network

A publication of the Australian Competition and Consumer Commission for the Utility Regulators Forum

Issue 78 March 2021

Critical Issues in Regulation – From the Journals

The Revolution in Antitrust: An Assessment, Dennis Carlton and Ken Heyer, *The Antitrust Bulletin*, 65, 4, 2020, pp. 608-627.

This paper is about the scope and impact of the major changes that have occurred in antitrust thinking and practice in the United States (US) since the mid-1960s. There is a particular focus on the growing role played by economists and economic analysis. The two authors approach the issue from somewhat different backgrounds. Dennis Carlton joined the University of Chicago in the mid-1970s; has been heavily involved in consulting, and has advised both the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ). Ken Heyer joined the Antitrust Division of the DOJ in 1982, after obtaining his PhD in Economics from the University of California, Los Angeles. The authors describe exactly what they think about the changes, and argue that there were actually two 'revolutions' in antitrust. Their broad conclusions are that, while the changes have been broadly beneficial, there could be improvements. They ask those wanting to revert to the past to reconsider.

The changes over the past nearly sixty years are depicted as two revolutions (section two). The first change was the greater use by economists and other academics of existing economic insights, together with the development of new economic insights. These new insights improved the understanding of the consequences of certain forms of market structure and business behaviours. It also included the application of advanced empirical techniques to large data sets. The second was a revolution in legal jurisprudence, as both the federal competition agencies and the US courts increasingly accepted and relied on the insights and evidence emanating from this economic research.

The third section of the paper explains the impact of the revolution on economists, consulting firms, and research in the field of industrial organisation. Questions need to be asked as the use of economics increases. One question is whether the economic analyses are themselves scientifically sound rather than being primarily advocacy pieces in which biased empirical results based on cherry-picked data or econometric specifications are being presented. Second, if economics is a scientific discipline, how do well-trained opposing experts often reach diametrically opposite conclusions? There is a detailed discussion on pages 617 and 618 of how differences can arise, and the various ways that these problems are or could be addressed. One such process would be to appoint an independent economist as a special master to help the judge or jury to understand and evaluate the reasons for the discrepancy of opinion. Another suggestion is to allow the experts to cross-examine each other before the judge, respond to a judge's questions, and then respond to each other's answers.

The fourth section contains a consideration of whether the overall changes have been successful or whether, as some critics claim, it has 'gone too far'. A number of specific areas of antitrust are reviewed, including cartels, horizontal mergers, vertical mergers and exclusionary conduct. The authors' view is that the changes have overall been beneficial though, as with most any policy, it can be improved.

The fifth section contains the authors' discussion of some of the current 'hot issues' in antitrust and, in particular, what some of its critics say about the state of the revolution. The authors focus on three broad questions being asked about contemporary antitrust.

The first question is whether the US economy has become less competitive than it used to be, and whether something should be done about it? The authors think some of the claims in this regard have 'been off the mark':

> [The] evidence does not support broad claims that the alleged increases in market power throughout the U.S. economy have harmed consumers. Any claim that productivity would have been even greater if only antitrust and regulation had been more aggressive are at best speculative, and in any event may be subject to the Nirvana fallacy's assumption that government institutions actually perform better in the real world than history suggests they do.

Contents

The second question is whether antitrust has become too lax in dealing with mergers and anticompetitive conduct on the part of dominant firms. The authors' consideration of this question includes a long discussion of the approach to two-sided markets where 'recent legal precedent [American Express] may create systemic problems for antitrust policy unless corrected'. Here the plaintiff has the legal burden not only to show clear harm on one side of the market, but also to demonstrate that potentially positive effects on the other side of the market are not large enough to outweigh the harms. This, according to the authors, makes it 'far less likely that net harm can be established'.

Finally, this section of the paper also includes a discussion of the issues surrounding the objectives of antitrust; particularly consumer welfare versus total welfare and the suggested role of antitrust in addressing inequality. With regard to inequality the authors believe there are more efficient and targeted government policies than antitrust to address social concerns over inequality.

The concluding section contains an expression of the authors' hope that those wishing 'to turn back the clock to the antitrust and regulatory policies of fifty years ago' study that experience more closely. Otherwise they risk having its demonstrated deficiencies be repeated by throwing out the 'revolution's baby with the bathwater'.

There are six sections in the paper: Introduction; What Was the Revolution? (two subsections); The Effect of the Revolution on Economists and Economic Studies of Antitrust Matters (five subsections); Did the Revolution Succeed in Improving Antitrust Policy? (five subsections); Current Issues and Critics (three subsections); and Conclusion.

