNEs, could invest in the traditional manner wherever they perceive the market to be of long term strategic significance. In contrast, non-strategic or ancillary markets will receive the much cheaper electronic investment activity. Alternatively, electronic investments could occur in all of the targetted markets. These would, however, by accompanied by smaller sales orientated investments that enabled the inward investor to overcome the psychic distance present. In addition to tailoring the electronic services to the market, effecting a globalisation-localisation strategic duality, the local investment would provide billing, advertising and other such services.

9.7.2 The complexity of psychic distance.

Psychic distance is a quick way of expressing that a variety of factors cause friction within the international economy. Friction arises due to countless reasons, for instance, differences in language, geography, the influence of the past, culture, legal systems and so forth. Moreover, psychic distance is often equated with, and represented by geographical distance. However, geography is an imperfect proxy for psychic distance because it obscures how the various elements that define the psychic distance between countries interact with one another.

It was shown in Chapter Seven that although countries may display quite similar psychic distance on an aggregate level there were marked differences when it came to the liberalisation of telecommunications markets. These differences arose for a variety of reasons, for example, the political landscape, yet were lost when aggregated into a proxy measure. Therefore, a proxy is needed that is able to highlight the subtleties inherent to the concept.

The advent of the Internet raises the question as to whether there is a role for psychic distance in cyberspace? Will the Internet annihilate psychic distance in all its different guises as many contend, or will it remain a potent force in shaping economic activity? Although many commentators have seized upon the notion that the Internet will create a frictionless market, free from the effects of psychic distance in all its forms, this remains a distant possibility. Friction, however it may be expressed, is necessary if companies are to make a profit. Thus, within cyberspace it is highly likely that psychic distance will continue to play a role. Having said this, the Internet is also levelling some of the disparities that led to friction in the international economy. As a consequence, the exact nature of psychic distance in cyberspace remains uncertain and requires clarification.

9.8 Old Kent Road for Mayfair...

It is clearly the case that the telecommunications industry is undergoing a period of change, prompting instability and uncertainty among the industry's many actors. This change is epitomised by the creation of the RBOCs and their subsequent investment activities at home and abroad as well as the merger of AirTouch and Vodafone that this thesis began with. The history of the RBOCs vividly demonstrates the pervasive nature of change, showing how the industrial organisation of the industry, and its regulatory framework, have not remained constant over the years. This section draws together themes from the thesis and speculates on how the constantly changing nature of the telecommunications industry will affect the RBOCs.

How can we understand change within the telecommunications industry, and what are its implications? A frequent analogy that is made to describe developments within the telecommunications industry is with the game of Monopoly. The story goes as follows: all the players have been round the board buying properties as they land on them and are about to start the next round. The next round sees the players begin to restructure their opportunistically assembled portfolio of properties into something more purposeful. That is, the players act to acquire all three properties within each colour group so that they can start to develop them with hotels. This is translated into telecommunications in the following way: properties become licenses and colours become related subsidiaries. Assembling groups of related subsidiaries produces holistic benefits, that is, the value of the whole is greater than the sum of the parts. The pan-Latin American cellular network of BellSouth is a prime example of this in practice.

The restructuring of their overseas subsidiaries by the RBOCs suggests that they are at this stage. They have exited certain markets and entered new one as the opportunity arose. In doing so, the RBOCs have begun to re-orientate their international investment portfolios away from non-telecommunications and low growth telecommunications markets. The result is that they are, as a group, more focused on the faster growing parts of the telecommunications markets, such as cellular, than has hitherto been the case. However, within this reorganisation the RBOCs have reacted to two quite different stimuli. The first of these is the move from monopoly to liberalised markets. This opened up markets to investment opportunities, thereby encouraging a shift in their investment portfolio. The RBOCs exited the less attractive markets and entered those that are more attractive.

The second group of stimuli are developments within structurally significant markets. The opening up of hitherto closed markets, or technological advances, in these countries has repercussions throughout the entire telecommunications industry. In the former the company reacts to developments as they occur and adjusts it strategy accordingly. Often the extent of this adjustment is marginal. In contrast, the latter results in the company fundamentally rethinking its strategy. Referring back to the monopoly analogy, the former is when a player reacts to developments with little or no forethought whilst the latter is reaction that occurs after the first player is able to place houses / hotels on the properties that they own.

What does the monopoly analogy tell us about the telecommunications industry? It is clearly the case that the changes that have occurred have impacted on the structure of markets. The RBOCs are a prime example of this impact in practice. The RBOCs have continually sought to reinvent themselves as the telecommunications industry changed. Given that this reinvention has been ongoing throughout the period since their divestiture in 1984, it is highly likely that it will continue into the future. The RBOCs as a group diversified in the aftermath of divestiture, but as the telecommunications industry changed they shed many of these investments and focused their activities on a declining number of lines-of-business centred around telecommunications. Both Pacific Telesis and US West represent the most dramatic form of reinvention that has taken place among the RBOCs. These two RBOCs reinvented themselves through divesting large parts of the company to concentrate on their in-region market.

