

Critical Issues in Regulation – From the Journals

The Coase Theorem at Sixty, Steven G Medema, *Journal of Economic Literature*, 58, 4, December 2020, pp. 1045-1128.

This paper is about the ‘Coase theorem’, which Steven Medema (Professor of Economics at Duke University) describes as ‘one of the most influential and controversial ideas to emerge from post-World War II economics’. The origins of the Coase theorem primarily lie in an article by Ronald Coase titled ‘The Problem of Social Cost’, published ‘in the *Journal of Law and Economics* in 1960. The theorem (which Steven Medema shows has multiple interpretations) is about public policy towards economic externalities. The approach involves the specification and enforcement of property rights, within which framework negotiations between the parties can result in an efficient outcome as long as transaction costs are sufficiently low. This article examines the theorem’s origins, its diffusion, and the wide variety of uses to which it has been put. There is a substantial amount of attention to what the author describes as the ‘ambiguity and controversy surrounding the theorem’.

This paper contains a comprehensive review and assessment of the voluminous literature that Coase’s article gave rise to. Views on the Coase theorem found in this literature range from it being correct, through it being ‘ambiguous’ to it being a ‘mere tautology’ at the other end of the spectrum. Numerous versions and interpretations of the Coase theorem have appeared in this literature. Coase himself comes closest to a statement of the theorem in this passage:

It is necessary to know whether the damaging business is liable or not for damage caused since without the establishment of this initial delimitation of rights there can be no market transactions to transfer and recombine them. But the ultimate result (which maximises the value of production) is independent of the legal position if the pricing system is assumed to work without cost.

Steven Medema suggests his own version that he says is valid as a proposition in economic logic:

If agents are rational and the costs of transacting are zero, resources will be allocated efficiently independent of how rights over those resources are

initially distributed. Moreover, if utility functions are uniformly affine in private goods and the registration of subjective values is not wealth-constrained, this efficient allocation of resources is independent of the initial rights structure.

The paper contains a large number of references to the place of the Coase theorem in relation to the economic-policy debate about externalities and the pursuit of greater economic efficiency. There is considerable discussion in the paper of the relationship between Coase’s bargaining approach and the earlier approach of Arthur Pigou, involving ‘Pigouvian’ taxes and subsidies on activities producing, respectively, negative and positive externalities. Amongst the observations on this topic are that, in the four decades between Pigou’s *The Economics of Welfare* and Coase’s paper, the ‘externality literature was extremely thin’ (p. 1049) and that Pigou had a ‘relatively minor place’ before the 1970s (p. 1076). In short, Steven Medema’s view is that Coase’s paper was not primarily focused on opening up a debate with Pigou.

There are seven sections in the paper: Introduction; The Road to the Coase Theorem; Coase, Stigler and the Creation of the Coase Theorem; Refining a ‘Theorem’: The Coase Theorem Controversy; Testing the Coase Theorem; The Many Faces of the Coase Theorem; and Conclusion.

Contents

From the Journals	1
Regulatory Decisions in Australia and New Zealand	8

Literature Note: The literature on the Coase theorem is replete with Nobel Prize winning economists, beginning with Ronald Coase himself who won in 1991 ‘for his discovery and clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy’. Nobel economists who have written about the Coase theorem include: Kenneth Arrow, James Buchanan, Oliver Hart, Leonid Hurwicz, Daniel Kahneman, Eric Maskin, Paul Samuelson, George Stigler, Joseph Stiglitz, Jean Tirole and Oliver Williamson. Other economists cited include Armen Alchian, Yoram Barzel, Francis Bator, William

Baumol, Steven Cheung, Harold Demsetz, Aaron Director, Joseph Farrell, Johannes de Villiers Graaff, Robert Inman, Frank Knight, Jean-Jacques Laffont, George Mailath, Deirdre McCloskey, Roland McKean, Ezra Mishan, Yew-Kwang Ng, Mancur Olson, Arthur Pigou, Charles Plott, Richard Posner, George L Priest, Andrei Schleifer, Tibor Scitovsky, Gregory Sidak, Adam Smith, Daniel Spulber, Gordon Tullock, Ralph Turvey, Hal Varian, and Cento Veljanovski.

The article can be accessed by subscription to the *Journal of Economic Literature*.

Delegation of Regulation, Tapas Kundy and Tore Nilssen, *Journal of Industrial Economics*, 68, 3, September 2020, pp. 445-482.

This paper is about the development of a simple model to study a government's incentives to delegate the regulation of an industry to a bureaucrat. While the bureaucrat is assumed to have more industry-specific knowledge than the government, the authors allow that its interest may not align completely with that of the government. In this context, constrained delegation is defined as delegation which is followed by laws and rules to restrict bureaucratic discretion. The analysis in this paper suggests that constrained delegation improves the government's benefit from delegating regulation to a bureaucrat.