Economists cited include Phillip Areeda, Orley Ashenfelter, Jonathan B Baker, Robert Bork, Ronald Coase, Harold Demsetz, Frank Easterbrook, Vivek Ghosal, Harvey Goldschmidt, Robert E Hall, Arnold Harberger, William Kovacic, Richard Posner, Mark Rysman, Steven Salop, David Scheffman, D Daniel Sokol, George Stigler, Donald Turner, Michael Whinston, Oliver Williamson and Tim Wu.

A classic reference is Harold Demsetz, 'Information and Efficiency: Another Viewpoint', *Journal of Law and Economics*, 1969, pp. 1-22.

The article can be accessed by subscription to *The Antitrust Bulletin*.

An Alternative to Natural Monopoly, Oriol Carbonell-Nicolau, *Journal of Regulatory Economics*, 58, 2020, pp. 184-192.

According to the author, a 'standard argument within the neoclassical economics tradition' is that an exclusive franchise to serve a market should be granted in the presence of decreasing average costs of production (or, more generally, subadditive costs) – a situation commonly known as 'natural monopoly'. The case for this approach to natural monopoly has focused on the potential efficiency gains derived from low production costs at large-scale output levels from a sole producer. Harold Demsetz, George Stigler and Richard Posner all advocated competition among potential suppliers to enter non-collusive bids to become the sole supplier of the decreasing-cost activity. This was seen as a mechanism to reduce the deadweight loss from monopoly. The criterion for award of the franchise is the lowest per-unit price that would be offered by the franchisee. In this paper, Oriol Carbonell-Nicolau makes the case for a different approach, based on the observation that decentralised choices under a joint-ownership rule are efficiency improving, and the resulting output allocation yields a lower deadweight loss than the monopoly allocation.

The author's literature review focuses on the effects of shared ownership. Some authors have suggested local public ownership. For example, Elinor Ostrom advocated 'polycentric governance' as an escape from the market-state dichotomy, emphasising community-governed common-pool resources. R Quentin Grafton compared private, community, and state-governed common-pool resources, finding that a common factor in ensuring successful governance of common-pool resources is the active participation of resource users in the management of the flow of benefits from the resource. Others are shown to have argued that privatisation of government-owned utilities transfers public value to private interests, whose profit motive is not necessarily aligned with the needs of a broad base of customers. These and other considerations have led some to propose alternative structures for utilities, where 'perhaps the best example of joint ownership is that of a cooperative'. This organisational structure is seen as prioritising social value over profit maximisation and growth, and is described by the author as a 'catalyser of productivity and innovation'.

In the author's analytical setting, consumers sharing ownership of the monopoly recognise the effect of their consumption choices on the value of the ownership shares. The author considers a sharing rule where the 'effective' price paid by each consumer/owner for each unit of output (the unit price net of the consumer's ownership share of profits) is the average production cost. Where average costs decrease with output, an 'externality' is generated whereby each agent benefits from the indirect effect acting on the price. Because consumers 'internalise' the effect of their consumption on the price, the joint-ownership rule improves efficiency relative to the standard monopoly allocation. However, since consumers care only about their own utility, the shared-ownership arrangement does not generally achieve the first best. Nevertheless, alternative joint ownership rules for which the 'effective' price (net of profit ownership shares) lies below the average cost of production mitigate the externality problem and lead to an efficiency gain.

The paper concludes with a perspective on the role of private information about costs. The 1982 paper by David Baron and Roger Myerson is described as demonstrating that a private monopolist can benefit from hiding private information. This can be an obstacle to the design of efficient monopoly regulation. In contrast, under the shared-ownership mechanism proposed by Oriol Carbonell-Nicolau, asymmetric information is detrimental to the collective interests of the owners/consumers. The author argues that it is therefore in their collective interest to arrange matters so that the cost function and the total quantity produced are a matter of public record.

There are three sections in the paper: Introduction; The Model; and Monopoly with Shared Ownership.

There are 18 items in the reference list with year of publication ranging from 1938 to 2019. Economists cited include David Baron, Ronald Braeutigam, Ronald Coase, Harold Demsetz, Harold Hotelling, Roger Myerson, Elinor Ostrom, Richard Posner, George Stigler, Jean Tirole and Oliver Williamson.

