

Reforming Public Procurement in Australia via Cost Sharing Incentives

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*One major microeconomic reform that is often forgotten in the Australian microeconomic reform debate is public procurement and the use of regulation to ensure public agencies and privatised entities continually face incentives to raise productivity. At first glance it may seem novel to combine public procurement and regulation policy but they are two sides of the same coin when it comes to the delivery of public goods. In this paper we examine the deficiencies in existing procurement arrangements adopted by Australian governments and identify how governments can use tender processes/regulation and contract incentives to generate significant budgetary savings and ongoing efficiency gains. These reforms have the potential to save Australian governments up to **\$14 billion** (around **1.1 per cent** of GDP) in 2008-09 dollars each year over the medium term, based on changes to administrative and operational arrangements.*

Introduction

The theoretical literature identifies certain circumstances where governments may need to intervene in the operation of product markets to ensure the efficient and equitable delivery of public goods.

- To support 'public' service provision based on market failure criteria related to public goods which in normal circumstances are underprovided to citizens and communities by the market economy.
- To support 'public' provision of services produced by firms in industries with natural monopoly elements (declining costs, barriers to entry etc.) which could exploit their competitive position.

The decision for government is how then to provide the public goods, i.e., whether to produce these goods within the public sector, or seek to deliver these goods through the budget, or through regulation. Since the late 1980s governments of all political persuasions have rejected direct provision of public goods in favour of contracting-out the services. Given this starting point, the focus of this paper is to show how governments can use procurement process/regulation and contract incentives to help raise the productivity of Australian public sector agencies and privatised utilities helping to curb the growth in public spending on goods and services.

What follows below is an examination of the role of public procurement (especially) and regulation as a driver of microeconomic reform by improving the contracting arrangements of Australian government agencies.



This paper argues that the current practices of competitive tendering and contracting have not realised the efficiency gains that were expected from its introduction in the early 1980s. We argue that part of the reason may be due to the extensive use of fixed price (FP) contracts in situations of uncertainty, which account for a significant share of the value of contracting in Australia. Use of FP contracts in those situations has ultimately lead to contract variations and cost blow-outs – or cost plus (C+) contracts for all intents and purposes.

The theoretical literature indicates that when there is uncertainty in procurement cost, the probability of selecting the lowest cost provider through competitive tender is low, since supplier's bids become uncorrelated with their expected costs. However, an optimal risk-sharing rule for procurement induces the correct incentives in bidding and in production. In light of this, we reiterate the message of the theoretical literature of the last thirty years: use of cost-sharing (CS) contracts could yield substantial cost saving for these types of risky procurements.

Section 1 provides a recent history of public procurement in Australian. Section 2 details spending by the Australian public sector on procurement since the mid 1980s. Section 3 examines the state-of-play of procurement policies adopted by Australian government agencies. Section 4 examines the economics of the procurement decision by purchasers and suppliers and draws on the theoretical literature to explain how tendering arrangements and contract choice can be used by governments as a policy lever to generate budget savings and to raise public sector productivity. Section 5 provides an indicative costing of the likely magnitude of benefits stemming from the reform for Australian government agencies. Section 6 examines the equivalence between appropriately designed procurement policies and regulation. Section 7 looks at the potential drawbacks associated with introducing cost incentives into procurement arrangements. Section 8 provides a summary of our conclusions.



1 Background

The following section provides a recent history of public procurement in Australia.

1.1 A Recent History of Procurement in Australia

Public goods were traditionally produced in Australia by public agencies, but from the mid 1980s onwards, there was a shift away from direct 'production' towards 'outsourcing' of service provision. In 1989 Treasurer Paul Keating quipped 'if you went into a pet shop, the parrots would be squawking about microeconomic reform'. By that year the progressive corporatisation and privatisation of public trading enterprises had gathered pace. Later the reform process shifted to the general government agencies and the progressive outsourcing of agency service delivery.¹ Across the public sector managers were asked to achieve the following worthy goals:

- to better 'manage' their budgets;
- to seek to lower costs, improve productivity; and
- to provide better value for taxpayers and consumers.

The original inspiration for outsourcing came to Australia from offshore and was heavily influenced by business management literature, especially from the United States (for example, the case of airline deregulation in the 1970s) and from Great Britain (for example, the Thatcher Government's sell-off of nationalised industries from the early 1980s). The Business Council of Australia made the intellectual case for reform in this country. They argued for the progressive realignment of public service delivery to focus on "core" elements (Business Council of Australia, 1991). The Kennett Government put this logic into action from 1992 when it sold the State's electricity generation and distribution system (at a premium over market value) and in one stroke virtually eliminated Victorian net public debt. However, not all public asset sales in Australia were conducted on such favourable terms for taxpayers (for example, Tabcorp, Crown, CSL, Telstra II & III etc).

Overall, the track record of the privatisation experience of government business enterprises (GBEs) in Australia has been quite mixed (King, 2002). Indeed, the case for widespread

¹ A general government fulfils the functions of government as their primary activity. Their primary function is to provide public services that are mainly non-market in nature and for the collective consumption of the community, or involve the transfer or redistribution of income. These services are largely financed through taxes and other compulsory levies, although user charging and external funding may occur.



transfer of public utilities into private hands has very weak theoretical grounds (Laffont and Tirole, 1993).

Overall the track record for contracting out general government services is also very mixed. There have been numerous expensive failures related to the outsourcing of IT, legal and accounting functions. For example, the effective operation of the Commonwealth Department of Finance has been held back for many years by the decentralisation reforms of the late 1990s where reliance on contractors in accounting and IT services plague the effective preparation of budget estimates.² More recent examples are provided by measures associated with the Federal Governments stimulus packages from October 2008 to February 2009 in response to the Global Financial Crisis such as the failures associated with the Home Insulation, Building the Education Revolution and Strategic Indigenous Housing and Infrastructure programs: “These companies... All they are interested in is making a killing and then getting out”. (Robinson, 2009).

1.2 Arguments For and Against Contracting Out

There has been much debate over which, if any, government services should be outsourced to the private sector. This is a separate issue from the main argument of this paper. The argument put forth here concerns the efficacy of different modes of contracting on government services, and takes as given the decision to outsource those services. However, it is important to delineate the efficiency gains that proponents of outsourcing have in mind when debating the benefits of outsourcing (versus in-house provision of government services) against the efficiency gains that can be realised from proper contract selection.

The public sector rationalisation of outsourcing usually considers the trade-off between exposing decision makers to the discipline of competitive forces, and the transaction costs of writing the contract and monitoring the performance of the winning tender. The empirical findings of Levin and Tadelis (2007) for US city government contracting supports the hypothesis that outsourcing is less likely on services that entail greater transaction costs of writing the contract and monitoring performance.

The Parliamentary Library Current Issues Brief “Outsourcing-For and Against” also outlines the debate from the Australian perspective.

² Reforms were often implemented by ideologues with very little understanding of public agencies and to what end, let alone a strong economic framework for the decisions that they carried out.



The economic rationale behind 'outsourcing' was to try and 'create' a competitive market delivery mechanism where only the arthritic hand of government had previously existed.

This whilst trying to avoid paying economic rents to the proprietors of newly privatised goods and service providers who usually transferred over from jobs in general government agencies.

The key instruments that were available to government to instil competitive pressures in products markets for public goods included:

- sealed bid tender processes (especially for large general government agencies such as the former Commonwealth Employment Service and departments like Transport and Defence); and
- price regulation of oligopolistic firms (e.g. electricity, freight, water, gas, health, telecoms etc).

Outsourcing government services was expected to achieve efficiencies over in-house provision, since it involved delegating the production decision making process to residual claimants to cost saving.³

However, it should be noted that the means of delegating is the critical aspect to outsourcing: competition in the market will ensure efficient resource allocation, but limited competition for the market may leave substantial rents to the winning party.

Furthermore, in environments where there are not just few bidders, but also uncertainty in production and associated information problems, and no competitive benchmark, competition for the market through a tender process does not always lead to the desired efficiencies, as documented in McAfee and McMillan (1986).

