COMPETITION & CHANGE, Vol. 9, No. 2, June 2005 201–219

The Internationalization of Corporate Healthcare: Extent and Emerging Trends

CHRIS HOLDEN

School of Health Sciences and Social Care, Brunel University, Isleworth, UK

This article presents the results of an investigation into the extent of internationalization among large corporations engaged in significant health-related activities. Companies included in Fortune magazine's 'G500' list of the world's 500 largest corporations (by sales) were analyzed for health-related activities. Those with significant health-related activities were allocated to categories within a typology of health-related businesses. This typology is composed of five key categories: providers of services to the end consumer; producers of goods; suppliers of services to state or private providers; insurance and managed care companies; and firms involved in the construction, maintenance or ownership of premises. Direct providers of health services were the least internationalized category of health-related business, whilst producers of goods and suppliers of services were the most internationalized. The article discusses the reasons why this is the case, and concludes that internationalization among direct providers of health services is likely to increase over time.

KEY WORDS Globalization, Health businesses, Health services, Internationalization.

Introduction

The social importance of health provision means that governments intervene in this sector more than perhaps any other. All governments intervene in some way to secure the health needs of their populations, and all of these governments struggle constantly with issues of equity, effectiveness and efficiency in doing so. Yet even health systems where services are provided predominantly by state agencies, such as the British National Health Service (NHS), rely on for-profit companies for the supply of goods and services that make the provision of healthcare possible. Furthermore, processes of reform and privatization pursued by Western governments are leading slowly towards a greater role for for-profit providers in the direct delivery of health services. When coupled with the increasing trend toward the internationalization of the world economy and the liberalizing agenda of international institutions, such policies have potentially profound implications for the delivery of services.

The implications of processes of internationalization or 'globalization' for welfare states at the macro-economic level have been frequently debated in recent years (Esping

E-mail address: christopher.holden@brunel.ac.uk

DOI: 10.1179/102452905X45409

Andersen 1996; Mishra 1999; Sykes *et al*. 2001; Yeates 2001). Yet the implications of internationalization for the delivery of welfare services at the level of the firm are only beginning to be explored. As governments across the world pursue policies that extend the scope for the involvement of private companies in the delivery of welfare services, processes of internationalization are likely to become increasingly important as multinational providers of health-related services emerge. Yet we have little information on the extent of existing internationalization among direct providers of health services, and how these compare with rates of internationalization among other types of health-related firm such as pharmaceutical producers. As the Working Group on Health and the International Economy of the World Health Organization's Commission on Macroeconomics and Health argues:

> There is a pressing need to improve data on the health sector, in particular on the nature and extent of trade and investment transactions in this sector. Much of the current analysis on the effects of liberalization in the health sector is qualitative in nature, based mainly on experiences of particular countries, and that too frequently is anecdotal rather than based on hard data (Ahluwalia 2002: 22).

As a foundation for research in this area, we need to have a clear, global, picture of the extent of internationalization in existing health-related companies. This article presents the results of research that aims to contribute to such a picture, by seeking to ascertain the existing extent of internationalization among different types of firms with health-related activities. A typology of private, and potentially internationalized, companies involved in activities related to health and social care is presented. This typology provides the basis for a comparison of the extent of internationalization between direct providers of health services and other sectors relevant to the provision of health and social care. The first section of the article sets out the research design, whilst the second section discusses the results. This section indicates that internationalization among direct providers of health services is far less developed than other health-related sectors, and the reasons for this are discussed. The third and final section considers some of the likely trends in the expansion of providers of health services in the near future, arguing that internationalization in this sector is likely to increase as a result of government policies.

Research Design: The Extent of Internationalization of Corporate Healthcare

Although some work has been done on the internationalization of companies providing health and social care services (Hall 2001; Holden 2002; Mohan 1991; Moran and Wood, 1996), there is a need for a more systematic picture of the extent of internationalization in the sector. Whilst some sectors related to the delivery of health and social care are known to be highly internationalized, such as pharmaceuticals, less is known about direct providers of health and social care services, and there is insufficient existing data with which to compare different types of relevant firms.

In order for a clear picture to emerge, and for comparison between different relevant sectors to take place, we must first have a typology with which to categorize the different types of company that exist. For-profit companies involved in health and social care may be divided into five main categories:

1 *Providers of services* to the end consumer. These may include acute health (hospital), long-term care, home care, general clinics or specialist services, as well as pharmacies,

dentists and opticians. Such services may be paid for privately by the individual (through out-of-pocket payments or private insurance), by social insurance, or directly by the state (for example via tax-funded purchasing agencies as in Britain).

2 *Producers of goods*, which are supplied to state providers or to private providers. Such goods may include drugs and medicines, medical equipment or information and communication technology (ICT).

3 *Suppliers of services* to state providers or to private providers. Such services may include ancillary services (such as cleaning and catering), management services (e.g. of hospitals), consultancy services, and those of wholesalers, which distribute drugs or medical equipment and act as intermediaries between producers and providers.

4 *Private insurers*. As well as firms providing traditional health insurance services, this category includes managed care or health maintenance organizations (HMOs), as well as pharmacy benefit managers. HMOs have emerged from the American health insurance market as a means of containing costs, and typically involve health plans that limit the providers or treatments covered. Pharmacy benefit managers emerged simultaneously with managed care to handle the purchasing and distribution of prescription drugs for HMOs and other third-party payers, and attempt to control costs by giving physicians and pharmacists incentives to prescribe and dispense from a limited product range (Mossialos and Mrazek 2002: 148).

5 Companies involved in *the provision or maintenance of premises*. These include real estate investment trusts (REITS), which have been particularly important in the expansion of the larger long-term care providers in Britain through sale and leaseback arrangements, construction companies, facilities managers and maintenance companies, and finance, consultancy and accounting firms which have been involved in organizing Private Finance Initiative (PFI) hospital projects in Britain.