A classic reference is David Baron and Roger Myerson, 'Regulating a Monopolist with Unknown Costs', *Econometrica*, July 1982.

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

Welfare Analysis Meets Causal Inference, Amy Finkelstein and Nathaniel Hendren, *Journal of Economic Perspectives*, 34, 4, Fall 2020, pp. 146-167.

This paper is about the marginal value of public funds (MVPF) which, the authors argue, offers a powerful approach to the empirical welfare analysis of a change in public expenditures or taxes. Examples considered in this paper include subsidies to a vaccine and a tax on carbon. The MVPF is defined as the ratio of affected individuals' own willingness to pay (WTP) for the policy change to the causal effect of the policy on government's net costs. There are two types of effect – mechanical (the increase in government expenditures due to the policy in the absence of any behavioural response) and the 'fiscal externality' capturing the effect of any behavioural response to the policy on the government's net budget outlays. A value of 1.5 for the MVPF means that every $1 of net government spending provides $1.50 of benefits to the beneficiaries of the policy.

The authors propose that a 'key attraction' of their approach is that it allows researchers to incorporate causal estimates of policy changes directly into a welfare analysis. In addition, the authors propose that the MVPF provides guidance for future empirical work on determining which behavioural responses matter for welfare. Specifically, empirical economists interested in translating the benefits of the 'credibility revolution' into progress on applied welfare analysis are advised to focus their efforts on estimating behavioural responses that have fiscal externalities on the government budget. Economists are further advised not to focus on behavioural responses whose costs are (approximately) fully internalised by the responding individuals.

The authors regard the approach as both more robust and easier to interpret than the traditional methods of welfare analysis. For example, taking into account the distortionary effect of taxation raised to finance government expenditure, known as the 'marginal cost of public funds', is criticised because it is not a single rate and may be negative (for example, a carbon tax). However, it 'remains a useful guide' for 'large policies'. The other traditional approach, identified as 'marginal deadweight loss', is criticised because it can be 'badly biased' and may require estimating effects of hypothetical policies in which those affected are 'compensated' for the change through lump-sum transfers.

Having set out its attractions, the authors then note that their MVPF approach is 'no panacea'. Estimating the WTP for the policy change can be challenging, especially if the policy involves in-kind transfers (such as subsidised education) or if it has effects on individuals not directly targeted by the policy change. The authors describe how 'a variety of arrows in the empirical economist's quiver – including structural modelling, calibration exercises, and quasi-experimental or experimental techniques – may usefully be brought to bear'. They see the core value of the MVPF is that it provides clarity on what objects are needed for welfare analysis. Finally, while only rarely will welfare analysis of real-world public policy be clear-cut and straightforward, the authors believe that the MVPF framework is sufficiently flexible that it can be applied in a wide range of situations.

There are 59 items in the reference list, with year of publication ranging from 1927 to 2020. Economists cited include Hunt Allcott, Mary Amiti, Alan Auerbach, Marika Cabral, Janet Currie, Martin Feldstein, Arnold Harberger, Jerry Hausman, James Hines, Jean-Jacques Laffont, James Poterba, Frank Ramsey, Sherwin Rosen, Joel Slemrod and Jean Tirole.

Classic references made in this paper include Frank Ramsey, 'A Contribution to the Theory of Taxation', Economic Journal, March 1927, pp. 47-61, and Arnold Harberger, 'The Measurement of Waste', *American Economic Review*: Papers & Proceedings, May 1964, pp. 58-76.

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

Energy Systems Integration: Implications for Public Policy, Carlo Cambini, Raffaele Congiu, Tooraj Jamasb, Manuel LLorca and Golnoush Soroush, *Energy Policy*, 143, August 2020.

This paper is about Energy Systems Integration (ESI) which the authors describe as an emerging paradigm at the centre of the energy debate in the European Union (EU). ESI is described as taking a holistic view of the electricity, gas, and heat sectors to deliver a clean, reliable, and affordable energy system. By using the synergies within and between sectors, ESI aims to increase flexibility in the energy system, maximise the integration of renewable energy and distributed generation, and reduce environmental impact. The authors observe that, while ESI-enabling technologies have been studied from a technical perspective, the economic, regulatory, and policy dimensions of ESI are yet to be analysed in depth. This paper contains a consideration of ESI in a multi-step approach. First, the authors focus on the economics of ESI-enabling technologies. Next, they discuss how the EU national regulators incentivise their adoption. Economic and policy barriers to ESI are identified and policy solutions to overcome these barriers are proposed. The authors conclude that current regulatory frameworks in the EU do not sufficiently stimulate ESI investments and only through proper design of incentives can ESI be adopted.