The key result of the paper is the characterisation of the rule for optimal constrained delegation. In particular, the authors point to the occurrence of strict delegation, in which the government caps the bureaucrat's actions based on expected costs. Strict delegation gives rise to a regulatory contract featuring distortion at the top; and it leads to a modification of the uncertainty principle. The authors describe how various factors – including bureaucratic drift and the government's lack of information – affect the delegation rule and, subsequently, the equilibrium regulation policy. They conclude that, while bureaucratic discretion typically reduces with bureaucratic drift, it is affected by changes in the government's beliefs about the business's technology. In particular, allowing bureaucratic discretion is more interesting the more likely it is that the business is low-cost.

While the authors' analysis provides some normative suggestions for the design of delegation rules, the authors also identify questions they consider remain unanswered.

One of these is that the delegation framework assumes no contractual relationship between the principal and the delegates. While this properly reflects the relationship between a politician and a bureaucrat, it may not be an appropriate assumption in other situations. Further, the authors do not

address the bureaucrat's incentives for acquiring information. While the authors consider that this assumption is appropriate in situations where bureaucrats can be hired based on their industry-specific knowledge; in other situations the delegation rule could have a direct effect on the bureaucrat's incentive to acquire information. For example, low bureaucratic discretion can demotivate a bureaucrat from a detailed investigation of the business, in which case the government must take the issue of information acquisition into consideration when designing the delegation rule.

There are seven sections in the paper: Introduction; The Model; Preliminary Analysis (two subsections); Full Delegation; Constrained Delegation; Discussion (two subsections); and Concluding Remarks. There is also an Appendix.

There are 27 items in the reference list, with year of publication ranging from 1984 to 2020. Economists cited include Kyle Bagwell, David Baron, Alexander Frankel, Jeremy Greenwood, Jean-Jacques Laffont, David Martimort, R Preston McAfee, David Sappington and Jean Tirole.

The article can be accessed by subscription to the *Journal of Industrial Economics*.

Interconnectedness in the Australian National Electricity Market: A Higher-Moment Analysis, Hung Do, Rabindra Nepal, and Russell Smyth, *Economic Record*, 96, 315, December 2020, pp. 450-469.

This paper contains an examination of the risk-transmission mechanisms in the interconnected Australian National Electricity Market (NEM) which excludes Western Australia and the Northern Territory. The authors illustrate that the transmission of extreme events should be considered in terms of their magnitude (via skewness) and the likelihood of their occurrence (via kurtosis) when promoting NEM interconnectedness. This interconnectedness is through what the authors describe as 'volatility spillovers'. The distribution of electricity prices is skewed and heavy tailed.

The authors' empirical results suggest that there are differences in the influence of shocks on risk spillover according to their place of origin. In particular, shocks emanating from New South Wales and Victoria have the largest effect on the NEM's risk spillover via all four realised moments – realised return (RR), realised volatility (RV); realised skewness (RS) and realised kurtosis (RK). These states have the largest generation, the largest consumption and the largest exports. They also display the largest convergence of technologies.

Shocks sourced in South Australia (historically a net importer until 2018 and now rich in renewables) have

the least impact on RR and RS spillover. Shocks from Queensland (high generator concentration and possible high local generator market power) have the lowest impact on RV and RK spillover.

The authors' empirical findings also suggest that interconnectedness costs can be limited by providing sufficient transmission capacity which can expand generation capacity. The empirical results suggest that a one per cent increase in NEM generation capacity can decrease the transmission of these risks by between 0.9 and 1.7 per cent, depending on the moment of the electricity return distribution.

There are six sections in the paper: Introduction; Overview of the NEM and Relevant Literature (two subsections); Data and Construction of Realised Moments (two subsections); Methodology (two subsections); Empirical Results (three subsections); and Conclusions. There is also an Appendix.

There are 55 items in the reference list, with year of publication ranging from 1969 to 2019. Economists cited include Torben Andersen, Tim Bollerslev, Francis Diebold, Stephen Littlechild, David Newbery, Mohammad Pesaran, Peter Phillips, Andreas Pick and Paul Simshauser.

A classic reference is: Giora Hanoch and Haim Levy, 'The Efficiency Analysis of Choices Involving Risk', *Review of Economic Studies*, 36, 1969, pp. 335-346.

The article can be accessed by subscription to the *Economic Record*.

Switching Energy Suppliers: It's Not All About the Money, David Deller, Monica Giulietti, Graham Loomes, Catherine Waddams Price, Anna Moniche and Joo Young Jeon, *The Energy Journal*, 42, 3, 2021, pp. 95-120.

This paper is about the behaviour of energy consumers in relation to switching between energy suppliers. The authors of this paper observe that many consumers appear not to take advantage of lower energy prices available in liberalised retail markets. They provide evidence to explain why, in their view, 'consumers may leave substantial amounts of money on the table'. The authors identify factors which may inhibit switching and their results suggest that expectations of high switching rates in an unregulated market may be unrealistic. They also believe that their findings have important implications for the design and regulation of energy markets, including the imposition of price caps on 'default' retail tariffs in 2019 in the United Kingdom and parts of Australia.