It must be recognized, of course, that some firms will fall into more than one category. So, for example, suppliers of management services to state providers may also be involved in the construction or maintenance of buildings, as is envisaged under PFI plans to build and operate hospitals for the British NHS. The analysis in this article categorizes firms under their primary health-related activity.

The extent of internationalization in these different types of firm was investigated through the construction of a database of all health and social care-related companies in *Fortune* magazine's 'Global 500' list of the world's largest 500 companies (by total sales) (Hjelt 2002). The extent of internationalization may be measured according to various criteria. The criteria used by Ruigrok and van Tulder (1995: 154) in their influential book include percentage of assets held outside of home country, percentage of sales abroad, percentage of employees abroad, internationalization of shares, and composition of the management board. The United Nations Conference on Trade and Development (UNCTAD) measures the extent of internationalization of the world's 100 most internationalized non-financial transnational corporations (TNCs) by using a 'transnationality index' (TNI), calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment (UNCTAD 2003: 187). UNCTAD provides no data on financial firms due to 'the different economic functions of assets of financial and non-financial firms and the non-availability of relevant data for the former' (UNCTAD 2002: 113, n. 1). This study includes financial firms in the form of insurance firms, but does

not use assets as a measure of internationalization. Instead, the measures of internationalization used are percentage of sales abroad, percentage of staff employed abroad and total number of countries in which the firm has operations. These measures are considered to be particularly appropriate because they provide a range of indicators capable of capturing the extent of internationalization in different types of relevant firm.

The differences between goods-producing companies and service-providing companies necessitate a range of indicators if these different types of firm are to be compared. Goods producers may have operations in only one or a few countries and yet generate a substantial proportion of their income from sales abroad through exports (although using percentage of sales abroad as a measure is complicated by the fact that whilst most companies present information on foreign sales so as to include home country exports, others present foreign sales only as sales made by subsidiaries located abroad). It may be advantageous to goods producers to operate in this way since they can realize huge economies of scale in production. Internationalized service providers find it very difficult to operate in this way since services are generally consumed as they are produced (Hoekman and Primo Braga 1997: 286). Although service providers can make some use of economies of scale in provision by having larger-than-average facilities (Holden 2002: 56), they must therefore make use of multiple outlets when expanding. The percentage of staff employed outside of the company's home country may therefore help us to capture this difference between goods and service providers. The total number of countries in which a firm operates may often be a misleading measure, since firms may maintain offices in a number of countries mainly for, for example, marketing purposes, but employ few staff there and make the majority of their sales in fewer countries. Whilst we must remain wary of the limitations of this measure therefore, it does have some utility in indicating the global reach of a firm, especially where service firms are concerned (for the reasons already stated). When considered together, therefore, these measures can help us build up a clear picture of the extent of internationalization in different types of company.

However, two weaknesses in the research design must be acknowledged. Firstly, internationalized service firms tend to be smaller than manufacturing firms (Enderwick 1989: 30), whilst some extremely large service providers, such as American hospital groups, may operate entirely within their home country (Hall 2001: 18). The use of the G500 as the primary source may therefore overlook to some degree the extent of internationalization among providers of services. Furthermore, we must acknowledge, as Hjelt (2002) puts it, that 'change is a constant in the Global 500'. That is to say, the firms included in the list may differ significantly from year to year, due to the changing fortunes of firms and sectors as well as to processes of merger and acquisition or divestment and outsourcing. Nevertheless, the use of the G500 provides a basis upon which to compare the extent of internationalization in different types of large health-related firm. Furthermore, if it proves to be the case that the larger hospital providers remain relatively uninternationalized compared to, for example, pharmaceutical companies, the question of why this is so remains to be investigated.

The second weakness of measuring the extent of internationalization in this way is that such quantitative measures tell us little about the *form* of internationalization in different firms (Held *et al*. 1999: 237). Case studies of different types of firm, and even of different firms within the same sector, may therefore be necessary to get a full picture of the internationalization process (Holden 2002). In presenting the results of this research,

illustrative examples are provided in acknowledgement of this issue. Nevertheless, the quantitative data provide a necessary basis for further research.

The five categories presented here are broad and include firms whose main activities are not directly health related. However, as Moran and Wood (1996: 134) argue, health is a service 'whose delivery is only possible with the use of a complex and highly advanced technology. Much of the health care industry is concerned with the creation and marketing of that technology, and with the provision of a physical infrastructure allowing its delivery. Technological innovation has placed large parts of the industry in health care products at the forefront of modern industrial economies.' They cite the market in diagnostic imaging technologies as one example, a market that was one of the fastest-growing industrial sectors during the 1980s, involving integration between the traditional medical equipment industry, micro-electronics and computers. Here, as in the pharmaceutical sector, high research and development costs, integration with other industrial sectors and marketing costs lead to international concentration to reap economies of scale.

Consequently, firms for whom health is not their main business, but for whom health forms a significant part of their business, have been included in the analysis. For example, producers of diagnostic imaging equipment usually make a large range of other electronic goods, whilst some insurers which provide an extensive range of financial products and services provide significant health insurance, even though this is not their main business. For example, medical equipment accounts for only about 7% of General Electric's total sales, yet the firm is a major producer of such goods when compared with other producers of the same type of equipment. Such firms have been included because they are likely to be major suppliers of health goods or services, even though these may form a minority of their overall sales. Furthermore, the size and internationalization of these firms may have a significant effect on their relationship with governments in a way which impacts on national health systems, even where the extent of their internationalization does not stem from their health-related activities. Nevertheless, the diverse range of activities which such firms engage in is likely to increase the extent of their internationalization as measured here, as against, for example, specialist health firms such as providers of hospital services (this is not true for pharmaceutical firms, however, which are generally both specialized in health activities *and* highly internationalized).