In such cases, the incentives for cost saving depend on the form of the contract that is offered, and FP contracts do not always select the lowest cost provider.

This paper will argue that it is the reliance on FP contracts in such environments that have prevented the expected gains from outsourcing to be realised in Australia.

³ The main conclusion from the principal-agent literature is that the party which has the most control over the risk should be the owner of that risk and the recipient of any residual income. Where risk is specific to an activity, efficiency gains can be achieved through outsourcing. When returns from an activity rely on policy decisions, outsourcing is inappropriate (Quiggin, 1996, p. 2).



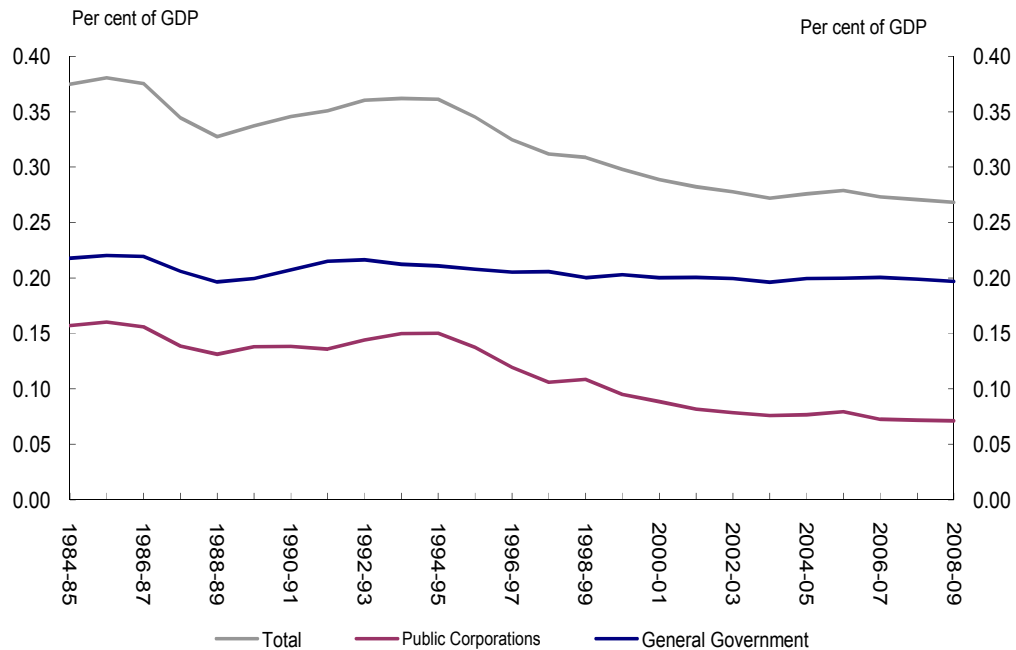
1.3 Analysis of Spending on Procurement from the Mid 1980s

One way to consider the impact of the 'outsourcing' on procurement is to look at the annual spend by governments on goods and services and capital equipment.⁴ A priori you would expect that the overall spend by government would have declined over the 'outsourcing' era. First, because asset sales transferred activity out of the public sector. Second, due to either to genuine productivity gains or service reductions associated with cost cutting.⁵ However, it is also possible that the savings achieved through reducing "in-house" activities were offset by increasing the value of purchases from the private sector (either through volume increases or by price increases).

⁴ To analyse the composition of public procurement spending in Australia we adopted a methodology similar to Minicucci and Donahue (2004). The total procurement series generated for this study is derived from lines 1223 Benefits to households in goods and services & 1229 Other Non-employee expenses from the Government Finance Statistics 5512.0 Operating Statement, adjusted for the accruals break, adding purchases of new capital Gross Fixed Capital Formation for the Australian government (General Government, Public Financial Corporations and Public Non-financial Corporations) for the Commonwealth, State and Territories. Accruals adjustment was undertaken using the publication ABS series 6248.0.55.001 Wage and Salary Earners, Public Sector, Australia. Whilst an approximation, we believe the series is the best available public estimate of total expenditure on goods and services by all government units.

The 1223 series reflects goods and services purchased by governments on behalf of households. These goods and services are not used by government in producing output, and so are not included in intermediate use. The largest components of benefit purchased by government for households are the Pharmaceutical Benefits Scheme (manufacturing) and Medicare (health). There are some smaller items such as Student Bus/Rail passes (transport).

⁵ Measuring public sector productivity is notoriously difficult. Within a productivity framework, we are aware of only one study of Australian government sector productivity as a whole, which found no growth in government administration total factor productivity in the seven years to 1993-94 (Verikios 1998).

**Chart 1 Procurement Spend by Australian governments by sector**

Source: Australian Bureau of Statistics, Government Finance Statistics 5512.0, National Accounts 5204.0, Wages & Salary Earners, Public Sector, 6248.055.001.

Note: Spending series has been reconstructed to overcome the structural break in 1998-99 with the introduction of accrual accounting. Details can be obtained from the authors.

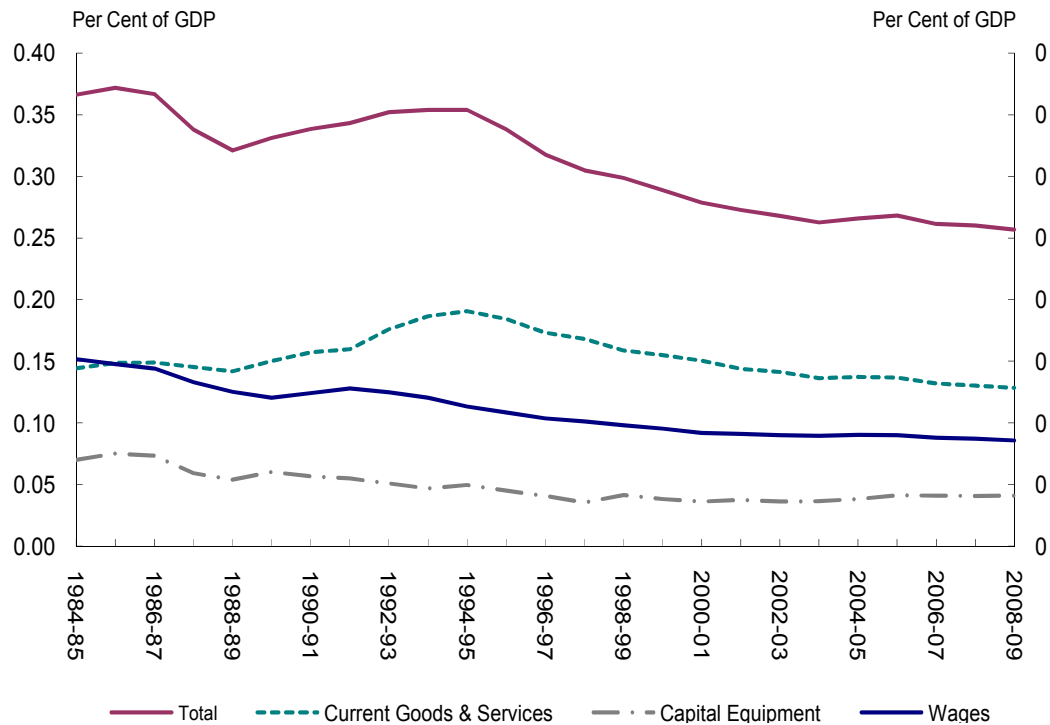
Overall procurement spending has fallen from **36 per cent** of GDP to around **26 per cent** of GDP (or by 10 percentage points of GDP) since 1983-84. Importantly, almost all of this reduction in the 'expenditure' of government is due to the declining share of public corporations (Chart 1) which fell by 8.9 percentage points from 16 per cent of GDP in 1983-84 to **7.1 per cent** of GDP, whereas general government spending fell by only 0.8 percentage points from **20.2 per cent** of GDP in 1983-84 to **19.4 per cent** of GDP by 2008-09. Most of the decline in overall spending is attributable to rolling privatisations which occurred from 1988 to the late 1990s (see **Appendix 1**). Over the same period the GDP share of general government purchases has stayed about the same.