The source of the data used revolves around an event held in the United Kingdom in 2012 called The Big Switch (TBS). The TBS allows the authors to observe real decisions made by over 7,000 consumers in a collective switching auction. This is

supplemented by their responses to a survey generating a limited set of variables that proxy uncertainty or lack of confidence.

The econometric method applied to analyse the switching decision is the Probit model that estimates the likelihood to accept the offer received in TBS on the basis of both monetary considerations and non-price preferences. The Probit model for the probability of switching was estimated using the conditional maximum likelihood estimation, an instrumental variable method, which deals with the potential endogeneity.

The authors conclude that a number of factors appear to affect consumers' behaviour. These include: non-price preferences; time pressures; and concerns about the switching process itself. The 'enhanced' respondent model is acknowledged to be 'not perfect' and influences from some variables are possibly still not identified. These include, perhaps, some heuristics or biases that might be conventionally regarded as 'irrational'. Nevertheless, the authors believe that their model contributes to explaining why financial rewards alone may fail to induce switching, even among people who are well-educated and more engaged than most within the retail energy market.

There are six sections in the paper: Introduction; Literature Review; Data; Econometric Method; Results and Conclusion. There are four Appendices.

There are 43 items in the reference list, with year of publication ranging from 1987 to 2019. Economists cited include Paul Klemperer, Stephen Littlechild, Daniel McFadden, Pravin Trivedi and Michael Waterson.

A classic reference is: Paul Klemperer, 'Markets with Consumer Switching Costs', *Quarterly Journal of Economics*, 1987, pp. 375-394.

The article can be accessed by subscription to the *Energy Journal*.

The Seven Deadly Sins of Tech?, Hal Varian, *Information Economics and Policy*, 54, March 2021, 100893.

This paper is about online competition, particularly involving large tech firms such as Google, Apple, Facebook, Amazon, and Microsoft (a group commonly collectively known as 'GAFAM'). Professor Hal Varian, the Chief Economist at Google, examines several issues involving these firms that have often come up both in the popular press and in academic discussions. The stated goal of this paper is to examine the facts about the 'alleged seven deadly sins of tech'. These are: competition; innovation; acquisitions; entry; switching costs; entry barriers; and size. The author argues that, when you look at the facts, competition among tech firms is

working well and that this has yielded many positive outcomes for consumers and the economy as a whole.

The body of the paper comprises a critique of each of the seven criticisms. Most attention is placed on competition, considered under four subheadings: users; revenue; general purpose and special purpose search; and quantity, quality and price. Next, the author responds to the 'claim ... that large tech companies have had a negative impact on innovation' by presenting data on the amount of R&D expenditure made by the GAFAM businesses. The discussion of acquisitions includes two responses to the suggestion that potential entrants face a 'kill zone' and a round-up of the amount of antitrust activity in the United States and the United Kingdom. The treatment of barriers to entry includes a response to the suggestion that network effects restrict entry. Finally, in response to the observation that 'some people object to the "internet giants" because they consider them too big and too powerful', Hal Varian provides data on the (greater) market shares of the largest businesses in the United States in earlier times. Following the discussion of the seven 'sins' there is a paragraph containing a 'few macroeconomic facts about the digital economy'.

The paper concludes with a single final paragraph that includes these words: 'there is little, if any, evidence for these sins. Instead the facts show a dynamic, competitive industry with high levels of investment in R&D and capital equipment, high wages for workers, and rapid growth. These are virtues, not vices. Is there any other sector that comes close to the tech sector in this sort of economic performance?'

There are 22 items in the reference list with year of publication ranging from 2011 to 2020. Economists cited include Elena Argentesi, David Autor, Emilio Calvano, David Dorn, David S Evans, Lawrence Katz, Michael Mandel, Ryan Nunn and Christina Patterson.

The article can be accessed by subscription to *Information Economics and Policy*.

Local News On-line: Aggregators, Geo-Targeting and the Market for Local News, Lisa George and Christian Hogendorn, *Journal of Industrial Economics*, 68, 4, December 2020, pp. 780-818.

This paper exploits what the authors describe as a 'rare opportunity to study the effect of aggregation on the market for news'. The authors' analysis suggests that adding geo-targeted links to the Google News site increases household visits to local outlets and the share of local content in household news consumption. The magnitude of the estimated effects are described as 'modest', with increases in

local news consumption for the heaviest Google News users of 25 per cent, and this from a low baseline. The authors state that the results are robust to the alternative classification of news domains, to the time-frame considered, and to the exclusion of influential markets. They also state that the results are robust to alternative identification strategies that rely on direct, rather than imputed, measures of intermediation. The authors' feel that, given continued growth of the Google News platform, their results are also likely to reflect a lower bound on aggregate effects.