Firms have not been included on the basis of any simple statistical measure, such as a minimum percentage of sales in the health sector, since precise information on this is not always available, and it is not necessarily the best way of making such decisions, since firms will have strategies aimed at increasing or reducing their activity over time in a particular sector, and since different health-related sectors have different characteristics. For example, as already discussed, pharmaceutical producers usually specialize in the production of pharmaceuticals, whereas producers of diagnostic equipment may make a diverse range of electronic equipment. To take another example, firms providing ICT equipment or services have a vital role to play in the functioning of health services today. However, such firms may or may not have a significant orientation towards health service providers as such. Firms are therefore included in the analysis where they have an explicit, dedicated and sustained orientation to the health sector in at least one of their divisions (as was the case, for example, for EDS and Sun Microsystems), but are excluded where use of their products or services by healthcare providers is incidental (as was the case, for example, for Fujitsu). This information was obtained through analysis of company literature, including annual reports and websites, and the checking of this directly with company representatives where possible.

Whilst this may mean that decisions on which firms should be included in the analysis may involve qualitative judgements at the margins, thus reducing the reliability of the study to a small extent, this is regarded as a more valid basis for making decisions when compared to the use of 'blind' or arbitrary statistical criteria.

Results and Discussion

Of the 500 firms included in the G500 list, 82 were identified as having significant health-related activities, according to the criteria outlined above. Of these 82, 32 specialized directly in healthcare. Table 1 shows how these break down by sector. Although only 32 of the 82 firms had healthcare as their main business, the fact that 82 of the 500 largest companies in the world had significant health-related business indicates the extent to which healthcare provision already relies upon for-profit companies. Nevertheless, rates of internationalization within different sectors varied greatly.

Of the 82, ten were direct providers of health services, with six of these providing pharmacy services, three providing hospital services and one providing assisted living services for seniors. Table 2 shows that the majority of direct providers of health services had extremely low rates of internationalization. This was because the largest pharmacy and hospital providers (i.e. those which appear in the G500) are mainly American companies exclusively or primarily serving the huge American market. All the pharmacy providers had non-existent or negligible rates of internationalization, regardless of whether they were specialist pharmacies or located within supermarket chains (although the drug distributors Alliance

TABLE 1

Health-related businesses in the G500 by type

	Providers of services	Producers of goods	Suppliers of services	Insurers	Premises companies	Total
Number	10	35	12	24	1	82
Detailed breakdown	6 Pharmacy providers (3 core pharmacy 3 supermarket)	12 Medical imaging or IT producers (health minority business)	5 Distributors of pharma/ medical supply (specialist health firms)	16 General insurers (health minority business)	1 Construction (health minority business)	
	3 Hospital providers (2 core hospital1 diversified)	14 Core pharma 6 Pharma (as minority business)	3 IT 3 Catering 1 Consulting (health minority business)	8 Specialist health / managed care		
	1 Assisted living (hotel chain)	3 Medical products (health minority business)				

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites.

TABLE 2

Internationalization of providers of health services

Company	G500 No.	Core business	Subsidiary business	Home country	Sales abroad as % of total	Staff abroad as % of total	No. of countries with operations
Tenet Healthcare	424	Hospitals		USA	1*	1*	2
HCA	275	Hospitals		USA	2*	2*	3
Marriot International	496	Hotels	Senior living	USA	35*	35*	65
Rite Aid	331	Pharmacies		USA	0	0	1
Walgreen	183	Pharmacies	General merchandise	USA	0	0	1
CVS	215	Pharmacies		USA	0	0	1
Publix Supermarkets	328	Supermarkets	Pharmacies	USA	0	0	1
Albertsons	100	Supermarkets	Pharmacies	USA	0	0	1
Winn-Dixie Stores	398	Supermarkets	Pharmacies	USA	1	1	2
Samsung	118	Trading	Hospitals	South Korea	18	4	80

* = Estimate based on other data provided by the company.

Figures are for year ended 31 December 2001, or as near to that date as possible, depending on company accounting periods.

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites; direct communication with companies; UNCTAD (2003); Hoovers.

Unichem and Franz Haniel, which appear in Table 1 as suppliers of services, also provided pharmacies and were much more internationalized – see below). Two of the hospital providers, Tenet Healthcare and HCA, were American chains. Tenet operated only one acute hospital outside the USA. This represents something of a retreat from international activity for Tenet, which (as National Medical Enterprises) acquired many of the hospital assets of the British firm United Medical Enterprises after 1975 (Griffith and Rayner 1985: 44), and which had a controlling stake in the UK long-term care provider Westminster Health Care up until 1996 (Holden 2002: 61). HCA (Hospital Corporation of America) operated six facilities in England and two in Switzerland and employed an estimated 2% of its staff abroad. The third hospital provider, Samsung, provided hospitals in South Korea but is a huge diversified trading company, or chaebol, characteristic of large Korean firms. Samsung generated 18% of its total sales outside Korea in 2001. (Hitachi, which appears in Table 1 as a producer of medical imaging goods not as a provider of services, also provided hospitals in Japan. Thirty-two per cent of Hitachi's sales were outside its home country of Japan in 2001.) The most internationalized provider of services (by sales and staff) was the international hotel group Marriott, which provided assisted living facilities for seniors. This part of Marriot's business was sold off to Sunrise Senior Living at the beginning of 2003.

Thirty-five of the 82 companies were producers of goods. Results for this category have been sub-divided into the 12 that were general electrical or information technology (IT)

firms producing medical imaging equipment or specialist IT equipment for healthcare providers, but whose main business was unrelated to healthcare (Table 3), and the 23 that were producers of pharmaceuticals and/or other medical supplies (Table 4). Of these latter 23, 14 had pharmaceutical production as their main business. In contrast to providers of health services, the rate of internationalization among goods producers is extremely high. The high degree of internationalization among pharma firms in particular, when compared to all other industrial sectors, is evinced by the fact that 11 of the firms in UNCTAD's list of the world's 100 most internationalized non-financial TNCs (for the year 2001) are pharma firms, with an average transnationality index of 55.5 (UNCTAD 2003: 187–188). This compares with 12 motor vehicle firms included in the list, which have an average transnationality index of 47.3 (ibid). Comparison with rates of internationalization in

