

Incomplete Contracts: Implications for the Organisation of the Public Sector

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Source: Lewis Evans, Graeme Guthrie and Neil Quigley *Contemporary Microeconomic Foundations for the Structure and Management of the Public Sector* New Zealand Treasury, Working Paper 12/01, pp.77.



Background

- 1980s: New developments in institutional economics and industrial organisation
 - Revolution in thinking about the organisation of the public sector – the “New Public Management” (NPM)
- In the past 20 years, has microeconomics produced any new ideas that might cause us to re-think the organisation of the public sector?
- Answer yes: Evans, Guthrie, Quigley (2012) Treasury Discussion Paper 12/01 *Contemporary Microeconomic Foundations for the Structure and Management of the Public Sector.*

New Public Management circa 1980s

- New ideas about the existence and boundaries of firms:
 - Authority may have lower transaction costs than the market (Coase on why firms exist)
 - Transaction costs (Williamson, Alchian, Kilne & Crawford) with relational specific investments can be high: *ex post* hold up, haggling etc
 - Agency theory (Jensen and Meckling; Achian & Demsetz, Mirrlees etc etc)
 - Contestability as a driver of efficiency in commercial services
- NPM was about applying these ideas to the public sector in NZ.



Theory of the Firm

- A satisfactory theory of the firm will provide a unified analysis of the costs and benefits of integrating activity within a firm
- Contracts are incomplete, not just because of transaction costs, but because of pervasive information, observation and enforcement problems
 - Many outcomes are not contractable even with very low transactions costs: actual human capital, service quality, dynamic response to change.



Theory of the Firm #2

- Will all owners of a firm face the same transaction and agency costs?
 - If yes, then ownership does not matter
- But, in a whole variety of contexts there does seem to be evidence that some activities are more profitable with one set of owners than they were with another
 - In that case, a theory of the firm needs to explain the allocation of ownership rights in terms other than transaction costs.



Incomplete Contracts

- The current focus of attempts to create a unified theory of the firm
 - Shifts the focus of attention in explaining firm boundaries to the assignment of ownership rights and away from transaction and agency costs
- Ownership = the residual decision rights in relation to matters not specified in contract
 - Understanding firms and contracts means understanding where those rights are allocated



Incomplete Contracts

- Coase: All transactions involve incompleteness
- Williamson: Specific assets create holdup problems that drive decision-making inside the firm
- Oliver Hart (with Grossman and Moore) has broadened this framework by focussing on ownership as the provider of incentives to invest in assets.
 - This investment-focussed framework is relevant to the allocation of decision rights to different owners as well as to the problem that Williamson addressed



Grossman and Hart *JPE* 1986


- The seminal paper in the theory of the firm in the last 25 years
- A unified theory of the costs and benefits of integrating activity with a firm.
- Boundaries of the firm determined by the efficiency of allocating the residual rights of control to different parties
 - A firm is a collection of assets that have a single owner (ie, that are unified by the framework for residual decision-making), not a “nexus of contracts”

Allocation of Ownership Rights

- Contracting out is about who owns the residual decision rights in matters not specified explicitly in the contract, not transaction costs
- Ownership is allocated to the agent whose non-contractible effort adds the most value to the project
 - Agents will not invest (or invest less) unless they have residual control rights
 - Ownership sits with the party with the opportunity to make the investment that adds the greatest value



Questions


- How would we analyse the costs and benefits of making GPs salaried employees of the Ministry of Health or DHBs vs the current system of GPs running independent businesses (albeit partly government funded)?
 - Grossman and Hart (1986) on the difference between life insurance and general insurance sales models – why were general insurance agents independent, but life insurance agents employees of the insurer?
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The Incomplete Contracting Answers

- An incomplete contracts approach would say that the difference between the GP and insurance models is not related to transaction or agency costs, but to ownership of the client list
 - When they are independent, GPs own their patient list and are the residual claimants in non-contractible effort in providing services to patients
 - General insurance agents owned their client lists because policies were interchangeable, non-contractible effort by the agent added the most value to customers, so ownership by the agent was optimal



A Dynamic Theory of Ownership


- Ownership provides rights to make decisions relating to present and future contingencies and plans
 - Ownership of decision rights over noncontractible elements is therefore forward looking
 - It is therefore more explicitly dynamic than agency and transaction cost theories have tended to be (ie it is explicit that the best response today may not be best tomorrow)
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Real Options

- Uncertainty about the payoff from investment is pervasive: much investment is irreversible.
 - The option to delay investment, and obtain further information (eg about demand or the path of technical change) is valuable
 - The option to invest immediately may be valuable if the opportunity (eg funding) is time-limited.
- The “bad news principle” – investing when you should have waited is costly.