The authors also find evidence that, while aggregation increases the diversity of sources consulted each week, it does not increase variety over an extended period of time. This result supports theoretical frameworks in which aggregators increase competition at the article level among top outlets. However, the result also suggests that aggregators may play less of a role in product discovery than their owners sometimes argue.

The authors caution that their findings are limited by the nature of available data, which provides only top-level domains. This precludes them from precisely measuring the intensity of use of Google News for sample households, or for studying the effects of targeting on Google News use itself. The authors also consider the early years of the platform, whose early users might have different news preferences than the general population. Although the results are seen as robust to alternative identification approaches, the authors also express the belief that much could be learned from further analysis with data from technology firms.

There are six sections in the paper: Introduction; Research Design; Data (four subsections); Empirical Strategy; Results (three subsections); Outlets; and Conclusion.

There are 21 items in the reference list with year of publication ranging from 1981 to 2020. Economists cited include Susan Athey, Babur De Los Santos, Ali Hortacsu, Markus Mobius, Joel Waldfogel and Matthijs Wildenbeest.

A classic reference is: Peter E Kennedy, 'Estimation with Correctly Interpreted Dummy Variables in Semilogarithmic Equations', *American Economic Review*, September 1981.

The article can be accessed by subscription to the *Journal of Industrial Economics*.

Cost Saving Potential associated with Infrastructure Sharing in the Context of 5G Introduction

Saskja Schäfer, Ahmed Elbanna, Werner Neu and Thomas Pluckebaum, WIK Discussion Paper No. 472, Bad Honnef, December 2020.

This discussion paper is about the cost savings that mobile network operators (MNOs) can realise by sharing network infrastructure elements. The extent to which cost savings can be achieved depends on factors such as: the type and amount of network elements shared; whether the cooperation is agreed *ex ante* or *ex post*; the level of demand; and the degree to which free capacities in existing networks are available. The aim of the present work is to support the decision-making process (competition policy and regulation) with respect to Infrastructure Sharing in the context of 5G deployment. It takes into account case studies from different countries and presents calculations of the cost-saving potential for MNOs from different 5G scenarios.

The authors observe that a public-policy debate has started regarding the high investment needs associated with the new mobile base stations required. One option would be reducing costs for individual providers through Infrastructure Sharing – at least in areas in which the deployment is exceptionally expensive or demand is particularly low.

While Infrastructure Sharing has been common practice in all European member states for many years, this has only been for the sharing of passive network elements such as masts. Active Infrastructure Sharing, including the shared use of electronic elements such as antennas, is less common. There are variations between countries – Germany, for example, has almost exclusively passive Infrastructure Sharing agreements, while in Sweden, Active Infrastructure Sharing on a large scale has long been common practice.

Cost saving advantages and associated effects that can be achieved through Infrastructure Sharing, such as a faster deployment, are accompanied by drawbacks. There is a high risk that large-scale sharing can result in a reduction in competition based on a lack of services differentiation between mobile network operators. Regulation of Infrastructure Sharing must balance these benefits and drawbacks. Furthermore, the legal framework needs to provide an environment which protects market participants outside the cooperative arrangements and thus preserves competition when it comes to large-scale or intensive Infrastructure Sharing agreements. The motivation of market participants and the market structure are also relevant in determining the extent of Infrastructure Sharing.

In a ‘greenfield’ scenario, cost savings of between 16 and 22 per cent for Radio Access Network (RAN) Sharing can be achieved, depending on the technology (4G/5G) and the number of partners involved. In regard to full network sharing (national roaming), the potential for cost savings is a little higher at between 19 and 33 per cent. Consequently savings are mainly derived in the RAN. From a trans-technological perspective, 5G is more cost-effective and better suited to savings from sharing compared with 4G.

There are seven sections in the paper and 137 items in the reference list.

This Discussion Paper (available in the German language only) can be accessed at: **WIK Discussion Paper Number 472**.

The Effects of the Universal Metering Programme on Water Consumption, Welfare and Equity

Carmine Ornaghi and Mirco Tonin, *Oxford Economic Papers*, 73, 1, January 2021, pp. 399-422.

This paper is about the Universal Metering Programme (UMP) in south-east England, particularly its impact of on water consumption and the related efficiency and distributional effects. The authors find that, on average, UMP households decrease consumption by 22 per cent. This figure is seen as relevant for any *ex ante* cost-benefit analysis. In particular, such a ‘large reduction’ in average consumption suggests to the authors that it would be advisable to extend compulsory metering to other areas where households have similar characteristics.

The authors’ analysis suggests that there is considerable heterogeneity in the way households react to metering. In particular, they observed low responsiveness in the group of households that are better off under the metered tariff – typically, small households living in expensive dwellings. These results suggest that optional metering in England is inducing the ‘wrong types of household’ to choose a meter. Furthermore, the authors see their study as offering the first large-scale evidence that the percentage reduction in water consumption is similar across income groups.