TABLE 3

Internationalization of producers of non-pharmaceutical health goods

Company	G500 No.	Core business	Subsidiary business	Home country	Sales abroad as % of total	Staff abroad as % of total	No. of countries with operations
Dell Computer Corporation	131	Computing	Health IT systems	USA	40*		
Sun Microsystems	268	Computing	Health IT systems	USA	53		170
General Electric	9	Electrical	Medical equipment	USA	32	49	100
Siemens AG	22	Electrical	Medical equipment	Germany	78	59	190
Toshiba	77	Electrical	Medical equipment	Japan	38		
NEC	84	Electrical	Medical equipment	Japan	23		25
Royal Philips Electronics	143	Electrical	Medical equipment	Netherlands	95	84	60
Canon	190	Electrical	Medical equipment	Japan	72	52	
Hitachi Ltd	32	Electrical	Medical equipment	Japan	32	25	
Fuji Photo Film	251	Photographic Products	Medical equipment	Japan			
Eastman Kodak	383	Photographic Products	Medical equipment	USA	51	44	30
Marubeni	25	Trading	Medical equipment	Japan	32	31	73

* = Estimate based on other data provided by the company.

Figures are for year ended 31 December 2001, or as near to that date as possible, depending on company accounting periods.

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites; direct communication with companies; UNCTAD (2003); Hoovers.

TABLE 4

Internationalization of producers of pharmaceuticals and other medical supplies

Company	G500 No.	Core business	Subsidiary business	Home country	Sales abroad as % of total	Staff abroad as % of total	No. of countries with operations
Astrazeneca	301	Pharma	Medical devices	UK	94	81	45
Abbott Laboratories	309	Pharma	Medical equipment	USA	37	40	40
Johnson & Johnson	121	Pharma	Surgical instruments	USA	39	50	54
Bayer	158	Pharma	Diagnostic equipment	Germany	58	45	
Eli Lilly	441	Pharma		USA	36		27
Wyeth	354	Pharma		USA	36	44	65
Roche Group	288	Pharma	Diagnostics	Switzerland	98	87	65
Novartis	257	Pharma		Switzerland	90*	80*	140
Pharmacia	250	Pharma		USA			
Aventis	230	Pharma	Vaccines	France	65	52	
Bristol-Myers Squibb	218	Pharma		USA	35		60
GlaxoSmithKline	140	Pharma		UK	92	57	70
Pfizer	127	Pharma	Animal health	USA	38	60	
Merck & Co. Inc	62	Pharma		USA	16	35	32
Kimberly-Clark	345	Personal paper products	Medical products	USA	35	65	42
Proctor & Gamble	93	Household products	Pharma	USA	47	43	79
Nestle	55	Food	Pharma	Switzerland	99	97	70
Tyco International	103	Electrical	Medical products	USA	39	55	100
3M	316	Diversified	Medical products	USA	55	48	60
Loreal	415	Cosmetics	Pharma	France	86	30	86
Akzo Nobel	407	Chemicals	Pharma	Netherlands	95	81	80
Mitsubishi Chemical	350	Chemicals	Pharma	Japan	20		
Suntory	485	Beverages	Pharma	Japan			

* = Estimate based on other data provided by the company.

Figures are for year ended 31 December 2001, or as near to that date as possible, depending on company accounting periods.

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites; direct communication with companies; UNCTAD (2003); Hoovers.

the pharmaceutical sector thus serves to indicate not only the different rates of internationalization in different health-related sectors, but also how these compare to the most internationalized firms in other sectors.

Twelve of the 82 were suppliers of services. Of these 12, five were specialist distributors of pharma and/or other medical products, three were IT companies providing significant services to healthcare providers, three were catering firms and one, Accenture, was a management consulting firm with ongoing health-related business. Table 5 shows that the extent of internationalization of suppliers of services was fairly high, although varying significantly between companies. This was true for the specialist health distribution companies as well as for the other types of firm included in this category. Rates of internationalization in

TABLE 5

Internationalization of suppliers of services to healthcare providers

Company	G500 No.	Core business	Subsidiary business	Home country	Sales abroad as % of total	Staff abroad as % of total	No. of countries with operations
Sysco	217	Catering	Hospital catering	USA	1	4	2
Compass Group	409	Catering	Hospital catering	UK	67	72	90
Sodexho Alliance	476	Catering	Hospital catering	France	85*	85*	72
Amerisource Bergen	319	Distribution pharmaceuticals	Distribution medical supplies	USA	0	0	1
McKesson	57	Distribution pharmaceuticals	Health IT	USA	6	12*	7
Cardinal Health	61	Distribution pharmaceuticals	Clinical improvement services	USA	10	42	22
Franz Haniel	269	Distribution pharmaceuticals	Pharmacies	Germany	79	78	30
Alliance UniChem	478	Distribution pharmaceuticals	Pharmacies	UK		46	8
Computer Sciences	443	IT Services	Health IT	USA	36		69
Electronic Data Systems	221	IT Services	Health IT	USA	43		58
Oracle	464	IT Services	Health IT	USA	52	54	61
Accenture	380	Management consulting	Health consulting	USA	50		47

* = Estimate based on other data provided by the company.

Figures are for year ended 31 December 2001, or as near to that date as possible, depending on company accounting periods.

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites; direct communication with companies; UNCTAD (2003); Hoovers.

three of these five distribution companies were substantial, whilst one, AmerisourceBergen, exclusively served the American market. Of the other four distributors, two, Mckesson and Cardinal Health, were also American. Franz Haniel was a German company which owned Europe's leading drugs wholesaler, GEHE AG, and which also had non-health-related businesses. Franz Haniel obtained 79% of its sales from outside Germany in 2001. Alliance Unichem was a British firm formed in 1997 from the merger of UniChem plc and Alliance Sante S.A. The company distributed healthcare products across Europe and operated over 1,000 pharmacies in the UK, the Netherlands, Italy, Norway and Switzerland. These wholesale and distribution companies play a pivotal role in the healthcare supply chain in both the USA and Europe: as well as being intermediaries between goods producers and (both public and private) providers of health services, they may provide consultative, information, marketing or management services to both producers and providers.