Specific policy recommendations made by the authors include the following:

Regulatory frameworks should incentivise investments by networks in innovation. The implementation of output-based incentive regulation is seen as well suited for this goal, as it shifts the focus from economic efficiency to an efficient delivery of outputs specified by the regulator.

Network innovation needs to be fostered through specific incentives, as these lower the risk that the regulated business bears. The regulator can either fix the revenue allowance and the expected result of the innovation process beforehand, or fix the revenue allowance for innovation but leave network businesses with the freedom to decide how to spend it.

Adoption of household-level storage systems (such as electric batteries) and conversion technologies (such as hybrid heat pumps) could be incentivised through tariff-based support mechanisms, such as feed-in tariffs for Distributed Generation, or through government grants or loans.

Where markets are deemed immature, other grid users could benefit from tariff-based support mechanisms which could help new business models to emerge.

Energy systems are different from one another due to scale, geography and other reasons, and in some cases a competitive market would not develop. Regulators should, under such conditions, allow network operators to own and operate storage and conversion systems, which can significantly reduce infrastructure costs and the need to build excess capacity.

Lowering system costs requires coordinated development plans for network operators to exploit existing synergies. Regulators could either require that network operators do so in their business plans or they could raise (lower) revenue allowances for businesses that (do not) do so.

Greater coordination at the European level, could be achieved by giving more leverage to the Agency for the Cooperation of Energy Regulators, although its prescriptive power would need to be limited, and the EU coordinator would need to engage with relevant stakeholders to identify opportunities to deliver cross-country integration solutions.

There are 77 items in the reference list, with year of publication ranging from 2003 to 2020. Economists cited include Laura Abrardi, Tim Brennan, Chiara Fumagalli, Paul Joskow and Emanuela Rondi.

The article can be accessed by subscription to *Energy Policy*.

Loyalty Taxes in Retail Electricity Markets: Not as they seem?, Bruce Mountain and Kelly Burns, *Journal of Regulatory Economics*, 59, February 2021, pp. 1-24.

This paper is about what the authors perceive as a common view in retail electricity markets that retailers discriminate based on consumers' loyalty: loyal consumers pay more and switchers can (and do) select the cheapest offers when they switch. The premium is colloquially known as a 'loyalty tax' or 'loyalty premium'. Reflecting this understanding, Australia's governments, regulators and consumer advocates have encouraged consumers to switch electricity retailers. Based on data from the Australian State of Victoria, the authors test whether consumers that had switched in the previous twelve months (the 'switchers') pay less than consumers who remained with their retailers (the 'remainers') in the previous twelve months. Switching behaviour is also analysed according to the tier of the retailer in the market hierarchy.

The authors use a sample of 47,114 electricity bills for Victorian households from 2018. They calculate annual bills and available savings if consumers switch to the cheapest offer available to them. They then construct an econometric model to assess the extent to which consumers that switched retailer in the previous twelve months pay lower prices than consumers who remained loyal to their retailer for at least the last twelve months. The authors estimate that the annual bills of switchers are expected to be AU$48 (4 per cent) lower than those for remainers, and that the median switcher could reduce its bills by 21 per cent by selecting the cheapest offer.

Classifying retailers into three tiers (incumbents, mid-sized retailers and new entrants) however provides some nuance to the main conclusion. Across all three tiers, switchers paid less than remainers, but the gap differed quite markedly. The third tier of retailers (the new entrants with market shares of less than 3 per cent) impose higher loyalty taxes than the other two tiers (incumbents and mid-sized retailers). The middle tier of retailers impose the lowest loyalty tax and for many consumers they may actually reward loyalty.

The authors' findings suggest to them that: the loyalty tax is (typically) smaller than widely considered; it varies across tiers of retailers; and that even engaged consumers typically do not select the lowest-priced offer. This may suggest that switchers have other considerations in mind – such as reputation and reliability – in addition to price. In this case, the authors ask whether regulators and price-comparison providers should aim to provide more information and/or reassurance on such issues. The authors further ask whether the low achieved savings compared to the much greater savings apparently available suggest that the problem is one of high search costs. This is perhaps a result of misleading discounts, inadequacies in price-comparison services and the difficulty of anticipating how retailers are likely to change their prices after customers have switched to them.