Another way to consider the impact of the 'outsourcing' wave on public procurement is to look at the annual spend by government on different types of payments. Ex ante, it would be expected that an overall decline in the share of public sector spending should lead to a reduction in purchases of primary factors (especially labour, and also capital equipment). However, given that government must deliver various program services, the decline in



in-house activity may not equate to a decline in total procurement spend. Jobs may shift out of government (as departmental spending falls) and into private sector agencies, whilst overall program spending remains stable or increases. These predictions are borne out in Chart 2.

Chart 2 Public Sector Purchases From 1984-85 by component



Source: Australian Bureau of Statistics, Government Finance Statistics 5512.0, National Accounts 5204.0, Wages & Salary Earners, Public Sector, 6248.055.001.

Note: Spending series has been reconstructed to overcome the structural break in 1998-99.

Overall public sector spending falls by around 10 percentage points of GDP over the period from 1983-84.

- Payroll declines from **15.4 per cent** of GDP in 1983-84 to **8.9 per cent** of GDP in 2008-09, or by **6.5 per cent**.
- Capital spending also declines from **7.3 per cent** of GDP in 1983-84 to **4.1 per cent** of GDP to 2008-09, or by around **3.2 per cent**.⁶

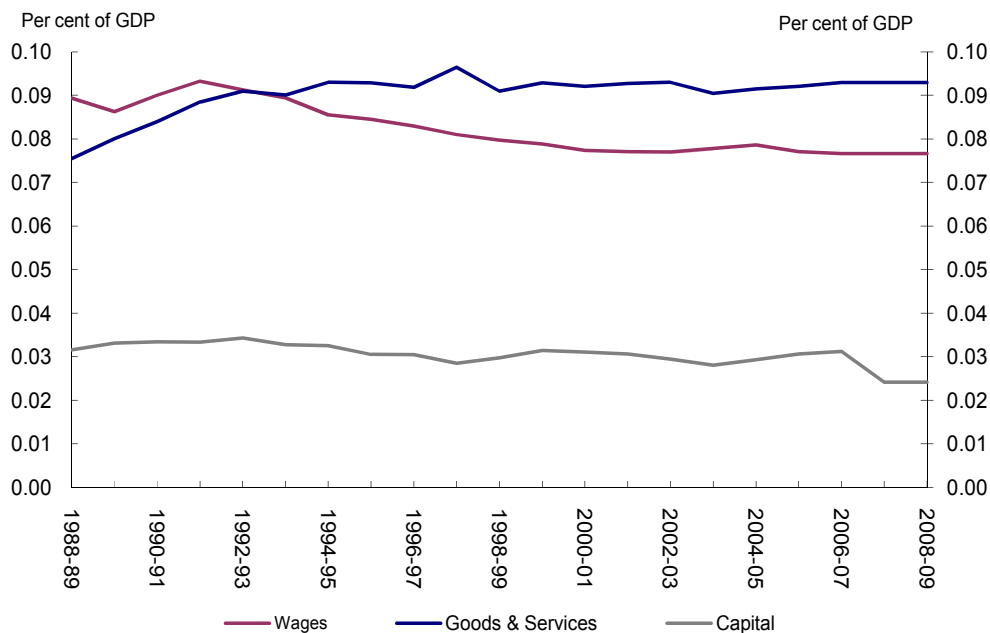
⁶ Capital spending on public infrastructure is defined here as those assets that deliver basic services to industry and households, including economic infrastructure (for instance, electricity, gas, water, transport, storage, and



- Purchases of goods and services rise from **13.4 per cent** of GDP in 1983-84 to **19.1 per cent** of GDP in 1994-95, by **5.7 per cent** of GDP, only to fall back again to **13.2 per cent** of GDP by 2008-09.

It is clear that for the public sector as a whole there has been a tendency to outsource activity, especially given the progressive downsizing of the public corporations sector.

Chart 3 General Government Purchases from 1988-89 by component



Source: Australian Bureau of Statistics, Government Finance Statistics 5512.0, National Accounts 5204.0, Wages & Salary Earners, Public Sector, 6248.055.001.

Note: Spending series has been reconstructed to overcome the structural break in 1998-99.

What was the direct impact of 'outsourcing' of spending on procurement on the general government sector? We have already seen that the overall procurement spend remained remarkably stable for the general government sector. However, you would expect that there was some offsetting increase in purchases of recurrent goods and services if purchases of both primary factors (especially labour) were on the decline.

communications) and social infrastructure (for instance, education, health and recreation facilities). While we include only public investment at least half of this infrastructure in Australia is owned by the private sector.

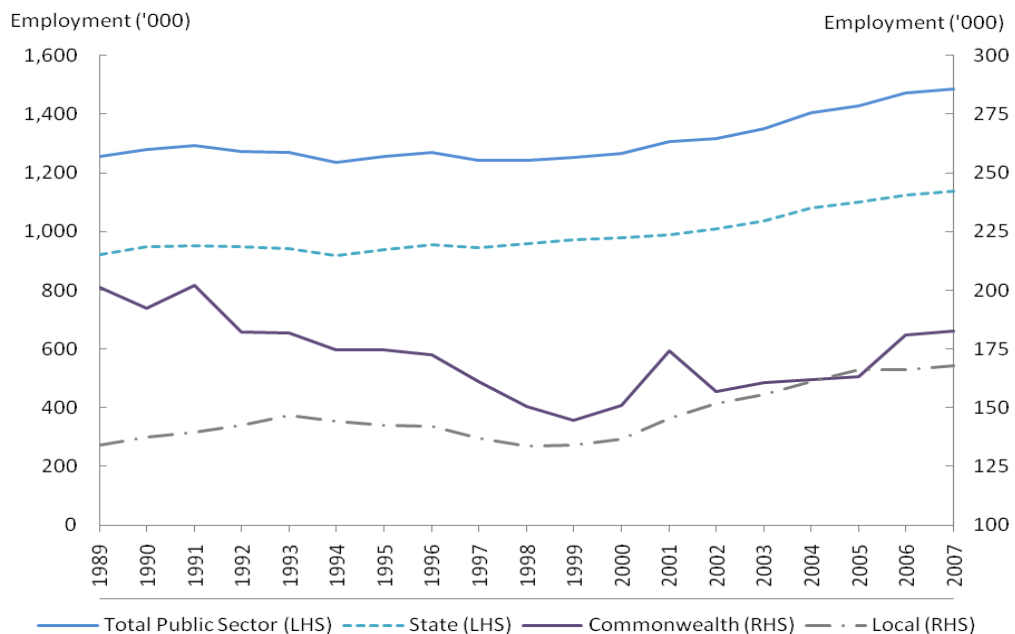


This is exactly what is borne out in Chart 3. The timing of the upturn of purchases of goods and services from the late 1980s coincides with a decline in the public sector wage bill.

Purchases of goods and services rise from **7.6 per cent** of GDP in 1988-89 to **9.6 per cent** in 1995-96 only to fall marginally to **9.3 per cent** of GDP in by 2008-09 (with purchases higher by around **1.7 per cent** of GDP overall). Payroll declines from the high of **9.3 per cent** of GDP during the recession in 1991-92, to **7.7 per cent** of GDP in 2008-09, or by **1.6 per cent**. Capital spending declines modestly by **0.1 per cent**, but is still lower overall if you start looking at the series from the early 1980s.

It is worth noting from 1988-89 total employment in the Commonwealth General government fell by around 68,000 places up to 1998-89, but has since then recovered somewhat to decline overall by only 25,000 by the end of 2008-09. These significant reductions in employment numbers did not occur in state or local governments – as is represented in Chart 4.

Chart 4 Public Sector Employment in Australia (State & Federal)



Source: Australian Bureau of Statistics, Survey of Employment and Earnings

It should be noted that after more than a decade of procurement reform in the general government sphere, there is no downward trend in spending. This would suggest that 'outsourcing' as a policy has not delivered a significant savings dividend or Australian



governments are using any efficiency dividend from procurement reform to purchase and even greater volume of public services.