Twenty-four of the 82 firms were insurers. Of these 24, 16 were general insurance or financial companies where health insurance was a minority but significant part of their business. The other eight insurers were specialist health insurers, predominantly American managed care organizations. Table 6 shows that six of the specialist health insurers had no foreign operations of any kind. Of the remaining two, CIGNA had operations in Europe, Asia Pacific and Latin America, and also provided health insurance services to the expatriate employees of multinational companies. UnitedHealth Group is discussed below. Although there are some gaps in the data, it is clear that general insurers were divided between those that were global financial corporations and those that predominantly served the American market. Data for Japanese insurance firms could not be obtained.

Only one firm was identified which had significant business relating to healthcare premises. This was Takenaka, a Japanese construction firm that was a major hospital builder in Japan, although this constituted a minority of its overall business. Takenaka had (mostly non-health-related) operations in 18 countries. Further discussion of health-related premises companies is not therefore possible on the basis of this research.

The extent of internationalization was thus highest among goods producers and suppliers of services, and lowest among direct providers of services. We are thus compelled to consider why this is. The answer may relate partly to differences in the economics of different sectors. Goods producers may gain economies of scale from concentrating production in a few areas and exporting to foreign markets. This would explain why foreign sales are high, but not why foreign employment is also high, although high rates of foreign employment are likely to be explained partly by the use of low-cost production in overseas sites. Pharma firms in particular have been engaged in a global process of mergers and acquisitions. The various explanations given for this have included the need for economies of scale in research and development, the desire to acquire drugs in the acquired company's pipeline, and the simple rationalization of the manufacturing, marketing or research workforces. The key difference with service providers, however, is that the latter must usually have a physical presence if they choose to access foreign markets, and the largest for-profit hospital providers are American corporations servicing the huge US market. The main exceptions to this are Japanese and Korean conglomerates providing hospital services in their home markets; the internationalization of these firms arises from activities unrelated to healthcare. Nevertheless, as discussed above, some US hospital providers have attempted to internationalize in the past, and it will be important to investigate the effect of current trends towards greater liberalization upon their future strategic decisions.

TABLE 6

Internationalization of providers of health insurance services

Company	G500 No.	Core business	Subsidiary business	Home country	Sales abroad as % of total	Staff abroad as % of total	No. of countries with operations
CIGNA	254	Health insurance/managed care	Life & disability insurance	USA	5	10	30
Humana	493	Health insurance/managed care		USA	0	0	1
Anthem	486	Health insurance/managed care	Pharmacy benefit management	USA	0	0	1
Wellpoint Health Networks	410	Health insurance/managed care	Pharmacy benefit management	USA	0	0	1
Pacificare Health	433	Health insurance/managed care	Pharmacy benefit management	USA	0	0	1
Advance PCS	387	Health insurance/managed care	Managed Care	USA	0	0	1
Aetna	178	Health insurance/managed care	Health insurance	USA	0	0	1
United Health Group	198	Health insurance/managed care	Health information services	USA			7
Loews	260	Insurance	Health insurance	USA	5*		
Legal & General	374	Insurance	Health insurance	UK	20*	20*	5
Northwestern Mutual	310	Insurance	Health insurance	USA			8
Massachusetts Mutual Life Insurance Company	249	Insurance	Health insurance	USA			8
Allianz	18	Insurance	Health insurance/managed care	Germany	78	51	70
New York Life Insurance	170	Insurance	Health insurance	USA	20*		10
Aegon	146	Insurance	Health insurance	Netherlands	75	88	13
Met Life	128	Insurance	Dental insurance	USA	4		15
Sumitomo Life Insurance	126	Insurance	Health insurance	Japan			
Asahi Mutual Life	119	Insurance	Health insurance/managed care	Japan			
Fortis	85	Insurance	Health insurance/managed care	Benelux	36		14
Munich Re Group	79	Insurance	Health insurance/managed care	Germany	68	92	60
State Farm Insurance	63	Insurance	Health insurance/managed care	USA	5*	3*	2
Assicurazioni Generali	50	Insurance	Health insurance/managed care	Italy	67	60*	
Axa	30	Insurance	Health insurance/managed care	France	78	74	25
Standard Life Assurance	265	Insurance	Health insurance	UK	20*	20*	8

* = Estimate based on other data provided by the company.

Figures are for year ended 31 December 2001, or as near to that date as possible, depending on company accounting periods.

Sources: 'The G500' (*Fortune* 22 July 2002); company annual reports; company websites; direct communication with companies; UNCTAD (2003); Hoovers.

However, relatively high rates of internationalization among *suppliers* of services must lead us to the conclusion that the differences between goods producers and service firms cannot be the only explanation for the lack of internationalization among direct *providers* of health services. This must lie at least in part in the history of welfare state intervention. For example, whilst healthcare services are often provided directly by the state, reducing the opportunities for private providers, pharmaceutical production and distribution usually is not. It is in the USA, where healthcare is provided largely by private providers and paid for largely by private insurance, where the largest for-profit service providers exist. It is only recently that many other advanced capitalist countries have begun to open up to private provision on a larger scale. However, state providers of healthcare have also provided a massive subsidy to private producers of pharmaceutical and other health goods, thus funding their expansion. The relationship between different kinds of health and social care-related firms and other actors, particularly states, is thus especially important.

The pivotal role of the state in providing opportunities for, or barriers to, the internationalization of private providers is indicated by current developments in UK health policy. The reintroduction of the purchaser-provider split into the British NHS through the creation of Primary Care Trusts as purchasers is opening up new opportunities for the expansion of both European and American providers in the UK, through a process that is being centrally orchestrated by the Department of Health (DoH). Thus at a meeting with private sector providers at Downing Street on the 13 May 2003, Prime Minister Tony Blair reportedly told them that he wanted to open the whole of the NHS to outside competition. Blair told representatives of private companies bidding to run 11 new diagnostic and treatment centres (DTCs) that:

> We are anxious to ensure that this is the start of opening up the whole of the NHS supply system [i.e. provision of health services] so that we end up with a situation where the state is the enabler, it is the regulator, but it is not always the provider (*The Guardian*, 14 May 2003).