Whilst some of the RBOCs have divested companies, others have acquired companies. SBC along with Bell Atlantic have acquired Bell and non-Bell companies alike, expanding both their number of customers and geographical coverage. In doing so, they have encouraged the consolidation of the industry. Although consolidation is likely to continue in the future, and the RBOCs will play a significant part in this consolidation, they are more likely to be reacting to developments elsewhere than proactively setting the agenda. In particular, the RBOCs will be reacting to an agenda determined by a series of internal tensions. The present state of affairs, with the RBOCs prohibited from entering the long-distance market, and further full-blown mergers between their number remote, is likely to increase the tension between their faster and slower growing lines-of-business. That is, between the cellular and data lines-of-business on the one hand and the BOCs on the other. Shareholder value is increasingly attributed to the former two lines-of-business, whilst revenues and the traditional source of profits are still largely located in the realm of the BOCs. Finally, the regulatory framework in place is such that greater operational freedom is afforded to cellular and data lines-of-business than the BOCs.

All these differences lead to tensions within the RBOCs; between those parts of the company that generate the revenues, and are their traditional core lines-of-business, and those which provide less revenue but which are viewed as value creators and increasingly central to success within the industry. Taken to their logical conclusion these tensions will lead to the break-up of one or more of the remaining RBOCs. This break-up could follow the example of Pacific Telesis and US West who voluntarily divested lines-of-business in order to pursue other investment opportunities. Future divestments could fragment the RBOCs along either the lines of growth rates or the degree of regulatory freedom. This would then allow each of the constituent parts of the RBOCs to pursue strategies that are more appropriate for its particular set of circumstances. Alternatively, the divestment option may be imposed on the RBOCs. In this case, the divestment option is in reaction to the dissatisfaction voiced by interested parties such as shareholders, regulators and other telecommunications companies. The ultimate aim of divestment is to promote shareholder value through overcoming regulatory and competitor concerns as to the anti-competitive nature of the RBOCs.

Of the remaining RBOCs the most likely to undergo some form of restructuring is BellSouth. Unlike the other RBOCs BellSouth is geographically concentrated on its eight state region, having largely ignored out-region expansion. The initial success of this strategy has led to, firstly, its continuation despite the availability of investment opportunities elsewhere in the United States and secondly, the increasing level of competition in-region. Moreover, investor sentiment has shifted to favour national instead of regional telecommunications companies. To overcome its perceived disadvantage BellSouth could implement one of three strategies. On the one hand BellSouth could follow Pacific Telesis and US West and divest its non-BOCs and directory publishing lines-of-business. This option would, however, weaken the resulting BOCs-centred company because it would lack any presence in the cellular market. The divestments of both Pacific Telesis and US West were partly driven by the desire to enter the PCS cellular market.

Alternatively, BellSouth could reverse its geographical concentration through M&A activity. BellSouth could merge with, or be acquired by, another telecommunications company whose operations are mainly outside of its eight state region. All things considered, a more likely scenario is the partial divestment of the cellular and data lines-of-business and the use of the resulting stock market listing to effect a merger with another telecommunications company. This other telecommunications company will mainly operate outside of BellSouth's in-region market, and will be either a new generation IXC such as Williams or a cellular operator. Companies in either of these areas would simultaneously diversify BellSouth's geographical scope and revenues, prompting in the process a re-rating of the company by investors.

Intimately linked to change within the telecommunications industry is the role of government within the industry. Talking Heads sang, "Don't worry about the government." When the RBOCs were divested from AT&T in 1984 they were prohibited from entering other markets, as it was perceived that they would act like their erstwhile parent, that is, anti-competitively. However, through challenging the regulatory framework under which they have laboured the RBOCs have been allowed to enter other lines-of-business. It would, therefore, appear that the song is appropriate for the domestic telecommunications landscape. This is not the case, however. The 1996 Telecommunications Act provided for the possibility of RBOCs entry into the long-distance market once fourteen competition enhancing conditions have been satisfied. The RBOCs must satisfy regulators at both the state and federal levels that they should be allowed to enter the long-distance market. Consequently, regulators will, for the foreseeable future, continue to play a fundamental role within the industry.

Whilst the role of regulators within the industry has been assured by the 1996 Telecommunications Act, tensions have arose between state and federal agencies as to who has authority in the decision making process. Both parties have claimed jurisdiction over the RBOCs and the implementation of the Act, leading to uncertainty within the industry. Although a series of court rulings have sought to clarify matters these have not been conclusive. Moreover, a series of Supreme Court rulings has initiated a debate on the nature of the relationship between the state and federal tiers of government within the United States. Therefore, the regulatory landscape in which the RBOCs operate will continue to be subject to uncertainty. This will in turn complicate the negotiation of the RBOCs entry into the long-distance market; not only will it be unclear who has the ultimate regulatory responsibility but the negotiations may be subsumed within the much broader and contentious debate as to the nature of state and federal relationships. Regardless, the RBOCs' entry into the long-distance market will be delayed.