In terms last financial year 2008-09, Australian government agencies will spent around **\$214 billion** on goods and services (including capital and excluding public sector salaries), over **17 per cent** of GDP.

- Around **\$185 billion** of this spending is estimated to be paid directly to Australian based enterprises who either fill the order using Australian or foreign based (in-house) suppliers, or through their sub-contractors.
- Approximately **\$29 billion** of this spending is estimated to be paid directly by government agencies to foreign suppliers and up to one third of this is due to defence.⁷
- An estimated **\$163 billion** was paid domestically to suppliers across a broad cross section of Australian industries, the largest of which will include:
 - **\$11.4 billion** paid for telephone, postal and courier services;
 - **\$9.9 billion** paid for legal, advertising and accounting services;
 - **\$9.4 billion** paid to wholesale traders; and
 - **\$9.0 billion** paid for employment placement, security and cleaning services.⁸
- An estimated **\$51 billion** will be paid domestically for capital items including:
 - **\$35 billion** spent on engineering construction projects of which a significant share contributed is related to transport and electricity assets; and
 - **\$16 billion** will be spent on imported capital equipment.

⁷ It is worth noting that the Australian Bureau of Statistics has no ability to track imports by public or private sector, let alone being able to ascertain the value of private defence related supplies in imports. This was not always the case but the introduction of the new customs computer system in 2005 put an end to detailed monitoring of import clearance data.

⁸ The source is ABS catalogue number 5209.0.55.001 Australian National Accounts: Input-Output Tables - Electronic Publication 2004-05, Table 2. We have derived the share of public sector usage of supplies and matched these to 2008-09 estimates for budget expenditure by Australian governments.



- This **\$214 million** in direct spending by Australian Governments agencies does not include:
 - transfer payments to households which total around **7 per cent** of GDP each year;
 - infrastructure spending which governments help cause to be created via public private partnerships (PPPs) which added a further **\$25 billion** to gross fixed capital formation in 2008-09;⁹
 - capital grants made by government to universities, private schools and private hospitals that create assets found on the balance sheets of universities and private firms, which are expected to be worth around **\$5 billion** in 2008-09; and
 - private sector spending on privatised public infrastructure which is worth significantly more again in new infrastructure spending.¹⁰

In terms of spending by the Australian Government, Table 1 below lists the top 10 agencies by contract value in 2008-09 of those bound by the Financial Management and Accountability Act (FMA) 1997 to report contracts in excess of \$10,000. It does not represent actual expenditure, rather contractual information reported during 2008-09. The top 10 agencies account for approximately \$28 billion, which is 83.7 per cent of the value of all reported contracts.

⁹ For a list of current PPP projects please see the following:

<http://www.infrastructureaustralia.gov.au/project-pipeline/index.aspx>

There is no oversight and monitoring of the value of PPP projects in Australia so the value of \$25 billion is based on a phone survey of state and federal government contacts. The Victorian Treasury estimated the figure to be approaching \$20 billion in 2004
http://www.pppforum.gov.au/national_pipeline/projects_in_the_market.

¹⁰ The procurement series derived for this paper relating to expenditure on goods and services in Government Finance Statistics 5512.0 is only loosely equivalent to an intermediate use component in the Input Output 5209.0.55.001 publication. It would exclude some components that should be included, and the reverse would also be true. However, it does give a ballpark estimate for total expenditure on goods and services by general government units, with the main omission relating to the imputed use of financial services (FISIM). We have used the demand shares for the Government Administration and Defence columns in Table 2 to derive approximate dollar value of expenditures on different categories of items.

**Table 1 Contracts Reported by the Top 1 FMA Agencies in 2008-09**

Agency	Value [\$m]	% of total value
Defence Materiel Organisation	9,537	28.9
Department of Defence	8,917	27.1
Department of Immigration & Citizenship	1,828	5.5
Department of Education, Employment and Workplace Relations	1,715	5.2
Ausaid	1,666	5.1
Department of Health and Ageing	1,067	3.2
Australian Federal Police	887	2.7
Department of Finance and Deregulation	788	2.4
Centrelink	695	2.1
Australian Tax Office	499	1.5
Total of Top 10 Agencies	27,599	83.7

Source: <http://www.finance.gov.au/publications/statistics-on-commonwealth-purchasing-contracts/index.html>

It is clear that defence contracting represents the bulk of the value of contracts in Australia. Moreover, defence contracting probably represents the bulk of contracting environments where there are few bidders, uncertain production costs, scope for cost reduction and risk averse suppliers.

2 So Much Spending: So Few Tenders

Given that Australian public sector agencies spend around **17 per cent** of GDP each year on goods and services supplied by the private sector, these outlays should be subject to transparent and accountable procurement processes, operating as substitutes for efficient economic markets.

Ideally, tender processes should be used by governments as a policy tool to help drive down the costs of program delivery, and also to reward productive and efficient private businesses. They should not be used:



- to promote political, state or regional interests, or environmental causes;
- to promote the interests of well connected rent seekers, or
- to maximise the discretion in decision making afforded procurement staff.

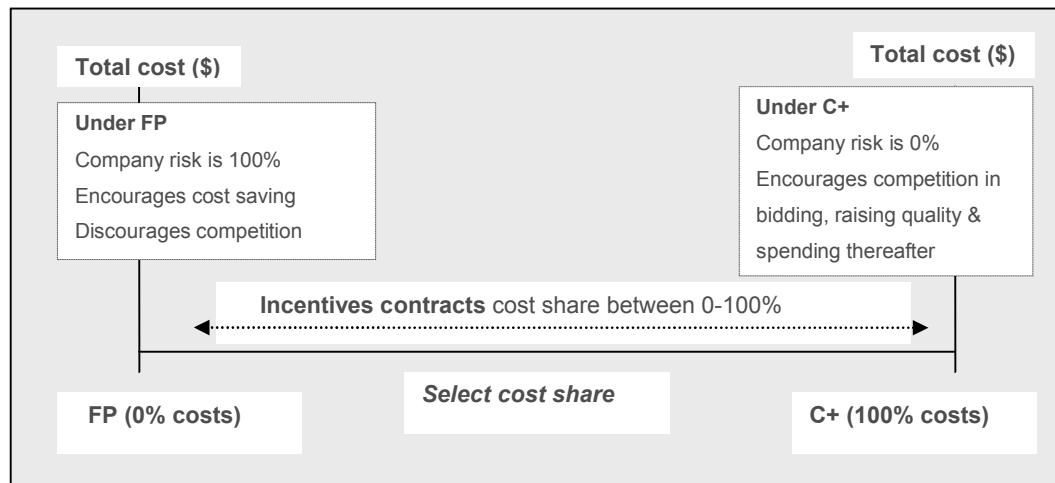
In 1996 the Productivity (Industry) Commission (PC) found that the practice of sole source service provision (or sourcing from a single supplier) was widespread and was driving up the cost of service provision for government by between **10-30 per cent**.

Unfortunately the bulk of public dollars spent on procurement in Australia are still not subject to tender. An informal survey of responsible officers at public supply, treasury or finance departments across Australian governments confirmed that only a fraction of total spending is subject to open public tender, estimated at around $\frac{1}{4}$. Another fraction of total spending is filtered through panel arrangements estimated at around $\frac{1}{4}$. This means that around $\frac{1}{2}$ of all dollars spent in public procurement in Australia are not subject to competitive tender processes. Therefore, only a small share of the potential gains to open source tendering anticipated by the PC have ever been appropriated by governments. Perhaps more disturbing is the lack of oversight permitted by some jurisdictions, and the degree of discretion afforded agency representatives. (**Appendix 2**)

3 The Economics of Contract Choice

Another key problem with public procurement in Australia is that **100 per cent** of all dollars subject to public tender are contracted via fixed price contracts. These contracts do not allow government to share the gains from cost reducing activity and so potentially lead to overpayment by agencies. The following section identifies the alternative contract options available to government which are differentiated by the extent of risk sharing between the buyer and seller (see Chart 4). They fall into three broad categories of contracts.