Real Options #2

- Options are a key element of contractual incompleteness:
 - Exercise of options will hinge on information that is yet to be revealed
 - May not even be possible to specify *ex ante* exactly what information is relevant to exercise of the option
 - A key element of ownership is the allocation of the right to exercise flexibility (as opposed to contractually-specified investment dates).
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Ownership and Governance

- Governance = the mechanism for the exercise of decision rights in respect of incomplete aspects of contracts (management pay, major investment decisions).
 - Focus on the inability to write complete contracts about future investment decisions
 - Differs from traditional agency theory view (incentive contracts don't resolve all aspects of incompleteness)



Ownership and Governance: Private vs Public Sector

- Incomplete contracts approach has the potential to avoid (rather sterile) debates about the efficiency of state vs private management
- Moving projects into the private sector means private exercise of ownership rights and real options
 - This is about *ex ante* efficiency of public investment decisions, not efficiency of public management
- In other words, will state or private decision-making about investment add the most value?



Ownership and Governance: Private vs Public Sector #2

- Public – private partnerships are not about private capital – they are about private monitoring and private investment decision-making
 - Design contracts to incentivize private investment in facilities and performance innovation that will produce public benefits



Regulatory Design and Incomplete Contracts

- What is the role of an undesirable trading situation (UTS) in markets?
- In the NZ electricity market

The finding that a UTS exists

and

The resolution of a UTS

are the responsibility of the Electricity

Authority: pursuant to the objective of the Act

(the long term benefit of electricity consumers)



UTS defined pursuant to Code 2010

Undesirable Trading Situation

6. Clause 1.1 of the Code defines an undesirable trading situation as:
- (a) **undesirable trading situation** means any contingency or event—
 - (i) that threatens, or may threaten, trading on the **wholesale market** for **electricity** and that would, or would be likely to, preclude the maintenance of orderly trading or proper settlement of trades; and
 - (ii) that, in the reasonable opinion of the **Authority**, cannot satisfactorily be resolved by any other mechanism available under this Code; and
 - (b) includes, without limitation—
 - (i) manipulative or attempted manipulative trading activity;
 - (ii) conduct in relation to trading that is misleading or deceptive, or is likely to mislead or deceive;
 - (iii) unwarranted speculation or an undesirable practice;
 - (iv) material breach of any law; and
 - (v) any exceptional or unforeseen circumstance that is at variance with, or that threatens or may threaten, generally accepted principles of trading or the public interest.

Regulatory Governance Design

- The UTS represents an incomplete contract that requires a decision-making framework for resolution: a regulatory authority provides for this.
- The presence of a UTS in the Code means that the electricity market rules can be less prescriptive than otherwise and more in accord with a workably competitive market: the trade off is discretion (exercised with oversight) vs more prescriptive rules



Relational Contracting

- Relational contracting – now understood as a response to contractual incompleteness
 - Response which is not based on an allocation of residual decision rights, but on establishing a framework for bargaining.
 - Competitive tenders may not work well when incomplete contracts are important



Specialised vs Conglomerate Organisations

- What is the difference between narrowly focussed firms and conglomerates?
- Incentives for choice of project vs incentives for efficient implementation of the project
 - Specialised firms will be better at identifying projects, worse at selecting projects to invest in, and more efficient at implementing projects
 - Where decisions about which projects to invest in are critical, conglomerates will be more efficient – because they can centralise evaluation of projects



Application to the Public Sector

- Thinking about the public sector this decade should focus more on thinking about allocation of decision rights
 - Who adds the most (non-contractible) value to clients, to investment decisions?
 - Can decision rights really be delegated from the Minister's office?
- This has application to the organisation of the public sector itself, and also to the boundary between the public and private sector.



Application to the Public Sector #2

- Fewer public sector organisations with fewer points at which decisions are made
- Clarification of residual decision rights in governance and monitoring
- More community and NGO ownership of service delivery
- Thinking about private ownership as an allocation of decision rights over the development of major assets and firms