Another implication of regulatory uncertainty is that whilst the balance between state and federal levels is being determined the industry is technologically progressing, with the consequence that regulation is based on a prior understanding of technological possibilities, and not on the current state of technological possibilities. Whilst this is not untypical in the development of the telecommunications industry within America, it is now more of a problem as the pace of technological change has increased. As the gap continues to widen the RBOCs will be placed at a competitive disadvantage; technological advances will allow new entrants to challenge their businesses whilst they remain obligated to provide universal service and are regulated on the basis of being entrenched incumbents.

Internationally, the widespread acceptance of market liberalisation and competition ensure that markets are increasingly displaying similar characteristics. International efforts, such as the 1997 WTO Basic Agreement on Telecommunications and the pan-EU liberalisation at the start of 1998, have encouraged this trend. This will decrease the regulatory gaps between countries, thereby reducing this as a motive for RBOCs internationalisation. Other reasons for internationalisation, such as building global networks, opportunistically exploiting market opportunities, existing skills and competencies will come to the fore. It is anticipated that future RBOCs internationalisation will be driven by their desire to build regional, sometimes global, networks of interrelated subsidiaries. On a smaller geographical scale, Ameritech has assembled a string of investments in European PTOs. The RBOCs will strive in the future to replicate the continental reach of BellSouth in Latin America. Importantly, future efforts to regional networks of investments will be costly affairs, not least because telecommunications company valuations have appreciated significantly in recent years.

The desire to build regional networks highlights the importance of geography within the telecommunications industry. Although Francis Cairncross wrote that advances within telecommunications are bringing about the 'death of distance' this does not mean that the influence of geography on the industry will decline. If anything the death of distance heightens the importance of geography within the telecommunications industry. Control of key markets provides companies with competitive advantages. Key markets are either rapidly growing, the last mile to the customer or those which allow unique products to be offered. Pacific Telesis implemented 'California First' in order to retain control of key markets. More recently, SBC has acquired a series of wireline companies across America. In doing so SBC is endeavouring to gain control of the last mile of the network. SBC will then use this control to sell other services to its captive customer base.

Geography is Janus-faced, however. With BOCs providing services in fourteen sparsely populated Mountain states US West lacked a large urban area to underpin its revenue, profits or to act as an innovative market. This encouraged the RBOCs to expand out-region where it encountered entrenched incumbents and substantially different market conditions. Furthermore, the history of Pacific Telesis demonstrates that large urban areas attract new entrants, giving rise to competition and all that this entails in terms of cost-price pressures. The geography of markets will increase the pressures faced by the RBOCs and may lead to restructuring along the lines of Pacific Telesis.

To sum up: as the RBOCs react to future changes within the telecommunications industry they will divest lines-of-business creating new companies. Some of these companies will be closely allied with their erstwhile parent, whilst others will seek to chart an independent course from the onset. Regardless, the competitive pressures that they face will increase as more players enter the industry and technological advances allow for new service possibilities. Regulation will lag behind technological advances placing the RBOCs at a disadvantage and causing regulatory uncertainty and confusion. Internationally, the RBOCs will continue to trade their investments with the intention of building networks of inter-related companies. The model that the RBOCs will seek to emulate is that of BellSouth's Latin American portfolio of cellular networks. However, whilst the RBOCs as a group will continue to be successful internationally it is likely that domestic pressures will result in one or more of their number divesting its out-region and international investments.

APPENDIX A:

THE INTERNATIONAL INVESTMENTS OF THE RBOCs

A.1 Ameritech.

Year = 1984		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Cantel	Canada	19.90	Joint-venture	Cellular	Sold in 1988

Year = 1990		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
TCNZ	NZ	24.50	Joint-venture / privatisation	PTO	Sold in 1998.
Wer liefert was?	Germany	100	Wholly owned acquisition	Directory	Retained investment.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Sky Network Television Ltd	NZ	12.50	Joint-venture	TV	Sold during 1997.
Polska Telefonia Komorkowa	Poland	24.50	Joint-venture / start-up	Cellular	Sold during 1996.

Year = 1993		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
NetCom GSM	Norway	19.70	Joint-venture	Cellular	Retained investment.
MagyarCom	Hungary	33.50	Joint-venture / privatisation	PTO	Retained investment.

Year = 1995		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
N/A	China	N/A	Joint-venture / start-up	Cellular/fixed	Withdrawal in 1995.

Year = 1996		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Belgacom S.A.	Belgium	17.50	Joint-venture / privatisation	PTO	Retained investment.

Year = 1997		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Cross-Global Alarms	Canada	100.00	Acquisition / wholly owned	Alarms	Retained investment.
TeleDanmark	Denmark	42.00	Equity acquisition	PTO	Retained investment.