1. FP contracts with no cost sharing with all risk borne by the seller (see left hand side).
2. C+ contracts with no cost sharing with all risk borne by the buyer (see right hand side).
3. CS contracts denoted in the interior of the diagram where risk is shared between the buyer and seller.

**Chart 4 Comparing Contract Type in the Procurement Process**

In choosing between alternate contract types, it is necessary to deal with the potential uncertainty surrounding procurement, faced by either the procurer or the contractor (or both) at the time of contracting.

Fixed Price Contracts

Standard procurement processes employ FP contracts as their default setting. This is because FP contracts are suited to a situation where at the time of contracting there is no uncertainty for either the buyer (the procurement agency) or seller (the contractor) because the risks associated with production are small given that the product line is established. Here the buyer agrees to pay a fixed price for the product and the supplier bears all risk in the case of potential cost changes, but also reaps any rewards from cost saving activity. For this reason suppliers have no incentive to pad costs. Suppliers usually have narrow margins.

However, FP contracts may not perform well in an environment where goods may have unique design specifications, rely on untested technologies, production may involve considerable risk, long lead times in product development, or where contractors may have specialised knowledge about complex manufacturing processes (that are difficult to monitor). Most of these transactions are for homogenous, low price, low risk goods and services that can literally be bought out of the catalogue, over the phone, on the internet, or at the local Officeworks.

The few purchases that should be subject to public tender include heterogeneous goods with a client specific design element which is typically risky for suppliers to deliver. These



may represent about **10 per cent** of transactions by volume, but account for **90 per cent** of the value of all goods and services that are subject to public tender.

In this environment suppliers may require full insurance compensation in the form of a risk premium to carry project risk. This risk premium (for production risk) is most effectively delivered in the form of a C+ contract.

Cost Plus Contracts

Where both the procurer and the contractor face the same uncertainty at the time the contract is signed, then it may be that a C+ contract can be employed to share the risk of the project. Much of the contracting literature assumes that the procurement agency is risk neutral and the contractor is risk averse which means that the procurement agency should completely insure the contractor against all risk on efficiency grounds. Risk sharing was first analysed within a Principal-Agent framework by S.Shavell (1979) and specifically with a linear contract by Martin L. Weitzman (1980).

C+ contracts require all costs to be borne by the procurer, who reimburses the contractor for any costs incurred, along with a fixed percentage of the suppliers original cost estimate which serves as a percentage profit mark-up. But while the contractor bears no project risk, they also have no incentive to undertake cost saving activity. Experience from US Department of Defense suggests the use of these contracts should be limited to projects (or stages of projects) with unique design features and untested technologies. Otherwise suppliers have an incentive to “gold plate” projects they undertake – to ensure quality of the project regardless of the cost. C+ contracts, which are frequently used by defence departments worldwide, often run over budget and/or behind schedule. It is for this reason that Australian governments have begun using alternative procurement arrangements such as off-the-shelf purchases of military and civilian equipment, which tend to be on time and within budget (Australian Strategic Policy Institute, 2009).

There are only a few real world circumstances where C+ should be used:

- where suppliers would possess unique skills/ technology and face no competitors;
or
- when project risks may be insurmountable for a single contractor so that a guarantee of certain profits is needed to encourage participation (lending itself to the use of Alliance Contracting);

In either case, suppliers would face a robust audit scheme with penalties to stop cost padding or fraud.



The problem with C+ contracts is that they leave scope for the contractor to take actions which are not in the interest of the procurer due to information asymmetries (moral hazard and adverse selection) which inevitably result in inflated project costs. In this instance it is important for the procurer to offer the supplier a contract that provides less than full insurance to the contractor through cost sharing.

Cost Sharing Contracts

CS contracts attempt to manage the potential for information asymmetry between the buyer and seller by varying the size of the cost share borne by the procurer in proportion to the level of risk aversion of the contractor. Under a CS contract the contractor receives a FP component to undertake a project and shares with the procurer the difference between their estimate of project costs and actual project costs.

CS contracts help to overcome the problems of moral hazard and adverse selection.

Moral Hazard

The first major information asymmetry that justifies the use of cost sharing contracts is where both the procurer and the contractor face the same uncertainty at the time the contract is signed but also the risk averse contractor can take an action that will affect the outcome of the project and that action is unobservable by the procurer – the problem of moral hazard is present. For example, under a C+ contract, it would be feasible for the contractor to shirk their responsibilities, whilst imposing the full cost of this decision onto the procurer. Such a model was analysed by J. Michael Cummins (1977) in the context of defence procurement. In this case the procurer should employ a cost sharing contract, where the contractor is made to bear some project risk (providing less than full insurance by the procurer), which serves to align the interests of the contractor to the procurer's interests, and induce the contractor to take the "correct" action. Cost sharing rewards proactive contractors who can control their costs, overcoming the moral hazard problem.

Adverse Selection

A second major information asymmetry that motivates the use of cost sharing contracts is where the contractor realises some private information about their firms project costs, either before or after the contract is signed – then adverse selection is present. In such cases, the procurer needs a way of eliciting full disclosure of the private information from the contractor otherwise a low cost supplier could mimic a high cost supplier and earn an economic rent (otherwise known as economic profit) on their superior information. Economic rents obtained through exploitation of private information are referred to as



information rents, and represent a social welfare loss since revenue for the procurement ultimately comes from taxpayers.

The workhorse model of Jean-Jacques Laffont and Jean Tirole (1986) investigates the trade-offs between information rents and efficiency. Efficiency in their context relates to the level of effort that the manager of the supplying firm exerts to reduce the cost of the project.¹¹ While managers can reduce their firm's costs through effort, they incur a personal cost of exerting that effort which the procurer cannot contract on.¹² However, the procurer can observe the total cost of the project through a comprehensive audit. But the procurement agency does not know whether a high cost is the result of a supplier with an intrinsically higher cost exerting cost-reducing effort, or a supplier with an intrinsically lower cost exerting little or no effort. It is this ambiguity that provides the means for the lower cost supplier to mimic a high cost supplier and earn an information rent. To overcome this ambiguity the procurer develops a menu of contracts which compensate contractors of all different types for exerting the correct level of effort to reduce costs. Under the full menu of contracts the lowest cost supplier always has the greatest incentive to reveal their "cost" position. The analysis of Laffont and Tirole formulated the fully optimal menu of contracts under these circumstances.

Unfortunately, the complexity of the optimal menu presents problems for practical implementation in terms of computing the menu and administering it. They have the drawback of being abstract and difficult for procurement officers to implement. However, the work of William P. Rogerson (2003) has brought incentive contracting within reach of meaningful implementation. In his paper, Rogerson proposes a FP contract, with an opt-out clause C+ contract, as the simple menu. Rogerson's FP-C+ menu performs quite well against Laffont & Tirole's fully optimal contract. It captures around **75 per cent** of the gains of the fully optimal contract when the procurement agency believes they have a uniform chance of contracting with a contractor of any cost level.

Rogerson's simple cost-sharing rule idea is generalized by L.Y. Chu & D.E.M Sappington (2007). They analyse the case where the procurement agency offers the contractor a menu consisting of a single CS contract and a C+ contract as menu options. The CS-C+

¹¹ Formally, effort is said to be unobservable by the procurer and non-verifiable by a court of law.

¹² Regardless of the cost level of the supplier, there is a single level of cost-reducing effort that is efficient for the supplier's manager to engage in. The efficient level of effort is where the benefit from reducing cost by another dollar is lower than the manager's personal cost of that unit of reduction.



menu outperforms Rogerson's simpler FP-C+ menu under more general beliefs about the distribution of the contractor's cost, namely where the probability of facing a higher cost contractor is greater.

Sole Source Procurement

The policy implication of Laffont and Tirole and associated literature is that it is possible to offer suppliers some menu of contracts and extract a cost effective procurement outcome. The model (and subsequent work based on the model) assumes the identity of the supplier is already known to the procurer. This suggests this approach is applicable to sole source procurement arrangements where value for money would be enhanced through their application.