Analysis of the difference between metered and unmetered bills revealed that high-income households gain financially on switching to metering, while less affluent households are, on average, around £10 (annual) worse off. However, looking at the median of the distribution, more than half of low-income households end up paying a lower bill after adjusting their consumption. The authors see that an important contribution of their study is the investigation of when metering a household has social value. Whereas the answer to this issue critically depends on the correct identification of the

(unobservable) marginal cost of water, the authors' analysis suggests that the proportion of households for which the cost of metering outweighs the benefits is likely to exceed 25 per cent in some scenarios. These results suggest that a selective metering programme, where only 'large' households receive a meter, would most likely deliver the highest social welfare.

However, selective metering at the household level may be problematic to implement for both technical and political reasons. The technical barriers include: the lack of relevant information on the size and consumption habits of individual households; the need to consider that the number of members of households may change over time; that households may change their location; and that selective metering at household level is likely to increase unitary costs of installation (economies of scale). Regarding politics, the decision to have compulsory free metering for some households and optional metering for other customers (who need to pay) may be opposed by residents' and customers' associations, particularly if this increases perceived inequalities in water consumption. The authors argue that these considerations make the implementation of universal metering easier to manage and less risky than selective metering.

There are six sections in the paper: Introduction; Theoretical Framework; Empirical Framework; Results; Efficiency and Distributional Effects of Metering; and Conclusions and Policy Implications.

There are 21 items in the reference list with year of publication ranging from 1987 to 2017. Economists cited include Simon Cowan and Casey Wichman.

The article can be accessed by subscription to *Oxford Economic Papers*.

The Effectiveness of EC Policies to Move Freight from Road to Rail: Evidence from CEE Grain Markets, Russell Pittman, Monika Jandova, Marcin Krol, Larysa Nekrasenko and Tomas Paleta, *Research in Transportation Business and Management*, 37, December 2020, 100482.

This paper is about the effectiveness of a policy adopted in the European Commission (EC) in 1991 to encourage the substitution of rail and water carrier haulage for motor carrier haulage. This was part of the EC's agenda of reducing fuel consumption, emission of pollutants, carbon intensity, and road congestion. Regarding railway freight in particular, one policy tool that the EC has emphasised for this purpose is the restructuring of the rail sectors of member countries through the creation of competition for the incumbents by new train-operating companies (TOCs). This paper focuses on one important commodity group – grain – in four Central and Eastern European (CEE) countries (three EC

member states and one non-member state – Poland, the Czech Republic, Slovakia, and Ukraine).

The approach adopted by the EC to increase competition through the TOCs is found to have had only limited success, partly because it met with constraints on increasing rail's share. The authors regard the EC's approach as a 'seemingly less obvious policy choice than alternatives such as Pigouvian taxation measures or infrastructure subsidies'. The constraints that have emerged seem more closely related to shortages in infrastructure capacity than to a lack of competition among TOCs. The authors findings suggest that focusing policy more directly on infrastructure investment will be required if the current constraints binding rail's share are to be relaxed. They suggest an increase in subsidies or alternative strategies for attracting private investment into infrastructure, including alternative reform models.

There are six sections in the paper: Introduction; EC Policy: More Freight by Rail; Modal Choice: The Literature; Background Data; Country Case Studies: Poland, Czech Republic, Slovakia and Ukraine; and Discussion and Conclusion.

There are 125 items in the reference list with year of publication ranging from 1989 to 2020. Economists cited include Lorenzo Casullo, Gunter Knieps, Michael McGinnis, Chris Nash, Kenneth Train and Wesley Wilson.

The article can be accessed by subscription to *Research in Transportation Business and Management*.

Cost Efficiency and Endogenous Regulatory Choices: Evidence from the Transport Industry in France, Joanna Piechucka, *Journal of Regulatory Economics*, 59, 1, February 2021, pp. 25-46.

This paper is about the impact of different regulatory designs on the cost efficiency of operators providing a public service. This question is explored using data from the French urban public transport industry. The author proposes that a distinctive feature of the study is that it considers regulatory regimes as endogenously determined choices, explained by economic, political, and institutional variables. The approach involves a positive analysis to study the determinants of regulatory contract choices, which, in turn, affect the costs of operating urban public transport. The study includes a direct test of the bias associated with treating contracts as randomly assigned.

The author's goal is to estimate the impact of regulatory contract choice on operators' cost efficiency. The econometric strategy applied involves

specifying an underlying cost function for urban transport services. The dataset used is a 16-year panel of 126 urban public transport networks in France between 1995 and 2010, with a total of 1,351 observations. The empirical investigation begins by estimating a cost function based on information on operating costs, quantity of output and input prices. The author then takes an econometric approach to estimate frontiers. This uses a parametric representation of technology.