A.2 Bell Atlantic.

Year = 1987		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Business Intelligence Services	UK	100.00	Wholly owned acquisition	Other	Sold during 1993.

Year = 1988		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
from BCE Inc	UK	100.00	Wholly owned acquisition	Other	Retained
from BCE Inc	France	100.00	Wholly owned acquisition	Other	Retained
from BCE Inc	Swiss	100.00	Wholly owned acquisition	Other	Retained
from BCE Inc	Italy	100.00	Wholly owned acquisition	Other	Retained
from BCE Inc	FDR	100.00	Wholly owned acquisition	Other	Retained
from BCE Inc	Austria	100.00	Wholly owned acquisition	Other	Retained
CAP International	UK	100	Wholly owned acquisition	Other	Sold during 1993[1]

Note: 1. Sold as part of BIS Group.

Year = 1989		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Gibraltar-Nynex Communi-cations	Gibraltar	50.00	Joint-venture / start-up	PTO	Retained investment.
CONNECT Gmbh	Germany	N/A	Wholly owned start-up	Other	Retained investment.

Year = 1990		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
TCNZ	NZ	24.50	Joint-venture / privatisation	PTO	Sold during 1998.
NYNEX CableComms	UK	100.00	Wholly owned start-up	Cable	Sold during 1997.[1]

Note: 1. An initial public offering reduced Bell Atlantic's shareholding, and in 1997 the company was merged to form Cable & Wireless Communications.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Sky Entertainment	NZ	12.50	Joint-venture	Other	Sold during 1997.
Sky Network Television Ltd	NZ	12.50	Joint-venture	TV	Sold during 1997.
Eurotel Bratislava	Slovak	24.50	Joint-venture / start-up	Cellular	Retained investment.
Eurotel Praha	Czech	24.50	Joint-venture / start-up	Cellular	Retained investment.
Telecom PhoneWatch Ltd	Ire	N/A	Joint-venture / start-up	Alarms	Insufficient information, therefore retained.
TU-KA Cellular Kansai	Japan	N/A	Joint-venture / start-up	Cellular	Retained investment.
TU-KA Cellular Kanto	Japan	N/A	Joint-venture / start-up	Cellular	Retained investment.
TU-KA Cellular Tokyo Inc	Japan	N/A	Joint-venture	Cellular	Retained investment.
Sodalia	Italy	49	Joint-venture / start-up	Other	Retained investment.

Year = 1992		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Pacific Star Communicatio ns	Australia	50.00	Joint-venture	Other	Retained until 1998 when it is planned to be liquidated.
TelecomAsia	Thailand	18.70	Joint-venture	PTO	Retained investment.
FLAG	Bermuda	39.00	Joint-venture / start-up	Other	Retained investment.
TU-KA Cellular Tokai	Japan	N/A	Joint-venture / start-up	Cellular	Retained investment.

Year = 1993		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Grupo Iusacell	Mexico	41.9	Joint-venture	Cellular	Retained investment.
STET Hellas	Greece	20	Joint-venture	Cellular	Retained investment.
NYNEX Info Resources	Czech & Slovak Republics	100	Wholly owned start-up	Directory	Retained investment.

Year = 1994		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Omintel Pronto	Italy	19.70	Joint venture / start-up	Cellular	Retained investment.
Orient Telecom & Technology Holdings	Thailand	23.00	Joint-venture	Cable & cellular	Retained investment.

Year = 1995		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Citra Sari MaKumar	Indonesia	23.00	Joint-venture	Cellular	Retained investment.
BayanTel	Philippines	15.00	Joint-venture / start-up	Cellular	Retained investment.
Nynex-Reliance Cellular	India	50.00	Joint-venture / start-up	Cellular	Retained investment.
Videostrada	Italy	49	Joint-venture / start-up	Cable	Retained investment, though has not acquired any operations (as of Jan 1998).
Infostrada	Italy	33	Joint-venture / start-up	PTO	Reduced equity position, eventually sold in 1997

Year = 1996		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
UCOM	Thai	1.50	Joint-venture	Cellular	Insufficient information, therefore retained.

Year = 1997		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Cable & Wireless Communications	UK	18.50	Joint-venture	Cable	Retained investment.

A.3 BellSouth Corporation.

Year = 1987		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Shanghai Centre	China	N/A	Joint-venture / facilities management	Other	Retained investment.
Link Telecommunications	Australia	100.00	Wholly owned acquisition	Paging	Sold during 1995.
BellSouth Mobile Data Australia Pty Ltd	Australia	100.00	Wholly owned start-up	Data	Sold during 1995.

Year = 1988		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
TCIL BellSouth Ltd	India	40.00	Joint-venture / start-up	Other	Retained investment.
Instapage Pty Ltd	Australia	100	Wholly owned acquisition	Paging	Sold during 1995.
Page Alert Pty Ltd	Australia	100	Wholly owned acquisition	Paging	Sold during 1995.