The major drawback of the Laffont and Tirole literature is that it assumes risk-neutral buyers and sellers. Risk neutrality in their environment is feasible, since for the most part it is assumed that there is no noise in the production technology, in which case attitudes to risk are irrelevant.¹³ However, risk neutrality is a bold assumption and perhaps invalidates this approach for real world procurement decision making.¹⁴

To overcome risk aversion of contractors and simultaneously deal with the problems of moral hazard and adverse selection, it is necessary to address the important issue of how the contract should be awarded.

Public Tender Procurement

One way for the procurement agency to award a contract is by auctioning a single incentive contract to a number of buyers. An analysis along those lines was first undertaken by David P. Baron (1971) and much later by R. Preston McAfee and John McMillan (1986).

McAfee & McMillan's model starts out by assuming that a single linear contract is used. In their model, contractors bid on the project with full knowledge of the parameters of the linear incentive contract. At the time of signing the contract, the contractor has private information about the expected cost of the project. However, after the project is underway there is a production shock and the contractor can take an unobservable action to reduce

¹³ Moreover, the absence of production uncertainty means there is no pure moral hazard issue.

¹⁴ While their 1986 paper does not deal with contract award, in a later paper they integrate an auction mechanism: Jean-Jacques Laffont and Jean Tirole, "Auctioning Incentive Contracts", *Journal of Political Economy*, 95, 1987, pp. 921-937.



costs. Hence, McAfee & McMillan's model features bidding, adverse selection and moral hazard. Moreover, they allow for the contractor to be risk averse. Their result indicates that a single linear sharing rule is optimal, with the size of the cost-share parameter being determined by the extent of bidding competition, the variance of the production shock and the degree of risk aversion of the contractor.

4 Likely Benefits to Enhancing Contract Incentives

The likely benefits to enhancing contract incentives were explored in the paper "Procurement Policy and Contracting Efficiency" by Anthony G. Bower who examined a model of multi-stage procurement with limited commitment and endogenous audit timing (Bower, 1993). His findings suggest that more elaborate contracts yield only second order gains of **0-2 per cent** over a linear incentive contract, whereas the CS contract yields gains of **10 per cent** relative to FP or C+ contracts. Bower reveals that the gains achievable from contracts where the procurement agency can commit to not renegotiate the terms of the contract account for only **1-3 per cent**, with optimal auditing timing accounting for approximately the same. Perhaps the most important of Bower's results are that the gains from a competitive bidding process for awarding contracts may prove more powerful than any other incentive mechanism.

Bower's findings are consistent with those of the PC from a decade earlier. They suggest the gains from a complete tendering process are likely to be at least **10 per cent** relative to FP or C+ contracts.¹⁵ In the Australian context where around **\$143 billion** was spent in 2008-09 without applying contract incentives, this represents a potential gain of around **\$14 billion** (or **1 per cent** of GDP) each year solely from promoting greater competition in tendering. This represents a significant microeconomic reform which can be achieved relatively simply by changes to procurement policy and administration. Of course the likely benefits will be greater if the same cost incentives are embedded in regulation governing pricing behaviour of natural monopolies operating within and outside the public sector.

¹⁵ This is consistent with the benefit range estimated by Hodge (1999) whose *meta*-study of 129 United States, United Kingdom and Australian papers reported average cost reductions from competitive tendering of between 8-14 per cent, although his sample was biased towards providers of cleaning and waste disposal services.



5 Incentives and Regulation

How applicable are the previous findings regarding public procurement to the government regulation of pricing decisions of natural monopoly type industries (such as railways, telecommunications, electricity and natural gas with declining costs, barriers to entry).¹⁶ We would say our analysis is symmetrical. It is interesting that economists have often failed to see the equivalence between regulation and procurement contracts. For example, price cap regulation is equivalent to a FP purchase. Similarly a C+ procurement contract is equivalent to cost-of-service, rate of return, cost based regulation. The symmetry of procurement and regulatory options are portrayed in Table 2.

“Defence procurement is basically a form of cost-based regulation, and thus poses problems similar to those which occur in other regulated sectors like health care, telecommunications, electric utilities, and transportation.” (Rogerson, 1994).

Table 2 Comparing Government Procurement to Regulation

Supply response	Goal Effort Inducement	Goal Rent Extraction
Maximum cost reduction & Nil rent extraction	Fixed-price contracts	Price caps
Moderate Cost Reduction & Moderate rent extraction	Incentive contracts	Incentive regulation
Nil Cost Reduction & Maximum rent extraction	Cost-plus contracts	Cost-of-service regulation

Source: Laffont & Tirole 1993, p.11.& 40.

Once again it is usually more efficient for government to apply cost sharing incentive regulation. It is clear that linear cost sharing regulatory mechanisms outperform pure price cap regulatory mechanisms based on the literature (Schmalensee, 1989). Given the relatively infrequent use of incentive based regulation in Australia today there are likely to be further gains in terms of savings to government and household budgets in pursuing these arrangements. However, we have not attempted to estimate the benefits here.

¹⁶ Typically in these industries there is room for one or two firms. Governments may also regulate in areas such as pollution management, waste disposal and health where externalities drive a wedge between private incentives and public welfare.



6 Limitations of Cost Sharing Contracts

There are a number of real world difficulties with the introduction of incentive contracting arrangements which are considered in turn below.

Whilst the theoretical case for CS contracts is clear cut, there is little practical guidance to that effect in the policy literature. There has been very little use of CS contracts in Australia. Governments have been averse to sharing financial risks with private suppliers, and loathe to carry additional debt on their balance sheets. In a sense, they have often undertaken CS contracts by stealth by using PPP projects. However, private financing 'structures' are extremely inefficient in that they generally require paying the private provider a rate of return that is a multiple of what the public can traditionally borrow for. This funding cost is hidden from taxpayers in the form of higher road tolls or larger tax deductions for private investors.¹⁷

A key assumption in the incentives theory literature is that the contracts can be enforced perfectly by a court of law. Moving away from this assumption moves closer to the literatures on incomplete contracting and transactions costs theories. One reason for caring about this assumption is that in complex procurement environments, a judge may not have the requisite expertise to preside over disputes in the contract. This raises the issue of bounded rationality, and brings with it numerous associated considerations extending beyond the scope of optimal incentive contracts. However, the literature here is well established and does not invalidate any results discussed previously.

The basic procurement models of Laffont & Tirole and McAfee & McMillan cover static contracting environments. In repeated procurement environments, the simple incentive contract becomes increasingly difficult to sustain as the optimal contract arrangement. This is because both the procurement agency, and the contractor, learn and reveal their private information through their actions over time. The inability of the procurement agency to commit to a particular contract when it learns the contractor's valuable private information means incentive contracts must be designed to be renegotiation proof. The technicalities

¹⁷ A PPP project sees the creation of an asset (or assets) that remains in private hands until certain revenue streams have accrued to the supplier. Australian governments have chosen to operate this way to isolate themselves from the political budgetary fallout from cost overruns. Unfortunately there has been a significant cost to the public from this state of affairs. The private ownership of public infrastructure has been used to keep public debt low.



that result are detailed in Jean-Jacques Laffont and Jean Tirole (1988) and in the two stage procurement model of Rafael Rob (1986).

A final key stumbling block relates to the ability of the procurer to audit the contractor's costs. All the models discussed so far rely on the fact that either the contractor believes they will be audited, or the threat of auditing (with severe penalties if cost anomalies are found) deters cost padding.

All these limitations can be overcome by establishing appropriate procurement policies and administrative arrangements across government agencies.

Conclusions

Public services are not just part of the government's sausage machine but are capable of being organised as markets with discrete supply and demand functions. Once these markets are developed it is possible to secure for the public various economic rents that have been obscured by inefficient practices. The broad conclusion from the theoretical literature is that the combination of cost sharing incentive contracts and public tendering generates real savings for Government.

Our first finding is that government procurement policies adopted during the outsourcing era have not brought about a general decline in spending. The reason appears to be that policies have generally speaking been poorly applied. They have not embraced public tenders and competition – but simply shifted spending into the private sector where inefficient private operators now hold sway. For government procurement to be successful, procurement policies must be based on getting “value for money” (Banks, 2008).