The private companies at this meeting included Netcare, the biggest integrated healthcare body in South Africa, and consortia involving companies from the USA, Canada, Germany, France and Switzerland (ibid). Some of these had entered into partnership with UK firms, such as the Canadian hospital operator, Interhealth Canada, which has joined forces with PFI provider, Jarvis.

In addition to hospital services, the new GP contract will allow the private sector to take over out-of-hours primary care and provide specialist services. The DoH has already announced that the US firms Kaiser Permanente and United Healthcare are to play a greater role in primary care. UnitedHealthcare International is the international arm of UnitedHealth Group, which is included in Tables 1 and 6 as a health insurer, but which obtains approximately half of its net income from other healthcare activities. UnitedHealth International already has either full ownership or a joint venture with healthcare organizations in Hong Kong, Malaysia, India, the Philippines and Portugal (UHC 2003).

These developments in the British healthcare system indicate two things. Firstly, that it is processes of change which alter the balance between direct state provision, subsidy and regulation within welfare states that are the key to understanding the future expansion of for-profit healthcare (Holden 2003). Such processes of change are likely to lead to a greater role in health systems for private providers, and therefore to increase internationalization. Secondly, that the analysis undertaken in this article may significantly underestimate the extent of existing internationalization among direct providers of health services, since such

firms are often too small to feature in a list like the G500. Thus, whilst the analysis undertaken here provides a useful baseline for further research in this area, future research which focuses upon processes of change within welfare states as these affect the expansion of for-profit companies is likely to be particularly fruitful.

However, further research focused at the level of the firm should also continue to be valuable. For example, more research needs to be done to discover why some US hospital providers choose to internationalize, whilst others do not, and why some firms may even be reducing their international operations. This type of research is particularly important, since developments at the international level such as the General Agreement on Trade in Services (GATS) are likely to lead to a trend towards greater internationalization of service providers in the future. Probable future trends in the expansion of for-profit health service providers and other health firms are discussed in the next section.

Emerging Trends

As already argued, the expansion of for-profit welfare-related firms is primarily dependent upon political factors. Because governments intervene extensively in order to secure many of the welfare needs of their citizens, it is the shape of the welfare state in any given country, and processes of change affecting it, that determine the opportunities or barriers to the expansion of for-profit companies. There are both specific features and commonalities in change processes within different countries. However, the current process of trade negotiation being undertaken under the auspices of the World Trade Organization (WTO) is a process that most countries have in common, and such international processes and institutions help to create a climate of change that can have a significant impact upon national reform processes. The current round of trade talks begun in Doha have been designated 'the development round', and include two key areas relevant to health-related businesses: issues concerning intellectual property and patent protection, and liberalization of services.

Issues of intellectual property primarily concern patent protection for pharmaceutical companies. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) gives patent protection to companies developing new drugs for a period of 20 years. However, this has become a key development issue, since many developing countries grappling with the most extreme problems, of, for example, HIV-AIDS infection, are unable to afford the high price of patent-protected drugs (Correa 2002). Negotiations have been continuing for some time concerning differential pricing for poorer countries and the use of cheaper drugs manufactured by generic producers, but the resulting agreements have been complicated by the actions of the US government in seeking to defend the interests of its pharmaceutical firms. Services liberalization revolves around the General Agreement on Trade in Services (GATS), which involves countries 'scheduling' services for liberalization. Services included within the GATS agreement must offer 'national' (non-discriminatory) treatment and 'most favoured nation' status to foreign providers.

The GATS includes health and other welfare services, and there has been much debate about the extent to which it may threaten state organized welfare services, particularly in Europe (Adlung 2002; Price and Pollock 2003; Price *et al*. 1999; Ruane 2001). Specifically, Article 1.3 of the GATS allows governments to protect their services where they are 'supplied neither on a commercial basis, nor in competition with one or more service suppliers'. However, the WTO is pushing for a pro-liberalization interpretation of such

clauses, and reforms, such as those in Britain, which extend the scope for private sector involvement in health may render health services vulnerable under the GATS (Holden 2003; Price *et al*. 1999). The intractability of the issues on the agenda, particularly those concerning the reform of agricultural subsidies, and the attempt by the EU to force the inclusion of the 'Singapore issues' (investment, competition, government procurement and trade facilitation), led to stalemate at negotiations in Cancun, Mexico, in September 2003. However, the direction of change facilitated by such processes is clearly towards greater liberalization. Whilst pharmaceutical firms may be forced to accept a more extensive differential pricing regime than they want, the long-term outcome of these processes is likely to be a greater role for private health service providers, as well as the liberalization and increased portability of health insurance (Chanda 2001: 107–108; Lipson 2001; Sbarbaro 2000), and therefore an increase in the extent of internationalization among such firms.

The policies of other international institutions also tend to reinforce the move towards privatization and liberalization of health services. The World Bank and the International Monetary Fund use the provision of loans and other assistance to developing countries in particular as levers to insist on health reforms involving an increased orientation towards the private sector (Hall and de la Motte 2004). The World Bank also runs the International Finance Corporation, which invests solely in the private sector, and has played a significant role in supporting health and social care firms (Hall 2001). The European Union (EU) also plays a significant role within its own borders in facilitating the internationalization of public services through its public procurement rules. The European Public Procurement Directive, for example, seeks to increase cross-border competition between firms under public contracts within the EU by ensuring equal treatment of domestic and foreign providers (European Union 1992).

