QUASI-MARKETS AND CONTRACTING FOR HEALTH SERVICES

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Abstract

In 1993, the New Zealand health system was radically restructured. Area health boards, which were responsible for both purchasing and providing health services, were replaced by a quasi-market system in which public and private providers compete for public funds via contracts with purchasers. This thesis employs transaction cost economics (TCE) to examine the theory, the policy and the practice of the emerging quasi-market for health services in New Zealand. The main hypothesis which emerges from TCE is that contractual arrangements, which differ in their costs, will be aligned with transactions, which differ in their attributes, in a way which minimises the sum of production and transaction costs. If services involve specific assets, or are difficult to measure and monitor, the transaction costs of contracting are likely to be high.

The structure of the New Zealand health system prior to and after 1993 are described and analysed. Features of the emerging quasi-market include monopsonistic regional purchasers, a highly concentrated market for hospital services, weak budget constraints for CHEs, and a lack of competitive or political neutrality. All of these factors tend to dilute any incentives for efficiency.

The TCE framework is used to examine the early contracting experiences and contractual relationships for four different health services: rest homes, primary health clinics, surgical services and mental health services. The selection of these four services was based upon a profiling of the characteristics which, according to TCE, are likely to influence the cost of transactions. The results support the central argument of the thesis. That is, that the costs of contracting are higher for some services than for others because of inherent differences in the attributes of different health services. A blunt policy instrument which forces a split between the roles of purchaser and provider for all health services fails to recognise these differences and may prohibit the development of organisational structures which might otherwise be selected as means of economising on the transaction costs. Efforts must now be made to encourage a more discriminating approach to contracting in which a classical or neo-classical style of contracting is retained for those services where potential efficiency gains are high and the transaction costs of contracting are relatively low while longer-term relational contracts are developed for services where transaction costs are high.

Declaration

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person where due reference is not made in the text.

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INTRODUCTION

During the late 1980s and early 1990s, the reform of health care systems became a topic for heated debate in the health economics literature. The 1970s and early 1980s had been difficult years for the health sector. Real expenditures in many countries had increased at rates which were substantially higher than real economic growth and which many governments regarded as unsustainable (Table 1). A major objective of health policies in many countries was therefore to contain aggregate expenditure levels. The general thrust of these policies was towards tighter government regulation and control on the supply side. Strategies included controls over capital expenditure and/or hospital bed numbers (eg. Netherlands, Canada, USA), restrictions on the use of medical technology (Netherlands), fixed budgets for hospitals (NZ, Canada, Netherlands), limits on doctors fees (Canada), centralised price setting for hospital services (Germany, USA) and, in tax-funded systems, tighter control over public health budgets (UK, NZ and Sweden).

These rather broad generalisations concerning international health policies shroud the particular problems and policy responses of each country. Nevertheless, it was clear that, by the end of the 1980s, the rates of increase in health expenditures had declined in a majority (although by no means all) of the OECD countries. But other problems were emerging. Rapid improvements and innovation in both clinical knowledge and medical technology meant that it was possible to treat an ever-increasing range of health problems. Health systems were therefore expected to provide an increasing range and volume of high quality services. In privately funded systems (most notably the USA but also the private component of health systems in a number of other countries), these pressures resulted in higher costs and higher prices, and hence limited access for an increasing proportion of the population. In publicly funded systems, attempts to maintain universal access whilst containing total expenditure resulted in lengthening waiting lists and waiting times for the treatment of non-acute conditions (eg. UK, NZ and Sweden), poorly maintained facilities and equipment, and restrictions on access to new technologies.

Table 1: Health expenditures as a per cent of GDP: 1972, 1982 and 1992

	Health expenditure as % GDP			% change	
Country	1972	1982	1992	1972-1982	1982-1992
Australia	5.8	7.7	8.8	+31	+14
Austria	5.4	8.0	8.8	+48	+10
Belgium	4.3	7.4	8.2	+65	+11
Canada	7.2	8.4	10.1	+17	+20
Denmark	6.3	6.8	6.5	+8	-3
France	6.2	8.0	9.4	+29	+17
Finland	6.0	6.8	9.4	+13	+38
Greece	3.9	4.4	5.4	+13	+23
Germany	6.5	8.6	8.7	+32	+1
Iceland	5.7	6.9	8.5	+21	+23
Ireland	6.7	8.4	7.1	+25	-15
Italy	5.9	6.9	8.5	+17	+23
Japan	4.8	6.8	6.9	+42	+3
Luxembourg	4.6	6.9	7.4	+50	+7
Netherlands	6.7	8.4	8.6	+25	+2
New Zealand	**5.3**	**6.9**	**7.7**	**+30**	**+12**
Norway	5.9	6.8	8.3	+15	+18
Portugal	4.1	6.3	6.0[a]	+24	-5
Spain	4.4	6.0	7.0	+36	+23
Sweden	7.5	9.6	7.9	+28	-18
Turkey	n/a	3.6	4.1	-	+14
United Kingdom	4.7	5.9	7.1	+26	+20
United States	7.6	10.3	14.0	+36	+36