Our second finding from our examination of public procurement in Australia is that the introduction of more rational arrangements based on cost sharing contracts and public tender processes can save Australian governments up to **\$14 billion** each year, or around **1.1 per cent** of GDP, or **4 per cent** of total public spending. These are conservative estimates in the sense that we have relied on the lower bound estimates from the Australian and overseas empirical and theoretical literature and we have not counted a number of indirect/peripheral/ benefits.

We believe that public procurement can be described as ‘low lying fruit’ in terms of the microeconomic reform agenda that is ripe for government action. There is no reason to delay making these changes and to dedicate the proceeds to productivity enhancing reforms. It should also be remembered that many of the benefits that have been discussed



previously could apply to private sector procurement practices. In addition, the same basic principles can also be extended beyond procurement activity and be applied by government to in the administration of programs providing transfer and grant payments to households and business.

The Australian Government has visited the issue of contract choice and incentives at least three times over the past 15 years, including the Industry Commission (1994 & 1996), and the Kinnaird Report (2003). These reports favoured the use of incentives, with the Kinnaird Review taking a clear-cut position:

“Alternative forms of contracting will not be appropriate in all cases. Nevertheless, greater consideration should be given to alternative methodologies in strategic procurements, such as incentive contracts and alliance contracting. For example, it might in some cases, be more suitable to use a C+ incentive fee contract for the development stage of projects and a FP contract arrangement for the production phase. Alliance contracting may also be more appropriate for some major complex acquisitions. In this regard we note that the DMO already has two Alliance contracts and is examining their effectiveness.” (Kinnaird et al, 2003).

Australia is not the only jurisdiction seeking to extract better value from public procurement through the use of contract incentives. In December 2007 the United Kingdom Secretary of State for Business and Enterprise and Regulatory Reform, John Hutton, announced a Review of the Public Services Industry lead by Dr DeAnne Julius which reported in July 2008. Unfortunately its reports and findings proved to be a relatively superficial coverage of the relevant issues.



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Appendix 1 Privatisations in Australia

The following is a list of asset sales undertaken by the Commonwealth and State government since 1988 along with the sales proceeds. This list is not complete but includes all of the major sales.

1988

Commonwealth Accommodation & Catering Services (\$14.9m)

Defence Service House Corporation loan portfolio - trade sale (\$1.515bn)

1989

Australian Mineral Development Laboratories (\$0.92m)

Australian Industry Development Corporation (\$25m)

1991

Australian Defence Force Home Loan Franchise - trade sale (\$42m)

Commonwealth Bank (first tranche) - float (\$1.292bn)

AUSSAT - trade sale (\$504m)

Commonwealth Housing Loan Assistance Schemes in ACT (\$47.3m)

1992

Australian Airlines - trade sale (\$400m)

NSW GIO - float (\$1.26bn)

Victorian State Insurance Office - trade sale (\$125m)

1993

Qantas (25 per cent) - trade sale (\$665m)

Commonwealth Bank (second tranche)- float (\$1.686bn)

WA State Govt Insurance Office - float (\$165m)

Snowy Mountains Engineering Corporation - MBO (\$1.5m)

SAGASCO - trade sale (\$427m)

Gladstone power station - trade sale (\$750m)

NSW Grain Corporation - trade sale (\$96m)

Qantas (remainder) - float (\$1.45bn)

1994

Vic BASS - trade sale (\$3m)

State Bank of NSW - trade sale (\$574m)

CSL Ltd (Commonwealth Serum Laboratories) - float (\$299m)



Moomba-Sydney Pipeline system - trade sale (\$534m)

Commonwealth Uranium Stockpile (\$57m)

Pipeline Authority SA - trade sale (\$304m)

SA Austrust Trustees - trade sale (\$44m)

Vic Grain Elevators Board - trade sale (\$52m)

1995

Citipower - trade sale (\$1,575m)

SA State Govt Insurance Commission - trade sale (\$175m)

Eastern Energy - trade sale (\$2.08bn)

Victorian TABCORP - float (\$609m)

WA State Printing Division - trade sale

Aerospace Technologies of Australia (\$40m)

BankWest - trade sale (\$900m)

Powercor - trade sale (\$2.15bn)

SA Forwood Products - trade sale (\$123m)

State Bank of SA (\$10m)

1996

Axion Funds Management - trade sale (\$240m)

Commonwealth Bank (third tranche) - float (\$3.39bn)

Loy Yang A - trade sale (\$4,746m)

Commonwealth Funds Management - trade sale (\$62.5m)

1997

Avalon Airport, Geelong (\$1.5m)

PowerNet - trade sale (\$2.555bn)

Telstra (first tranche) - float (\$14.33bn)

Commonwealth Bank (fourth tranche) - float (\$1.77bn)

Melbourne Airport - trade sale (\$1,307m)

Brisbane Airport - trade sale (\$1,387m)

Perth Airport - trade sale (\$643m)

DASFLEET (\$408m)

Australian Industry Development Corporation - trade sale (\$155m)

Australian National Railways Commission (\$95.4m)

Suncorp-Metway – float (\$610m)

Department of Administrative Services units (eg Asset Services, Australian Property Group,

DAS Centre for Environmental Management, DAS Interiors) - (\$28.9m)



Housing Loans Insurance Corporation (\$108m)

Macleod Repatriation Hospital site - trade sale (\$1.75m)

1998

NSW Totalizator Agency Board - float (\$1bn)

Adelaide and Parafield airports - trade sale (\$362m)

Canberra and Coolangatta airports - trade sales (\$171m)

Darwin, Alice Springs, Tennant Creek airports - trade sale (\$110m)

Hobart and Launceston airports - trade sale (\$53m)

Mt Isa, Townsville, Moorabbin airports - trade sale (\$24m)

Archerfield and Jandakot airports - trade sale (\$10m)

Auscript (\$1.1m)

Victorian Plantations Corporation - trade sale (\$550m)

Aluvic - trade sale (\$502m)

Dampier-Bunbury Natural Gas Pipeline - trade sale (\$2.303bn)

Loy Yang B - trade sale (\$1.69bn)

1999

National Transmission Network - trade sale (\$650m)

Australian River Co. (formerly ANL) (\$20.6m)

Melbourne urban rail and tram systems - concession system

Australian Defence Industries (\$346.78m)

Telstra (second tranche) - float (\$16.0bn)

2000

Removals Australia (\$10.4m)

2001

Essendon Airport - trade sale (\$22m)

2002

National Rail Corporation and NSW Freight Rail Corporation (\$1.172bn)

Sydney (Kingsford Smith) Airport (\$5.588bn)

2003

Bankstown, Camden and Hoxton Park Airports (\$211m)

2004

ComLand Ltd - trade sale (\$165m)

2007

Queensland Government's electricity retailer Powerdirect Australia (\$1.2bn)

Hobart Airport (\$350m)



Telstra (third tranche) - float (\$16.0bn)

Source: <http://www.caslon.com.au/privatisationnote3.htm> and Macroeconomics.com.au.



Appendix 2 Government Finance Statistics

Definitions

Analysts undertaking fiscal comparisons generally revert to using National Accounts data looking at the public final consumption and gross fixed capital formation series to get a more consistent understanding of the impact of government on the broader economy. However, in this paper we have sought to understand just what purchases of goods, services and capital equipment are being made by government agencies. To do this the authors looked beyond the intermediate use of inputs by agencies to include all the goods and services they purchase, whilst ignoring the payment of wages, superannuation, depreciation and some other manual adjustments applied by the ABS to the consumption series. The approach was to use relevant GFS operating statement accounting lines and National Accounts series to identify precise purchases of goods and services and capital, whilst employing the Public Sector wages survey overcome the accruals structural break.

To help understand the procurement series employed for this study the following definitions are reproduced directly from the *Australian Bureau of Statistics publication 5514.0 Australian System of Government Finance Statistics Concepts, Sources and Methods* released on 2 September 2005.