The author finds that regulatory choices have a significant and important impact on the costs of urban public transport provision in France. Given similar network characteristics, networks that are operated under a fixed-price contract are estimated to exhibit approximately 21 to 23 per cent lower costs than those regulated under cost-plus contracts. However, ignoring the endogeneity of contractual choices makes this effect substantially less, amounting then to a reduction of approximately 4 per cent of total operating costs. Overall, the findings are seen to be in line with the theoretical prediction of new regulatory economics that fixed-price contracts provide more incentives for efficiency. The author therefore concludes that the move toward fixed-price contracts observed in the industry seems to be justified on efficiency grounds.

The results also shed light on the determinants of contractual choices. First, fixed-price contracts are more frequently observed when the operator belongs to major groups. These groups, which are depicted as maybe being willing to maximise profits aggressively, may attempt to affect the regulatory decision to choose a fixed-price contract. Second, a right-wing government is more likely than a left-wing government to choose a fixed-price contract rather than a cost-plus contract. According to the author, this is in line with right-wing governments showing greater interest in profits. Third, the results suggest that an increase in political contestability appears to be a determinant for the choice of a fixed-price contract as opposed to a cost-plus contract. This is related to the proposition that, in monopolised political markets, contracts are less rigid. Finally, the results suggest that an increase in network size decreases the probability of choosing a fixed-price contract. This is in line with local authorities preferring to delegate the management of less complex projects/networks under fixed-price contracts and more complex ones under cost-plus regimes. Finally, the results show a move over time toward high-powered incentive schemes.

There are six sections in the paper: Introduction; Industry Background (three subsections); Theoretical

Motivation (four subsections); Empirical Model (two subsections); Results; and Conclusion.

There are 43 items in the reference list with year of publication ranging from 1937 to 2019. Economists cited include David Baron, Gary Becker, Ronald Coase, Christopher Cornwell, Jean-Jacques Laffont, Roger Myerson, Sam Peltzman, Peter Schmidt, Robin Sickles, George Stigler, Jean Tirole and Oliver Williamson.

A classic reference is: Christopher Cornwell, Peter Schmidt and Robin Sickles, 'Production Frontiers with Cross-sectional and Time-series Variation in Efficiency Levels', *Journal of Econometrics*, 1990, pp. 185-200.

The article can be accessed by subscription to the *Journal of Regulatory Economics*.

Regulatory Decisions in Australia and New Zealand

Australia

Australian Competition and Consumer Commission (ACCC)

Inquiry into the National Electricity Market – May 2021 Report Published

On 24 June 2021 the ACCC published its **May 2021 Report** for its Inquiry into the National Electricity Market.

Roundtable on a New Regulatory Framework for the NBN

On 22 June 2021 the ACCC announced that it had held a roundtable comprising NBN Co, broadband retailers, industry groups, consumer representatives and government. The roundtable was the first step in considering a new regulatory framework for the NBN.

Australian Rail Track Corporation's 2008 Interstate Access Undertaking – Notice to Extend to 30 June 2023

On 15 June 2021 the ACCC issued a notice to extend the **Interstate Access Undertaking** to 30 June 2023. This followed the Australian Rail Track Corporation's application on 23 April 2021 to extend the operation of the undertaking for two years.

Developing a Regulatory Asset Base Value for the Australian Rail Track Corporation Interstate Network – Draft Public Report

On 15 June 2021 the ACCC published a **Draft Public Report** prepared by GHD Advisory titled *Developing a Regulatory Asset Base value for the Australian Rail Track Corporation Interstate Network, using the Depreciated Optimised Replacement Cost Method*. The ACCC also published a **Consultation Paper** on the DORC valuation of ARTC's Interstate Network.

Internet Activity Report for December 2020 Released

On 10 June 2021 the ACCC released its **biannual Internet Activity Report** for December 2020.

Australian Rail Track Corporation's March 2021 Variation of the 2011 Hunter Valley Coal Network Access Undertaking – Final Decision

On 2 June 2021 the ACCC published its **Final Decision** to consent to Australian Rail Track

Corporation's March 2021 Variation of the 2011 Hunter Valley Coal Network Access Undertaking.

Wholesale Market Indicators Report March Quarter 2021 Published

On 21 May 2021 the ACCC released the quarterly report for March 2021 on NBN services.

Viterra's Port Adelaide Facilities – Exemption from Parts of the Bulk Wheat Code

On 27 April 2021 the ACCC released its **final determinations, in relation to the Port Terminal Access (Bulk Wheat) Code**, concerning the services provided by grain handler Viterra at its Port Adelaide Inner Harbour and Outer Harbour facilities.

Data on Retail Electricity Prices in the National Electricity Market Released

On 13 April 2021 the ACCC released retail electricity market data for 2020.

Airport Monitoring Report for 2019-20 Published

On 31 March 2021 the ACCC released its **Airport Monitoring Report** for 2019-20.

Australian Competition Tribunal (ACT)

New South Wales Mineral Council's Application to Review the Treasurer's Decision not to Declare the Port of Newcastle – Australian Competition and Consumer Commission's Application for Leave to Intervene Disallowed

On 20 May 2021 the ACT directed that the ACCC's application for leave to intervene in this matter be disallowed.