Year = 1989		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Air Call Communications	UK	N/A	Equity acquisition	Cellular	Retained investment.
CRM	Argentina	60.00	Joint-venture	Cellular	Retained investment.

Year = 1990		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Tele 2000	Peru	58.70	Joint-venture	Cellular	Retained investment.
Comcel	Mexico	36.40	Joint-venture / start-up	Cellular	Sold during 1994.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
BellSouth Chile	Chile	100.00	Acquisition of existing co	Cellular	Retained investment.
Abitar	Uruguay	35.00	Joint-venture	Cellular	Retained investment.
Telcel	Venezuela	53.30	Joint-venture	Cellular	Retained investment.
Optus Communications	Australia	24.50	Joint-venture / start-up	PTO	Sold during 1997.

Year = 1992		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Dansk MobilTelefon I/S	Denmark	29.00	Joint-venture	Cellular	Retained investment.
RAM Mobile Data Ltd	UK	72.50	Joint-venture / start-up	Data	Retained investment.

Year = 1993		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
BellSouth New Zealand	NZ	65.00	Joint-venture	Cellular	Sold during 1998.
Frances Telecom Mobiles Data	France	12.50	Joint-venture	Data	Sold during 1995.
RAM Mobile Data CV	Netherlands	66.00	Joint-venture / start-up	Data	Retained investment.

Year = 1994		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Beijing Ji Tong BellSouth	China	N/A	Joint-venture	Other	Retained investment.
Optus Vision	Australia	46.50	Joint-venture / start-up	Cable	Sold during 1997
Cellcom Israel	Israel	30.80	Joint-venture	Cellular	Retained investment.
E-Plus	Germany	21.40	Joint-venture	Cellular	Retained investment.

Year = 1995		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Gesellschaft fur Datenfunk mbh	Germany	6.00	Joint-venture / start-up	Data	Retained investment.
RAM Mobile Data Belgium SCS	Belgium	80.00	Joint-venture / start-up	Data	Retained investment.
SkyCell	India	24.50	Joint-venture / start-up	Other	Retained investment.

Year = 1996		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
BSC de Panama	Panama	41.50	Joint-venture / start-up	Cellular	Retained investment.

Year = 1997		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
NICACEL	Nicaragua	49.00	Joint-venture	Cellular	Retained investment.
OTECEL	Ecuador	61.00	Joint-venture	Cellular	Retained investment.
BCP	Brazil	N/A	Joint-venture / start-up	Cellular	Retained investment.
BSE	Brazil	N/A	Joint-venture / start-up	Cellular	Retained investment.

A.4 Pacific Telesis Group.

Year = 1985		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Kensington Datacom	UK	100	wholly owned acquisition	Other	Divested in 1994.

Year = 1987		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Pacific Telesis Engineering Ltd	Thailand	100	wholly owned subsidiary	Paging	Divested in 1994.

Year = 1988		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
East London Telecommunic ations	UK	N/A	Joint-venture / start-up	Cable	Sold in 1992.

Year = 1989		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
International Digital Communicatio ns	Japan	10	Joint-venture / start-up	Long distance	Divested in 1994.
Bolton Telecable Ltd	UK	100	Wholly owned acquisition	Cable	Part of PacTel Cable, and thus divested

Year = 1990		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Microtel Communications Ltd	UK	N/A	Joint venture / start-up	Cellular	Divested in 1994.
PerCom Service Ltd	Thailand	49	Joint-venture	Paging	Divested in 1994.
Mannesmann Mobilfunk GmbH	Germany	29.15	Joint-venture / start-up	Cellular	Divested in 1994.
Telecel	Portugal	23	Joint-venture / start-up	Cellular	Divested in 1994.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Telechamada	Portugal	23	joint-venture	Paging	Divested in 1994.
PacTel Cable	UK	100	Wholly owned start-up	Cable	progressive divestment of franchises in 1993

Year = 1992		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Sistelcom-Telemensaje	Spain	17.50	joint-venture	Paging	Divested in 1994.
Central Japan Digital Phone Company	Japan	13	Joint-venture / start-up	Cellular	Divested in 1994.
Kansai Digital Phone Conmpany	Japan	13	Joint-venture / start-up	Cellular	Divested in 1994.
Tokyo Digital Phone Company	Japan	15	Joint-venture / start-up	Cellular	Divested in 1994.

Year = 1993		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Belgacom Mobile	Belgium	20.00	joint-venture	Cellular	Divested in 1994.
NordicTel	Sweden	51	joint-venture	Cellular	Divested in 1994.
Omnicom	France	18.50	Joint-venture / start-up	Paging	Divested in 1994.

Year = 1994		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Omintel Pronto	Italy	14.30	Joint venture / start-up	Cellular	Divested in 1994.

A.5 SBC Communications.