2.135 **Sales of goods and services** refers to revenues from the direct provision of goods and services by general government and public corporations, excluding GST. The item includes:

- fees and charges for services rendered and sales of goods and services by general government and public corporations;
- fees from regulatory services;
- revenues of general government enterprises for work done acting as an agent for other government and private enterprises; and
- rental income under operating leases.

2.136 As previously noted, fees from regulatory services are treated as revenues from sales if the government exercises some proper regulatory function, such as checking the competency or qualifications of a would-be licensee. If there is little or no work involved or if the revenues raised are clearly out of all proportion to the cost of providing the service then the fees are treated as taxation revenue.



2.148 Employee expenses relate to uncapitalised compensation of employees for services provided in the current period. They include the costs of wages and salaries, and the accrued costs of annual leave, long service leave and superannuation.

2.152 The major part of employee expenses is made up of **wages, salaries and supplements**. Allowances for overtime, shift-work, living away from home and travel are included, as are in-kind payments such as accommodation, vehicles and clothing provided by employers. Employee expenses also include accrued expenses for the period relating to accident compensation premiums, sick leave, annual leave, long service leave, retirement and redundancy.

2.154 **Non-employee expenses** are operating expenses that are not included elsewhere in the classification of expenses. They include expenditure by government on goods and services that are provided directly to households as social transfers in kind, for example medical and pharmaceutical benefits, telephone rental concessions, concessional railway fares, rental subsidies, reduced utility charges, etc. Non-employee expenses also includes usage or 'intermediate consumption' of goods and services by public sector units in the accounting period. Usage of goods can be derived as the opening value of inventories plus purchases less the closing value of inventories. Also included as non-employee expenses are rentals for the use of buildings or the right to use copyrights, patents, trademarks, etc.

2.155. In keeping with national accounting concepts, non-employee expenses also include purchases of certain types of defence equipment that, in conventional accounting, would be regarded as purchases of nonfinancial assets. As well as treating expenditure on destructive weapons (e.g. missiles, rockets, bombs) as current expenditure, SNA93 also treats expenditure on the platforms (e.g. warships, submarines, missile carriers and launchers, etc.) from which the weapons can be launched as current expenditure. Consequently, non-employee expenses includes expenditures on such weapon platforms, which are effectively treated as fully consumed during the accounting period in which they are acquired.

2.170 **Gross fixed capital formation** is a national accounting concept and is defined as the value of acquisitions less disposals of new and existing produced assets that can be used in production, other than inventories. Acquisition and disposal of valuables are excluded because, although they may be produced assets, valuables are not used in production. Gross fixed capital formation also excludes the acquisition and disposal of non-produced assets such as land, sub-soil assets, virgin forests, etc. (see the discussion ahead under 'Balance sheet items' for further explanation of produced and non-produced



assets). In practice, for transactions involving land and structures located on the land, separation of the value of land from the value of the structures may be difficult and the transactions are classified to the category (gross fixed capital formation or other transactions in nonfinancial assets) accounting for the major part of the value of the transaction. Acquisition of produced assets includes own-account capital works. Disposal of produced assets excludes their consumption through depreciation.

2.169 **Net acquisition of non-financial assets** is defined as gross fixed capital formation less depreciation plus changes in inventories plus other transactions in non-financial assets. Any recoverable GST is excluded. GFS net operating balance plus net acquisition of non-financial assets is equal to GFS net lending(+)/borrowing(-).



Appendix 3 Tender Processes by State

Given that our public sector agencies spend around 17 per cent of Australian GDP on goods and services reductions in the associated transactions costs offer potentially significant budgetary gains.

Currently there are as many formal tendering processes in Australia as government agencies procuring goods. Every government in Australia (federal, state and local) has its own complex procurement guidelines. Every government agency interprets the relevant guidelines and implements the overarching policy as it sees fit. And there is usually a dedicated procurement branch within each agency, where staff administers the system.

Existing arrangements unnecessarily raise the costs of conducting open tenders for government and business, reducing competition for each advertised tender. When an agency (the buyer) identifies an item for purchase it (mostly) creates a Request for Tender (RFT) document which specifies that nature and conditions by which the supply will take place:

- RFT templates are drafted by lawyers to cover every contractual possibility. These documents are imposing and complex, usually requesting potential suppliers complete a large number of attachments (providing a detailed project methodology and extensive background information). Historically RFTs and contracts were not drafted in such high legalise — but whether the current drafting has improved delivery performance is an open question.
- RFT documents generally lack a rational economic basis for decision making. Almost all of the information requested from suppliers is superfluous to the upfront ranking of potential suppliers based on who is the lowest cost provider.¹⁸ Only after

¹⁸ Requesting significant detail up front from each potential tender may help to fill up the procurement officers project file and cross-off various legal requirement in terms of due-diligence, but it is an extremely wasteful process in terms of the time of potential suppliers. First, requiring the provision of an extensive methodology transfers project knowledge from the supplier to the buyer for no payment, and with no guarantee that the suppliers intellectual property will be protected and the most cost effective approach rewarded. Second, almost all of the e background details that participants are required to provide the buyer cover a common set of facts that do not vary from project to project. Each new tender generally requires potential suppliers to start again with a new template and re-enter those facts to suit the new format of the RFT document. This generally entails pages and pages of information. Procedures such as preregistration panels are used to reduce these compliance costs, but tend to limit the competitive bidding process for any given contract.



this ranking is established does it makes sense to perform due-diligence on a short list of candidates, but surely not the whole field.

- The **buyer** is worse-off to the extent they invest valuable resources in an inefficient search process.
- The **supplier** has to weigh up the opportunity cost of participating in an expensive process, with large up front participation costs and generally a relatively small expected return from participating. It is not rational to participate unless they *know* they have a high expectation that they can pass these costs back to government.
- RFTs are advertised through public gazettes, newspapers and web based advertisements and via private and public tender notification services. All jurisdictions operate separate electronic web based systems, or contract out to a private sector provider to operate these systems for them. These arrangements imply cost duplication for buyers and impose additional search costs on suppliers.

The Commonwealth, Western Australia, South Australia and Victoria (in that order) operate the most effective and transparent reporting processes and publish oversight data on annual tender contracts. We reviewed the 2006-07 financial year:

- Around 44 per cent of procurement by the Commonwealth general government agencies was subject to public tender.
- Around 42 per cent of spending by the Western Australian was subject to public tender.
- Around 38 per cent of procurement by South Australia was subject to public tender.
- Around 11 per cent of procurement by Victorian was subject to public tender.
- Neither New South Wales, Queensland, Tasmania, Australian Capital Territory nor Northern Territory had the necessary agency oversight to produce comparable procurement statistics. Upon reviewing their individual procurement arrangements we assumed an average tender rate for each jurisdiction was 11 per cent.

There are many reasons why so few dollars of public money spent goes out to tender.



1. Most jurisdictions only require an open tender once the value of goods and services being purchased are greater than \$100,000, some have even higher thresholds for construction projects (it is \$9 million for the Commonwealth).¹⁹
2. Some jurisdictions only require a public tender where a public interest case can be mounted (subject to the discretion of the relevant purchasing agency).
3. All jurisdictions allow exemptions for certain types of purchases and sole sourcing is still permissible in specific situations.²⁰
4. Most jurisdictions excuse their public corporations (around 27 per cent of all purchases) from their mandatory procurement processes. Public corporation may still use open tender processes, but these are ad hoc requirements, not captured in the official statistics and the details of transactions are commercial-in-confidence.

¹⁹ Northern Territory has a \$50,000 threshold, the Commonwealth has a \$80,000 threshold for most general government agencies and \$400,000 for CAC Act bodies, all other jurisdictions have a \$100,000 threshold, except for Western Australia where the threshold for goods and services is \$150,000, but where capital works are dealt with separately. Queensland has no thresholds in place. Most jurisdictions do not mandate procurement guidelines for most or all public corporations.

²⁰ Purchases such as advertising, motor vehicles, property, accommodation, foreign aid or research and development, or where supplies are purchased offshore.