There are five sections in the paper: Introduction; Relevant Literature; The Estimation of Loyalty Taxes (three subsections); Analysis of Loyalty Taxes by Retailer Tier (two subsections); and Conclusions.

There are 41 items in the reference list, with year of publication ranging from 1986 to 2019. Economists cited include Allan Fels, Michael Pollitt, Catherine Waddams Price, Tony Woods and Michael Waterson.

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

How much do Households Respond to Electricity Prices? Evidence from Australia and Abroad, Lorraine Conway and David Prentice, *Economic Papers*, 39, 3, September 2020, pp. 290-309.

This paper is about the responsiveness of households (in Australia and abroad) to changes in electricity prices. The authors review published studies to understand how much households change their electricity consumption when there is a price change. Many studies find residential households have long-term and short-run elasticities behaving as economic theory would suggest. Long-run elasticities range from −0.75 to −0.3, and short-run elasticities range from −0.47 to −0.026. The authors reach four conclusions about the responsive of household electricity demand to price.

First, the empirical literature provides substantial international and local evidence that households, in the long run, respond to electricity prices. While the demand for electricity is found to be inelastic, households do respond in a material way to an increase in price. Further, this responsiveness is greater than is estimated for some other necessities, such as petrol and water. The responsiveness of the demand for electricity is comparable to that for cigarettes, and the higher estimates for electricity are similar to those for milk and bread.

Second, the international evidence from pilot studies and trials is that consumers respond to price signals that encourage moderating consumption during peak periods. While these very short-run price elasticities are smaller than the long-run estimates, this is consistent with economic theory that consumers can adapt over longer time frames by making more efficient investment decisions. Responsiveness in the very short-run is increased if pricing reform is accompanied by technology that improves household information and eases their ability to respond to price changes. The authors also note caveats on applying elasticities compiled from pilot and experimental studies to an entire population as those approaches can involve self-selection and incentives to participate which may not hold in other circumstances. The weight of evidence would support that households are responsive to price changes through adjusting demand.

Third, most short-run pricing studies appear to partner with energy businesses to access customer data. Similar to other research areas, details about income can sometimes be difficult to access as disclosure through surveys is limited. Where smart meters are in place, household usage data exist and is held by electricity businesses – access to these data requires working with electricity businesses with permission from households.

Finally, the authors conclude that there is insufficient evidence to determine whether low-income and vulnerable households respond less to electricity prices compared with other households. There is no Australian quantitative evidence, and the international evidence is ambiguous on the direction and size of any effects. The qualitative evidence seeking to understand whether low-income and vulnerable households are more likely to be adversely affected by electricity price reforms is mixed. Future Australian research could focus on more precisely understanding the impact of cost-reflective electricity prices on households by including a sample of a sufficient size of low-income and vulnerable Australians. Estimating the responsiveness of demand changes based on a panel of households or communities for a substantial period of time is recommended for this research.

There are six sections in the paper: Introduction; Prices as a Part of Energy Policy (five subsections); Long-Run Price Elasticities of Demand for Residential Electricity (three subsections); Short-Run Elasticities of Demand for Residential Electricity (four subsections); Price Responsiveness by Different Types of Household (five subsections); and Discussion and Conclusions. There are two appendices.

There are 44 items in the reference list, with year of publication ranging from 1892 to 2020. Economists cited include Marcel Boiteux, Severin Borenstein, Robert Breunig, Joshua Gans, Hendrik Houthakker, Koichiro Ito and Paul Simshauser.

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

How Antitrust Enforcement can Spur Innovation: Bell Labs and the 1956 Decree, Martin Watzinger, Thomas Fackler, Markus Nagler and Monika Schnitzer, *American Economic Journal: Economic Policy*, 12, 4, 2020, pp. 328-359.

This paper is about the 1956 consent decree against the Bell System which is viewed as providing a rare opportunity to learn about the workings of antitrust remedies concerning businesses with 'enormous' market power. It has been referred to repeatedly as an example of how to deal with such businesses. In this paper, the authors provide evidence for the potential, but also the limits, of this remedy.

The authors aim to show that free compulsory licensing can be effective in fostering innovation in highly concentrated markets. Their analysis also provides what they describe as the first rigorous evidence supporting the view that Intel would have found it harder to develop microprocessors without the consent decree in 1956 forcing AT&T to agree to license all its past patents (including the patents for the transistor) free of charge.