Year = 1984		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Australian Directory Services	Australia	100.00	joint-venture / start-up	Directory	Closed in 1989.[1]

Note: 1. Contract expired in 1989, and assumed that company liquidated therafter.

Year = 1985		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Aurec	Israel	50.00	Joint-venture	Other	Retained investment.
AMDOCS	Israel	50.00	Joint-venture	Other	Retained investment.

Year = 1987		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Southwestern Bell Telecom (UK) Ltd	UK	100.00	Wholly owned start-up	Other	Sold during 1992.

Year = 1990		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Telmex	Mexico	9.57	Joint-venture / privatisation	PTO	Retained investment.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Pacific Access	Australia	12.25	Joint-venture / start-up	Directory	Insufficient information, therefore retained.

Year = 1992		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
SBC Cable Commun-ications	UK	100.00	Joint-venture / start-up	Cable	Retained.

Note: 1. In 1993, and again in 1994 SBC sold 25% to Cox Communications, and then merged the company with TeleWest in 1994.

Year = 1994		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
SFR	France	10	Joint-venture	Cellular	Swapped for stake in Cegetel in 1996

Year = 1995		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Shinsegi Mobile Commun-ications Co Ltd	RSK	7.80	Joint-venture	Other	Retained investment.
TeleWest	UK	15.00	Joint-venture	Cable	Retained investment.
VTR S.A.	Chile	49.30	Joint-venture	Cellular	Retained investments.
MTN	RSA	15.50	Joint-venture / start-up	Cellular	Retained investment.

Year = 1996		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Golden Channels	Israel	42.70	Joint-venture	Cable	Retained investment.
Cegetel	France	15.00	Joint-venture	Cellular	Retained investment.

Year = 1997		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Diax	Switzerland	40.00	Joint-venture	PTO	Retained investment.
Golden Lines International Telecom	Israel	22.00	Joint-venture	Other	Retained investment.
Telkom South Africa	RSA	18.00	Joint-venture / privatisation	PTO	Retained investment.
China-US Cable Network	China	N/A	Joint-venture / start-up	Other	Retained investment.
TranAsia Telecommunic ations	Taiwan	20.00	Joint-venture / start-up	Cellular	Retained investment.

A.6 US West Inc.

Year = 1989		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Hong Kong Cable Commun-ications	HK	25.00	Joint-venture	Cable	Sold during 1990.
Unitel Limited	UK	N/A	Joint-venture / start-up	Cellular	Retained Investment.

Note: 1. Assumed retained as part of One-2-One as no indication otherwise.

Year = 1991		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Kablecom	Hungary	21.70	Joint-venture	Cable	Sold during 1996
Lynonnaise Communications	France	6.70	Joint-venture	Cable	Retained investment.
EuroTel Bratislava	Slovak	24.50	Joint-venture / start-up	Cellular	Retained investment.
EuroTel Praha	Czech	24.50	Joint-venture / start-up	Cellular	Retained investment.
Norkabel	Norway	46.00	Joint-venture / start-up	Cable	Sold during 1996
Swedish Cable & Dish	Sweden	12.00	Joint-venture / start-up	Cable	Sold during 1996
TeleWest	UK	26.75	Joint-venture / start-up	Cable	Merged in 1995 with SBC CableComms. Retained.
Westel 450	Hungary	49.00	Joint-venture / start-up	Cellular	Retained investment.
Delta Telecom	Russia	28.30	Joint-venture / start-up	Cellular	Retained investment.
Moscow Cellular	Russia	14.60	Joint-venture / start-up	Cellular	Retained investment.

Year = 1992		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
TeleWest Europe Group	UK	50	Joint-venture / holding co	Cable	Liquidated.[1]
LINTEL	Lithuania	49.00	Joint-venture / start-up	Other	Insufficient information
US WEST Polska	Poland	100	Wholly owned start-up	Directory	Sold during 1997.

Note: 1. Although there is insufficient evidence either way it is likely that the company was liquidated at some point given the lack of reference to the company in its promotional literature.

Year = 1993		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
TWE Japan	Japan	12.75	Joint-venture	Cable	Retained investment.
RTDC	Russia	66.50	Joint-venture / facilities development and management	Other	Retained investment.
One 2 One	UK	50.00	Joint-venture / start-up	Cellular	Retained investment.
Westel 900	Hungary	46.60	Joint-venture / start-up	Cellular	Retained investment.

Year = 1994		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
LISTEL	Brazil	50.00	joint-venture	Directory	Retained investment.
Optus Vision	Australia	46.60	Joint-venture / start-up	Cable	Retained investment.
TU-KA	Japan	2.00	Joint-venture / start-up	Cellular	Retained investment.
Bouygues PCN	France	5	Joint-venture / start-up	Cellular	Sold during 1997.
Thomson Directories	UK	100.00	Wholly owned acquisition	Directory	Sold during 1997.