As far as the demand side is concerned, the OECD provides the most complete data set available for statistical comparisons of health care in developed countries (Anderson and Hussey 2001). OECD data indicates clear growth in the state's share of health spending during the 1970s followed by a small but perceptible reduction during the 1990s (Docteur and Oxley 2003). There has thus been a very small relative increase in private financing of healthcare in recent years. However, as the British case discussed above indicates, private financing tells us very little about demand for private *provision*, since governments may themselves fund an increase in such provision. Importantly, OECD data indicate the continued growth of total healthcare expenditure as a percentage of GDP in most developed states, despite the attempts by governments to restrain their own expenditure. The general trend, therefore, has been for most governments not to simply attempt to cut health expenditure, but to attempt to ensure greater efficiency and effectiveness of such expenditure. This itself has become a driver of increased private provision, as governments such as that in Britain act on the belief that the private sector can realize such efficiencies. Furthermore, the rapid economic development of key countries such as China and India is dramatically increasing demand for health goods and services at the global level, as discussed below.

In addition to these political factors, health related economic activity is driven by two other key factors: the development of new technologies and demographic factors. According to Keaney (2002: 338), technological developments in health highlight 'the conundrum of Western health care systems: how to resolve the central contradiction of ever greater reliance on expensive technologies for individuals at the expense of universal, equitable health care provision.' Lethbridge (2002) has analyzed the activities of venture capital funds in the health sector in order to ascertain areas seen as being open to development by private

capital. She has identified pharmaceuticals, medical devices and diagnostic equipment, biotechnology and information and communications technologies applied to healthcare as priorities for health venture capital. Many of the specialist health firms included in this research identified information technology as an important area for development, and indeed many had already begun to develop web-based health services of one kind or another. Such developments offer an alternative route to the international trading of health services to those involving commercial presence, consumption abroad or the international movement of practitioners. Chanda (2001: 88–92) has identified telehealth as an area with particular potential for expansion in the near future.

The other technological development likely to attain most significance in the forthcoming period is that of new biotechnology therapies. However, this significance arises as much from social and political concerns about the technology as from its technical development as such. As Hayward (1998: 84) points out, biotechnology is currently nowhere near as developed as microelectronics and information technology, but arouses intense political debate. This means that the actual economic development of the technology, especially in relation to the agricultural and healthcare sectors, 'has become inseparable from domestic and transnational political forces' (Hayward 1998: 94). Nevertheless, it is clear from analyzing the annual reports of firms included in this research that many of them (particularly pharmaceutical firms) see biotechnology as a key area for expansion. This is despite the fact that large multinational corporations were generally late to enter the biotech field. Large firms have thus tended to use their market power to negotiate alliances with small independent firms 'in order to appropriate the technological knowledge generated by both small firms and the public sector' (Hayward 1998: 85; see also Mossialos and Mrazek 2002: 152). A new form of hierarchy is thus formed by these collaborations between large firms and small vulnerable ones. This type of relationship is likely to give way to mergers and acquisitions as the dominant trend within the biotech sector over the next decade, as large firms directly acquire the most successful smaller ones, which have borne the initial risks (Cockburn 2003).

The demographic trend identified by most of the firms included in this study as most significant is the continuing ageing of the population in advanced capitalist countries, which will lead to a marked increase in expenditures in all health-related sectors by and on behalf of older people. In terms of particular country markets, China is identified by many of the firms included in this study as being a key strategic market for their expansion over the next two decades. There are a number of reasons for this. The Chinese economy has grown rapidly in recent years, China is the most populous country in the world, and the reform process in what is a nominally Communist country continues to expand the role of the market in the economy. Under the Maoist system, healthcare services were based mainly upon work units such as factories and agricultural communes. The process of market reform in China has largely put an end to this system, with access to private services based upon ability to pay, and since 1980 health services have been open to foreign investment (Chanda 2001: 39). Pro-market reforms in China's healthcare system have also created opportunities for an increase in sales of pharmaceuticals and medical technologies (Li 2002: 251). Health firms usually do not develop treatments aimed at the needs of the developing world, particularly Africa (even though this is where need is greatest), since the poverty of these countries renders citizens and governments unable to purchase such treatments at prices that are most profitable for the relevant firms. Pharmaceutical research and production is a good example of this (Correa 2002). China's economy, however, is expected to continue to develop rapidly, and its recent entry into the WTO can only intensify these trends.

Conclusion

The research presented here indicates that producers of pharmaceuticals and other medical equipment are highly internationalized. Some suppliers of services also have high rates of internationalization. Specialist healthcare wholesalers and distributors in particular may be highly internationalized, and the role of such companies deserves further investigation. By contrast, specialist health insurers have low rates of internationalization, and predominantly serve the US market. Many firms providing general insurance services are highly internationalized financial corporations, but health insurance is often a relatively small part of such companies' business. Rates of internationalization among the (mainly American) direct providers of health services included in this analysis are low, the exceptions being diversified Japanese and Korean conglomerates providing hospital services in their home countries, and assisted living facilities run by the international hotel chain Marriot. As only one company with significant activities related to the construction or maintenance of healthcare premises was identified, further analysis of this sector could not be undertaken.

However, the use of the G500 as the basis for this analysis may underestimate the extent of internationalization among health service providers, since such firms are often too small to feature in such a list. Furthermore, it has been argued that the internationalization of health service providers is likely to increase as for-profit providers come to play a larger role in the delivery of healthcare, principally as a result of political processes taking place at both national and international levels. Whilst technological development and demographic change is likely to lead to an expansion in the market for all health-related goods and services, the most profound changes can be expected in the area of direct health service provision. This is precisely because this sector has more usually been marked by direct state provision, in contrast to the production of pharmaceuticals and other health-related goods. Government policies aimed at the marketization of healthcare and increased involvement by for-profit providers will expand the opportunities for such firms. As US and other such providers expand abroad, this process will interact with the policies of international institutions to increase the pressure on governments to open up their health sectors further to foreign provision, and to abandon practices which favour domestic providers. Further research in this area thus needs to focus particularly upon processes of reform that alter the balance between direct state provision, subsidy and regulation in the health sectors of different countries, and the ways in which these interact with international processes.