[a] Alternative estimates suggest that the 1992 ratio may be higher

Source: OECD (1994) *The Reform of Health Care Systems: A Review of Seventeen OECD Countries*, OECD, Paris, p.37.

Shifting paradigms

Health systems were also being subjected to the scrutiny of neo-classical economic theory and market-oriented values which had begun to dominate government policies in the mid 1980s. This shift in economic paradigm was especially significant for the publicly-funded and centrally-planned health systems of northern Europe and New Zealand because it called into question the fundamental principles of social justice and universal entitlement upon which many of these systems had been based. In the New Zealand context, the shift

away from any commitment to an egalitarian society by the New Zealand government has been discussed by Boston and Dalziel (1992) who noted that:

> .....important values such as human dignity, distributive justice, and social cohesion, have been given second place to the pursuit of efficiency, self-reliance, a fiscal balance, and a more limited state. (p.ix)

The debate about the appropriateness of alternative principles underlying health and welfare policy is essentially a normative one. However, the relevance of the competitive market model to health services at an empirical level has also been the subject of a long-standing debate amongst economists.[1] Proponents of the market view hold that health services are no different from other services in terms of the expected responses to market mechanisms (Logan *et al.*, 1989). Therefore, strengthening market mechanisms should improve the efficiency of health services and so achieve greater value for money. Those of the opposing view (articulated in the New Zealand context by Easton, 1987 and 1992) consider that the market model has limited application to health services. Potential sources of market failure include problems of asymmetry of information between the patient and health professional and hence a reliance on an agency relationship,[2] the difficulty of defining and measuring the output of health services, and the existence of indivisibilities and externalities (McGuire *et al.*, 1991). The re-emergence of neo-classical economics in the mid 1980s effectively rekindled the fire in this long-standing debate.[3]

The shift in economic paradigm highlighted the fact that centrally-planned health systems lacked real incentives for either technical or allocative efficiency. Moreover they were often more responsive to the demands of the providers working within the system than to the needs of the people they were meant to serve. Consumer choice was often

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1. See for example, Maynard and Williams (1984), Goldsmith (1984), Logan *et al.* (1989), Donaldson and Gerard (1993), Hsiao (1994) and Evans (1997).

2. Asymmetry of information of a different sort leads to adverse selection in private insurance markets. In this case it is the buyer who usually has better information than the seller about their risk status. If insurers are unable to set rates in line with an individual's risk status, private insurance markets may be inefficient in handling risk. This argument has provided one justification for universal health insurance (see for example, Evans, 1984, and Donaldson and Gerard, 1993). Other writers have focused on methods of improving competitive insurance markets through innovations in policy design which mitigate the consequences of adverse selection (eg. Palfrey and Spratt, 1986, Schlesinger and Venezian, 1986).

3. See for example, Logan *et al.* (1989), *Health Affairs* (special issue, Summer 1988), and Evans (1997).

limited (and sometimes non-existent). Information systems were poor and the accountability of providers was weak.

At the same time, a general acceptance seemed to have emerged, even amongst many market-oriented economists, that free markets were likely to have their own limitations. In particular, those who need health services most are generally the least able to make rational market decisions. The chronically-ill, the mentally-ill, the young, the elderly and the poor have neither the economic resources nor the knowledge and skills to respond to their needs as rational, utility-maximising individuals (Enthoven and Eccles, 1986). The fact that no developed country follows the free market model for the funding and provision of its health services is testimony to the inherent limitations of the model. A tendency for pre-communist countries to look towards the market mechanism for solutions to the remodelling their health systems recently encouraged four eminent health economists from Canada, the UK, the World Bank and the USA, to publish the following statement:

> Established market economies do not use the market mechanism to govern their health care sectors. Market forces are enlisted here and there where it is safe to do so. But the important decisions regarding the allocation of resources are NOT left to the market in any western country, even the United States. (Evans *et al.*, 1994, p.359.)