Year = 1995		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Cable Plus	Czech	94.00	Joint-venture	Cable	Retained Investment.
Chofu Cable	Japan	19.14	Joint-venture	Cable	Retained investment.
Flextech	UK	6.70	Joint-venture	Content	Insufficient information, therefore retained.
Kabeltelevisie Amersterdam (A2000)	Holland	50.00	Joint-venture	Cable	Retained investment.
TITUS	Japan	25.00	Joint-venture	Cable	Retained investment.
PT ARIAWEST	Indonesia	35.00	Joint-venture / facilities managers	Cellular	Retained investment.
Binariang	Malaysia	20.00	Joint-venture / start-up	Fixed	Retained investment.
Binariang Maxis Mobile	Malaysia	20.00	Joint-venture / start-up	Cellular	Retained investment.
Cable i Televisio de Catalunya (CTC)	Spain	20.00	Joint-venture / start-up	Cable	Sold during 1996.

Year = 1996		Details			
Name of investment	Host country	Equity %	Organisational form	Sector	Endpoint
Fintelco SA	Argentina	90.00	Joint-venture	Cable	Sold during 1997.
Optus Vision Pty Ltd	Australia	46.50	Joint-venture	Cable	Retained Investment.
BPL/US WEST Cellular	India	49.00	Joint-venture / start-up	Cellular	Retained investment.
Polska Telefonia Cyfrowa	Poland	22.50	Joint-venture / start-up	Cellular	Retained investment.
Telenet	Belgium	28.00	Joint-venture / start-up	Cable	Retained investment.
Singapore Cablevision	Singapore	25.00	Joint-venture	Cable	Retained investment.
Cable y Television de Madrid (CTM)	Spain	N/A	Joint-venture / start-up	Cable	Insufficient information, therefore retained.

APPENDIX B: RBOCs DESCRIPTIVE DATA.

The following appendixes contain descriptive statistical information relating to each of the seven RBOCs created by divestiture. These descriptive statistics are drawn from a range of different sources so that a complete as picture as possible of each RBOCs could be built. The principal sources were the SEC, FCC, ITU and the RBOCs themselves. In addition online databases and the business press were also consulted as required. However, it still remains the case that for some of the RBOCs, especially Bell Atlantic and Pacific Telesis, omissions are to be found.

B.1 Ameritech.

Location of the head-office:	Chicago, Illinois.	
Number of BOCs:	5	Ameritech Illinois, Ameritech Indiana, Ameritech Michigan, Ameritech Ohio, Ameritech Wisconsin
States covered by RBOCs:	5	Illinois, Indiana, Michigan, Ohio, Wisconsin

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	8377	990	14337	17	77514	1746
1985	9058	1077	14555	37	74883	1991
1986	9465	1138	14755	57	77538	2076
1987	9623	1188	15094	87	78510	1955
1988	10014	1237	15469	146	77334	1894
1989	10316	1238	15899	242	77326	2014
1990	10773	1254	16278	326	75780	2154
1991	10983	1165	16584	483	73967	2200
1992	11285	-400	17001	586	71300	2267
1993	11865	1513	17560	860	67192	2108
1994	12569	-1064	18329	1299	63594	1955
1995	13428	2008	19057	1891	65345	2176
1996	14917	2134	19704	2512	66128	2476
1997	15998	2296	20544	3177	74359	2651
1998	17154	3606	20968	3577	70525	2982

B.2 Bell Atlantic.

Location of the head-office: Philadelphia, Pennsylvania

Number of BOCs: 7 — New Jersey Bell, Bell of Pennsylvania, Diamond State Telephone, Chesapeake & Potomac Telephone District of Columbia, Chesapeake & Potomac Telephone Maryland, Chesapeake & Potomac Telephone Virginia, Chesapeake & Potomac Telephone West Virginia.

States covered by RBOCs: 5 — Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia.

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	8090	973	14677	N/A	79500	1912
1985	9084	1092	15090	N/A	79285	2163
1986	9920	1167	15509	N/A	80185	2290
1987	10747	1240	16056	67	N/A	2423
1988	10880	1316	16541	N/A	81400	2619
1989	11594	1023	17056	188.5	80000	2720
1990	12649	1230	17484	N/A	82700	2692
1991	12659	-324	17750	315	76900	2644
1992	12836	1340	18181	N/A	71400	2546
1993	13145	1403	18645	N/A	73600	2519
1994	13791	-754	19168	N/A	72339	2699
1995	13429	1858	19820	N/A	61766	2641
1996	13081	1881	20566	5993	62616	N/A
1997	30193	2454	39700	6300	N/A	N/A
1998	31566	2965	41600	8600	N/A	N/A

B.3 BellSouth Corporation.

Location of the head-office:	Atlanta, Georgia.	
Number of BOCs:	2	South Central Bell Telephone Company, Southern Bell Telephone and Telegraph Company
States covered by RBOCs:	9	Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee.