Australian Energy Market Commission (AEMC)

Annual Market Performance Review 2020 Published

On 20 May 2021 the AEMC released its Annual Market Performance Review for 2020, the **latest report from the AEMC Reliability Panel**.

Efficient Management of System Strength on the Power System – Draft Rule

On 29 April 2021 the AEMC announced its agreement to **29 July 2021 extension of time, for the release of the draft decision on the integrating energy storage rule change**, after the Australian Energy Market Operator sought more time to allow work on complex issues.

Australian Energy Market Operator (AEMO)

Electricity Statement of Opportunities Update Released

On 8 May 2021 the AEMO released a **2020 Electricity Statement of Opportunities (ESOO) Update**, which models the Yallourn Power Station's confirmed exit and additional 'committed' generation and storage projects not considered in the 2020 ESOO.

2021 Gas Statement of Opportunities Published

On 29 March 2021 the AEMO published a **2021 Gas Statement of Opportunities** for eastern and south-eastern Australia.

Australian Energy Regulator (AER)

Electricity Distribution Network Tariffs for Victorian Distributors Approved

On 18 June 2021 the AER approved **Electricity Distribution Network Tariffs** for Victorian distributors for 2021-22.

Costs for Project EnergyConnect – Final Regulatory Approval

On 31 May 2021 the AER **announced that it had approved** the costs for Project Energy Connect, the interconnector between South Australia and New South Wales being built by ElectraNet and TransGrid.

Papers Relating to the 2020 Rate of Return Instrument Published

On 21 May 2021 the AER released three papers in a series leading to the 2022 rate of return instrument. Two are draft working papers: **Term of the rate of return**; **Rate of return and cashflows in a low interest rate environment**; and the position paper **Rate of return and assessing the long term interests of consumers**.

2021-22 Jemena Gas Networks Distribution Tariffs for New South Wales Approved

On 18 May 2021 the AER announced approval of Jemena Gas Networks' 2021-22 gas tariff variation notice in accordance with its **2020–25 access arrangement**.

2021-22 Gas Transmission Pipeline Reference Tariff for Queensland Gas Customers Approved

On 18 May 2021 the AER announced approval of Roma to Brisbane Pipelines' 2021-22 gas reference

tariff variation notice in accordance with its **2017–22 access arrangement**.

Wholesale Markets Quarterly Report Q1 2021 Published

On 17 May 2021 the AER published the **Wholesale Markets Quarterly report**.

Network Electricity Tariffs Approved for Customers in Six Jurisdictions

On 14 May 2021 the AER approved Network Electricity Tariffs for retail customers in six jurisdictions: **SA Power Networks**; **Queensland**; **TasNetworks**; **Power and Water Corp (Northern Territory)**; **New South Wales**; and **Evoenergy (Australian Capital Territory)**.

High Wholesale Electricity Prices in South Australia in March 2021 – Report Published

On 12 May 2021 the AER published a report into prices on **12 March 2021** in the wholesale electricity market in South Australia.

Amadeus Gas Pipeline 2021-26 Gas Transmission Access Arrangement Approved

On 30 April 2021 the AER published its **gas transmission final decision** for the Amadeus Gas Pipeline 2021-26 access arrangement commencing 1 July 2021.

Determination of Default Market Offer (DMO) Prices 2021-22

On 27 April 2021 the AER released final **Default Market Offer prices** for 2021-22.

Update Costs for Victoria-to-New South Wales Interconnector Approved

On 13 April 2021 the AER approved costs to **upgrade the Victoria-New South Wales Interconnector** that will help secure electricity supply to homes and businesses after Liddell power station's closure in August 2023.

Retail Energy Market Performance Update Q2 2020-21 Released

On 6 April 2021 the AER published its **quarter two 2020-21 Retail Energy Market Performance Update data**, covering the period from October to December 2020.

National Competition Council (NCC)

Application for Certification of the Queensland Rail Access Review – Draft Recommendation

On 28 May 2021 the NCC released its **Draft Recommendation** on the Queensland Government's application to extend the certification of the Queensland Rail Access Regime until January 2031.

Australian Capital Territory

Independent Competition and Regulatory Commission (ICRC)

Regulated Retail Electricity Prices for ActewAGL Retail's Small Customers 2021-22

On 7 June 2021 the ICRC released the annual update of regulated retail electricity prices for ActewAGL Retail's small customers for 2021-22.

Review of Demand Forecasting Methods for Water and Sewerage Services – Issues Paper

On 28 May 2021 the ICRC released an **issues paper** on its review of how it forecasts demand for water and sewerage services in the ACT.

Review of Retail Electricity Form of Price Control – Final Report

On 30 April 2021 the ICRC released the final report for its **review of the form of price control used to regulate retail electricity prices**.