The emergence of quasi-markets

The questionable validity of some of the competitive market model's underlying assumptions for the health care market, together with the political implications of rejecting the normative principles upon which publicly funded health care had historically been based, encouraged theorists to seek solutions which introduced the necessary incentives for efficiency without undermining universal access. The ideas of Alain Enthoven were particularly influential in this regard. Enthoven had for many years been developing a model for "managed competition" in the US health system (Enthoven, 1980, 1981; Enthoven and Eccles, 1986). In essence, his proposals combined two main themes. These were the creation of a network of competing health plans that would operate under economic incentives to encourage efficiency, and the development of a regulatory framework that would ensure the equitable access and operation of these plans.

Invited to examine the National Health Service (NHS) in the UK in 1985[4], Enthoven proposed an "internal market" model in which District Health Authorities (DHAs) would buy and sell services through contracts with selected providers and other districts (Enthoven, 1985a and 1985b). In effect, districts would be the British version of health maintenance organisations (HMOs) except that, unlike HMOs, districts would not generally compete for clients. Instead, each DHA would be provided with a population-based budget which would be used to provide, or buy, health services for the people living in their area. The underlying theory was that districts would have an incentive to contract with the most efficient providers. The continuation of universal coverage meant that access would not be compromised in the pursuit of efficiency.

During the end of the 1980s and early 1990s a number of countries with publicly funded health systems, including New Zealand, developed proposals for reform. While the details of the reforms for each country were somewhat different, the influence of Enthoven's original proposals was apparent. As in the Enthoven model, the primary aim of the reforms was to introduce market-style incentives for efficiency through competition between providers.[5] However some of these proposals (most notably Sweden, the UK and NZ) differed from the Enthoven model in one important way. This was that, unlike HMOs which combine the functions of funder and provider, the functions of purchaser and provider would be split between separate agencies. Thus a 'quasi-market' for health services would be created.

The term 'quasi-market'[6] has become common parlance in the UK where it is used to describe the economic arrangements that have emerged in recent years for the provision of a range of welfare services such as housing, education, community care and health following market-oriented reforms. These economic arrangements aim to incorporate the

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4. By the Nuffield Provincial Hospitals Trust.

5. In the Netherlands and New Zealand, the original proposal was also to introduce competition between purchasers. However, in New Zealand this proposal has been shelved indefinitely. Further details are provided in Chapter 4.

6. The term was apparently originally used by Oliver Williamson (1975, p.8) to refer to any market which features providers which do not adhere to the usual profit-maximising model of firms (eg. non-profits such as hospitals and government bureaus). More recently it has been popularised by Le Grand (1991) and others in the UK through the SAUS Quasi-Market Programme based at Bristol University.

incentives for efficiency which are assumed to flow from competitive markets whilst maintaining the redistributive properties of public sector funding.

Quasi-markets for health services have a number of distinctive features. On the demand side, consumer purchasing power is generally not expressed in money terms (Le Grand, 1991). Instead, the government maintains the role of funder so that consumers face a zero - or near zero - price at the point of use. The choices of consumers are constrained, not by their incomes, but by the allocation decisions which have been made on their behalf by third parties (purchasers). Decisions about the level and regional distribution of funds are also made centrally by government rather than by any market mechanism. On the supply side, public and private providers compete with each other to win contracts with purchasers for public funds. However, unlike conventional markets, many providers are not-for-profit organisations.[7]

Quasi-markets, like conventional markets, are governed by a set of rules which shape the nature of the market. These may be formal rules, defined by the government, or informal rules determined by the players in the market. The formal rules may include specific regulations designed to govern the operation of the quasi-market for health services, as well as general legislation which applies to market transactions more broadly. Similarly, the informal rules may also emerge in a number of different ways. They may be a result of negotiated agreements between interacting parties, of precedents set by the behaviour or decision of a particular party, or simply through a set of voluntary - and possibly tacit - codes of practice. In all instances, the rules are likely to be open to interpretation so that the shape of the market may shift over time as different parties operate according to their own particular interpretation of the rules.