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	9672	1257	14000	0	96000	2274
1985	10712	1417	14500	30	92300	2624
1986	11401	1588	15000	80	96900	2894
1987	12229	1664	15700	120	98700	3058
1988	13596	1665	16400	205	100280	3207
1989	13996	1741	17000	447	101230	3222
1990	14345	1631	17500	680	101945	3190
1991	14445	1472	18100	800	96084	3102
1992	15202	1618	18600	1200	97112	3189
1993	15880	880	19300	1800	95084	3486
1994	16845	2160	20200	2500	92121	3600
1995	17886	-1232	21100	3500	97571	4203
1996	19040	2865	22135	4523	81241	4455
1997	20561	3261	23201	5987	81000	4858
1998	23123	3259	24025	8235	88450	5212

B.4 Nynex.

Location of the head-office:	New York, New York	
Number of BOCs:	2	New York Telephone, New England Telephone
States covered by RBOCs:	6	Connecticut, New York, New Hampshire, Massachusetts, Maine, Rhode Island, Vermont

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	9573	986	13197	11	94900	1844
1985	10314	1095	13623	36	89600	2108
1986	11341	1215	13966	50	90200	2414
1987	12084	1277	14398	75	95300	2551
1988	12650	1315	14807	127	97400	2784
1989	13220	808	14900	213	95400	2421
1990	13608	949	15300	259	93800	2493
1991	13255	601	15338	308	83900	2499
1992	13183	1311	15618	391	82500	2450
1993	13407	-394	16041	574	76200	2717
1994	13306	792	16578	900	63232	3102
1995	13406	-1849	17138	3356	59680	3188
1996	13454	1477	17740	N/A	68100	2905

B.5 Pacific Telesis Group.

Location of the head-office:	San Francisco, California	
Number of BOCs:	2	Pacific Bell, Nevada Bell
States covered by RBOCs:	2	California, Nevada

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	N/A	N/A	N/A	15	N/A	N/A
1985	N/A	N/A	N/A	53	N/A	N/A
1986	N/A	N/A	N/A	95	N/A	N/A
1987	N/A	N/A	N/A	168	N/A	N/A
1988	N/A	N/A	N/A	231	N/A	N/A
1989	9089	1242	13420	339	66274	N/A
1990	9052	1030	13868	418	62979	N/A
1991	9168	1015	14262	558	59037	1688
1992	9108	1142	14551	779	57023	1625
1993	9244	-1504	14873	1206	55355	1734
1994	9253	1159	15307	0	51590	1620
1995	9042	-2312	15767	N/A	48889	2961
1996	9588	1142	16427	N/A	48330	2753

B.6 SBC Communications.

Location of the head-office:	Originally St Louis Missouri, from 1992 San Antonio, Texas.	
Number of BOCs:	1	Southwestern Bell Telephone Company
States covered by RBOCs:	5	Arkansas, Kansas, Missouri, Oklahoma, Texas

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	7191	883	10650	0	71854	1804
1985	8048	996	10886	35	71400	1989
1986	8122	1023	11067	41	67500	1912
1987	8222	1047	11086	155	67100	1450
1988	8569	1060	11295	244	64900	1222
1989	8825	1093	11708	382	66200	1483
1990	9241	1101	12042	667	66700	1778
1991	9460	1076	12328	960	61200	1826
1992	10150	1302	12724	1413	59500	2144
1993	10840	-845	13145	2049	58400	2221
1994	11772	1649	13612	2992	58800	2350
1995	12670	-930	14223	3659	59300	2336
1996	13898	2101	14955	4398	61540	3027
1997	24856	1474	33440	5493	118340	5766
1998	28777	4023	37252	6851	129850	

B.7 US West Inc.

Location of the head-office:	Denver, Colorado	
Number of BOCs:	3 later into consolidated 1	Mountain Bell, Northwestern Bell, Pacific Northwestern Bell were consolidated into US West Communications in 1990.
States covered by RBOCs:	14	Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, South Dakota, New Mexico, Nebraska, North Dakota, Oregon, Utah, Washington, Wyoming

Year	Revenue $bn	Net income $m	Access lines 000s	Cell subs 000s	Employees	Capex $m
1984	7284	887	10871	5	70765	1774
1985	7819	926	11167	15	70202	2089
1986	8381	924	11332	32	69375	2282
1987	8697	1006	11613	51	68523	1905
1988	9221	1132	11878	83	69765	2279
1989	9691	1111	12218	134	70587	2186
1990	9369	1199	12562	219	65469	2217
1991	9528	553	12935	300	65829	2425
1992	9823	-614	13345	415	63707	2554
1993	10294	-2806	13843	601	60778	2441
1994	10953	1426	14336	968	61505	2820
1995	11746	1317	14847	1647	61047	2770
1996	12911	1178	15407	2391	69286	2831
1997	15235	697	16033	2918	67461	2672
1998	12378	1508	16601	185	54483	2905

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