Water and Energy Utilities Performance Report 2019-20 Published

On 30 April 2021 the ICRC released its report on performance and compliance of **licensed water and energy utilities delivered to ACT households and businesses over 2019-20**.

New South Wales

Independent Pricing and Regulatory Tribunal (IPART)

Solar Feed-in Benchmark Tariffs for 2021-22 to 2023-24

The IPART scheduled publication of its Solar Feed-in Benchmark Tariffs for 2021-22 to 2023-24 in June 2021. It **published its Draft Report in its Review of Solar Feed-in Benchmark Tariffs on 30 April 2021**.

Review of Water Management Prices from 2021

On 22 June 2021 the IPART **published its Supplementary Report** on WaterNSW's Non-Urban Metering Reform Charges from 1 October 2021 to 30 June 2025.

Water NSW Rural Bulk Water Prices from 2021

On 26 May 2021 the IPART **released a letter to Water NSW** notifying it that the IPART has deferred its determinations until mid-September 2021.

Northern Territory

Utilities Commission

Strategic Plan for 2021-22 to 2023-24 and Priorities for 2021-22 Released

On 7 June 2021 the Utilities Commission **released its Strategic Plan** for the next three financial years and its Priorities for 2021-22.

Port of Darwin Reporting Guidelines – Draft Revision

On 7 June 2021 the Utilities Commission published its **Draft Revised Port of Darwin Reporting Guidelines** for comment from stakeholders.

2019-20 Northern Territory Electricity Retail Review Published

On 6 April 2021 the Utilities Commission **published its Northern Territory Electricity Review for 2019-20**.

Queensland

Queensland Competition Authority (QCA)

Regulated Electricity Prices for Regional Queensland 2021-22 – Final Determination

On 11 June 2021 the QCA published its **Final Determination** on regulated electricity prices for Regional Queensland in 2021-22.

Statement of Regulatory Pricing Principles for Water – Final Determination

On 23 April 2021 the QCA published its **Final Determination** on the Statement of Regulated Pricing Principles for Water.

Dalrymple Bay Coal Terminal's 2019 Draft Access Undertaking – Final Decision

On 30 March 2021 the QCA published its **Final Decision** to refuse to approve the Dalrymple Bay Coal Terminal's Draft Access Undertaking.

South Australia

Essential Services Commission of South Australia (ESCOSA)

Minor and Intermediate Water and Sewerage Retailers Regulatory Performance Report 2019-20

On 4 June 2021 the ESCOSA published its **Regulatory Performance Report** for minor and intermediate water and sewerage retailers for 2019-20.

Tasmania

Office of the Tasmanian Economic Regulator (OTTER)

State of the Tasmanian Water and Sewerage Industry – 2019-20 Report Published

On 28 May 2021 the OTTER published its **2019-20 Report** on the State of the Tasmanian Water and Sewerage Industry.

Victoria

Essential Services Commission (ESC)

Melbourne Water's Maximum Prices and Service Standards 2021-22 to 2025-26 – Final Decision and Determination

On 22 June 2021 the ESC **Final Decision and Final Determination** on the maximum prices Melbourne Water can charge for its services from 1 July 2021 to 30 June 2026.

Port of Melbourne's Compliance with the Victorian Government's Requirements for How it Sets Prices

On 10 June 2021 the ESC **announced that it has commenced** an Inquiry into the Port of Melbourne's Compliance with the Victorian Government's Requirements on how it sets its prices.

Western Australia

Economic Regulation Authority (ERA)

No reportable items published in the June quarter.

New Zealand

New Zealand Commerce Commission (NZCC)

Measuring Broadband New Zealand Autumn Report Published

On 24 June 2021 the NZCC published its **Measuring Broadband New Zealand Autumn Report**.

Performance Analysis of Gas Distribution Businesses Released

On 31 May 2021 the NZCC **released its Performance Analysis** of Gas Distribution Businesses.

Draft Decision on Price-Quality Regulation of Chorus

On 27 May 2021 the NZCC **released its Draft View** on the revenue that Chorus can make on its fibre network.

Final Decisions to Retain Regulation for Three Telecommunications Services

On 12 May 2021 the NZCC **published its Final Decisions** to retain regulation of three telecommunications services with the objectives of promoting competition and protecting consumers.

Revised Process for Implementing New Regulatory Regime for Chorus

On 30 April 2021 the NZCC **published a Revised Process** for implementing a new regulatory regime for Chorus.

Regulatory Priorities for Energy Networks and Airports

On 29 April 2021 the NZCC **published its Regulatory Priorities** for Energy Networks and Airports.

Measuring Broadband New Zealand Summer Report Published

On 14 April 2021 the NZCC published its **Measuring Broadband New Zealand** Summer Report.

Network is a quarterly publication of the Australian Competition and Consumer Commission for the Utility Regulators Forum. For editorial enquiries please contact Rob Albon (Robert.Albon@acc.gov.au) and for mailing list enquiries please contact Genevieve Pound (Genevieve.Pound@acc.gov.au).