Central to quasi-markets is the notion of 'contract' which replaces bureaucratic organisational arrangements as the mechanism by which purchasers and providers transact with each other (Martin, 1995). Barker *et al.* (1990) suggest that this vertical disintegration of purchasers and providers (and contracting out by the state more generally) is the opposite process to the tendency of markets to integrate vertically as a means of minimising the costs of transacting between separate organisations. In seeking to understand this apparent paradox it is useful to refer to the analytical framework of new

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7. As Le Grand (1991) has noted, the objective function of these organisations is not always clear. This point is discussed in more detail in section 4.3 and Appendix 1.

institutional economics (or the new economics of organisations as it is sometimes called). This general body of theory encompasses transaction cost economics, agency theory, and the economics of property rights but draws on elements of neo-classical microeconomics, economic history, and industrial organisation. The common thread is the notion that the study of transactions between economic actors is central to the development of institutional form. The thesis draws on all of the elements of new institutional economics but looks primarily towards the insights provided by transaction cost economics (TCE), especially the work of Oliver Williamson.

Aims of the thesis

This thesis examines the theory, policy and practice of the quasi-market for public health services in New Zealand. I shall argue that the transaction costs of contracting have generally been high, especially for service providers. Moreover, any incentives for efficiency have sometimes been undermined by aspects of the regulatory, institutional and cultural environment that prevails in New Zealand. Therefore, while contracting may be appropriate for some health services, for many services the costs of contracting are likely to outweigh any gains in productive efficiency.

The research has a number of specific objectives. The first is to review the fundamental arguments which underpin TCE together with some common criticisms, and to consider how this general framework might be usefully employed to analyse the new quasi-markets for health services in New Zealand and elsewhere. A second objective is to describe and analyse the policy environment in which contracting for health services takes place in New Zealand, and to consider any strengths and weaknesses with respect to its underlying incentive structures. A third objective is to examine whether contracting between purchasers and providers involves different costs and benefits and different contractual relationships for different health services as predicted by the TCE framework.

The thesis was written in the first three years following the introduction of a quasi-market for health services in New Zealand. Much of the empirical content therefore relates to a market which is in the very early stages of development. This provides some useful insights into the process of translating policy into practice, and allows the identification of

factors which are influencing the development of relationships and practices within the new structure.

Outline of the thesis

The thesis is divided into three separate but related parts. These cover the theory, the policy and the practice respectively of quasi-markets and contracting for health services. The first chapter provides a general overview of the basic theory of TCE, together with some conceptual criticisms. It is argued that, although TCE has a number of weaknesses, none of these necessarily imply that the basic theory is fundamentally flawed. Rather, it is sometimes necessary to take a broader perspective by considering additional influences which lie outside of the standard version of TCE. Chapter 2 views the quasi-market for health services through the conceptual lens provided by this theoretical base. Specifically, the transaction cost framework is used to identify the potential costs and benefits of replacing hierarchies with contracts between purchasers and providers. The general conclusion from this first part of the thesis is that it is inappropriate to assume that the splitting of purchasers and providers *per se* will achieve net efficiency gains. Rather, one would expect different contractual relationships and different types of contracts to emerge for different types of health services. The implication of this is that the potential for efficiency gains from the purchaser-provider split is greater for some services than for others.

Part 2 commences (in Chapter 3) with a brief historical overview of the New Zealand public health system and of the issues leading up to the 1993 reforms. This chapter also provides details of the reform proposals and the economic environment in which they were introduced. Chapter 4 describes and analyses the nature of the emerging quasi-market in New Zealand. The focus here is on institutional structures and the formal and informal rules which guide and influence the behaviour of players within them. The general conclusion is that the quasi-market for health services differs markedly from the environment in which contracting between private parties usually takes place.

The final part of the thesis presents two empirical analyses of the quasi-market and contracting experiences in New Zealand in the first two years. An important assumption underlying the reforms was that efficiency would be stimulated by competition among

providers. Chapter 5 therefore addresses the question of the extent to which competition actually exists in New Zealand. A methodology is developed for measuring market concentration for a selection of surgical services. Comparisons are made between 1992 and 1994 to examine whether the introduction of the reforms had any early impact on the market structure of these particular services.

The second empirical study is presented in chapters 6, 7 and 8. This is a qualitative study which examines contracting methods and practices in the first two years of the reforms. Following the conclusions from Part 1 (i.e. that different contractual relationships and different types of contracts are likely to emerge for different types of health services) a cross-sectional analysis is used to explore the contracting experiences of four different health services. The four selected services are rest homes, primary health clinics, surgical services and mental health services. The research methodology is described in Chapter 6 while Chapters 7 and 8 are devoted to the presentation and discussion of the results. Issues reported in these two chapters include the contracting environment, types of contracts, the contracting process, contractual relationships, and reported costs and benefits of contracting.

The thesis concludes with a summary of the main findings, together with a discussion about the implications of these for the future direction of health policy. A glossary of terms and abbreviations is provided at the end of the thesis.