References

Adlung, R. (2002) Health services in a globalising world, *Eurohealth*, 8(3), pp. 18–21.

Ahluwalia, I. J. (Chair) (2002) *Health and the International Economy: The Report of Working Group Four of the Commission on Macroeconomics and Health* (Geneva, World Health Organization).

Anderson, G. F. and Hussey, P. S. (2001) Trends in expenditures, access and outcomes among industrialized countries, in W. W. Wieners (ed.) *Global Health Care Markets: A Comprehensive Guide to Regions, Trends, and Opportunities Shaping the International Health Arena* (San Francisco, Jossey-Bass).

Chanda, R. (2001) Trade in health services, working paper WG 4:5 of the Commission on Macroeconomics and Health (Geneva, World Health Organization).

Cockburn, I. (2003) *Regulation, the Evolving Structure of the Pharmaceutical Industry, and its Implications for Research Productivity*, Merck Lecture, London School of Economics, 16 October.

Correa, C. M. (2002) Public health and intellectual property rights, *Global Social Policy*, 2(3), pp. 261–278.
Docteur, E. and Oxley, H. (2003) Health-care systems: lessons from the reform experience, OECD Health Working Papers 9 (Paris, OECD).
Enderwick, P. (1989) Some economics of service-sector multinational enterprises, in P. Enderwick (ed.) *Multinational Service Firms* (London, Routledge).
Esping-Andersen, G. (ed.) (1996) W*elfare States in Transition: National Adaptations in Global Economies* (London, Sage).
European Union (1992) *Council Directive 92/50/EEC*, 18 June.
Griffith, B. and Rayner, G. (1985) *Commercial Medicine in London* (London, Greater London Council Industry and Employment Branch).
Hall, D. (2001) *Globalisation, Privatisation and Healthcare: A Preliminary Report* (Greenwich, Public Services International Research Unit/University of Greenwich).
Hall, D. and de la Motte, R. (2004) *Dogmatic Development: Privatization and Conditionalities in Six Countries* (Greenwich, Public Services International Research Unit/University of Greenwich/ War on Want).
Hayward, S. (1998) Towards a political economy of biotechnology development: a sectoral analysis of Europe, *New Political Economy*, 3(1), pp. 79–101.
Held, D., McGrew, A., Goldblatt, D. and Perraton, J. (1999) *Global Transformations: Politics, Economics and Culture* (Cambridge, Polity).
Hoekman, B. and Primo Braga, C. A. (1997) Protection and trade in services: a survey, *Open Economies Review*, 8(3), pp. 285–308.
Hjelt, P. (2002) Global 500: the world's largest corporations, *Fortune*, 8 July.
Holden, C. (2002) The internationalization of long-term care provision: economics and strategy, *Global Social Policy*, 2(1), pp. 47–67.
Holden, C. (2003) Actors and motives in the internationalization of health businesses, *Business and Politics*, 5(3), pp. 287–302.
Keaney, M. (2002) Unhealthy accumulation: the globalization of health care privatization, *Review of Social Economy*, 60(3), pp. 331–357.
Lethbridge, J. (2002) Venture capital and private equity investments in health care, paper to GASPP Seminar No. 5, *The emerging global markets in social protection and health: implications for socio-economic security*, organized in collaboration with the International Labour Organization and the World Health Organization, Inter University Centre, Dubrovnik, Croatia, 26–28 September.
Li, X. (2002) Shifting the 'burden': commodification of China's health care, *Global Social Policy*, 2(3), pp. 248–252.
Lipson, D. (2001) GATS and trade in health insurance services, working paper WG 4:7 of the Commission on Macroeconomics and Health (Geneva, World Health Organization).
Mishra, R. (1999) *Globalization and the Welfare State* (Cheltenham, Edward Elgar).
Mohan, J. (1991) The internationalization and commercialization of health care in Britain, *Environment and Planning A*, 23, pp. 853–867.
Moran, M. and Wood, B. (1996) The globalization of health care policy?, in P. Gummett (ed.) *Globalization and Public Policy* (Cheltenham, Edward Elgar).
Mossialos, E. and Mrazek, M. (2002) Entrepreneurial behaviour in pharmaceutical markets and the effects of regulation, in R. B. Saltman, R. Busse and E. Mossialos (eds) *Regulating Entrepreneurial Behaviour in European Healthcare Systems* (Buckingham, Open University Press).
Price, D. and Pollock, A. M. (2003) The public health implications of world trade negotiations on the General Agreement on Trade in Services and public services, *Lancet*, 362, pp. 1072–1075.
Price, D., Pollock, A. M. and Shaoul, J. (1999) How the World Trade Organization is shaping domestic policies in health care, *Lancet*, 354, pp. 1889–1891.

Ruane, S. (2001) The General Agreement on Trade in Services, New Labour and the implications for health policy, paper to the Social Policy Association Annual Conference, Belfast, July.

Ruigrok, W. and van Tulder, R. (1995) *The Logic of International Restructuring* (London, Routledge).

Sbarbaro, J. A. (2000) Trade liberalization in health insurance: opportunities and challenges – the potential impact of introducing or expanding the availability of private health insurance within low and middle income countries, working paper WG 4:6 of the Commission on Macroeconomics and Health (Geneva, World Health Organization).

Sykes, R., Palier, B. and Prior, P. M. (eds) (2001) *Globalization and European Welfare States: Challenges and Change* (Basingstoke, Palgrave).

UHC (2003) *United Healthcare International*, available at: http://www.uhcglobal.com/ (accessed 11 December 2003).

UNCTAD (2002) *World Investment Report 2002: Transnational Corporations and Export Competiveness* (Geneva, United Nations Conference on Trade and Development).

UNCTAD (2003) *World Investment Report 2002: FDI Policies for Development: National and International Perspectives* (Geneva, United Nations Conference on Trade and Development).

Yeates, N. (2001) *Globalization and Social Policy* (London, Sage).