The authors' results suggest that forcing Bell to compulsorily license its patents was ineffective as an antitrust remedy in stimulating market entry and innovation in the telecommunications equipment market, the market for which the antitrust remedy was intended. Recent mergers, such as the ones between AT&T and Time Warner; and between Disney and Fox, have put issues of vertical integration, market power, and potential foreclosure 'front and centre' in the current antitrust policy debate. The typical approach to deal with issues of market power and foreclosure in the case of vertical mergers is to impose behavioural remedies. The authors caution that a behavioural remedy may not always be sufficient to deal with market foreclosure resulting from vertical integration.

There are eight sections in the paper: Introduction (untitled); The Bell System and the Antitrust Lawsuit (three subsections); Estimation Frameworks and Data (three subsections); Main Results: The Impact of the Consent Decree on Follow-on Innovation; Complementary Results: The impact of the Consent Decree on US Innovation; The Effects on Bell; Compulsory Licensing as an Antitrust Remedy; and Conclusion.

There are 44 items in the reference list, with year of publication ranging from 1959 to 2020. Economists cited include Jonathan Baker, Richard Nelson, Mark Schankerman, Suzanne Scotchmer, Peter Temin, Michael Whinston and Heidi Williams.

The article can be accessed by subscription to the *American Economic Journal: Economic Policy*.

Joint Production in the Delivery Market: Letter networks with parcels or parcel networks with letters?, Antonia Niederprüm with the support of Gonzalo Zuloaga and Willem van Lienden, WIK Discussion Paper No. 466, Bad Honnef, December 2020.

This discussion paper is about the profound structural change that postal markets are undergoing. Digitisation is changing the forms of communication between consumers, providers and government institutions. Digitisation has also massively expanded the range of available advertising media and intensified the competition for advertising budgets at the expense of print media and addressed advertising mail. As a result, letter volumes have been decreasing for years, in Germany and worldwide. At the same time, the strong growth in e-commerce is leading to an increase in the dispatch of goods and merchandise directly to consumers.

The focus of this paper is on Germany, with comparative reference to a number of selected postal operators in other countries – Deutsche Post DHL, Österreichische Post, La Poste, PostNL, Royal Mail and PostNord with its subsidiaries Post Danmark and Swedish Posten.

Over the last five years, the majority of the selected operators have adopted similar strategies to deal with the divergent trends in demand for letter post and goods (small packages and parcels). All of them have expanded sorting and delivery capacities for the consignments of goods, and have invested in the modernisation and optimisation of processes. Nearly all of these operators have opted for a nationwide combined delivery of letter post and small packages. In contrast, with the exception of Royal Mail, all selected postal businesses rely on separate sorting centres for letter post (including small packages) and parcels. The majority of postal operators deliver letter post, small packages and parcels jointly outside metropolitan areas. The delivery bases serve as consolidation points and are being further developed for this purpose (for example, Deutsche Poste).

Overall, the postal operators are also striving to exploit the advantages of an existing, nationwide letter delivery network for the delivery of merchandise and to use delivery capacities that have become available due to the decline in letter volumes. In addition, postal operators are making significant efforts to organise the 'last mile' in a more flexible way, and, for letter post and packages, a more open way. This is aimed at coping better with the considerable fluctuations in demand for the delivery of merchandise to consumers.

Over the next five years, the authors expect Deutsche Post to continue to rely on the use of letter operations for the joint delivery of letter post, small packages and, in rural areas, parcels. This strategy tends to support a higher level of quality in universal service, especially in rural areas, compared with a situation without joint delivery. Nevertheless, the considerable fluctuations in demand for the delivery of goods may lead to a temporary deterioration in the quality of the letter post. To counteract this, the authors recommend that quality monitoring by the Federal Network Agency should be further developed to increase transparency, and thus ensure that there is no systematic discrimination against certain types of postal items or customer groups within the universal service.

There are three sections in the paper: Introduction (two subsections); Trends in Composite Production (ten subsections); and Future of Composite Production in Germany (six subsections). An Annex contains a literature review on economies of scale, scope and density in postal operations; and a model for estimating cost savings for network delivery by Deutsche Post.

There are 89 items in the reference list. Economists cited include William Baumol, Michael Bradley, Margaret Cigno, Jeff Colvin, Jorg Finsinger, John Panzar and Robert Willig.

This Discussion Paper (available in the German language only) can be accessed at: **WIK Discussion Paper Number 466**

What Remains of Cross-Country Convergence?, Paul Johnson and Chris Papageorgiou, *Journal of Economic Literature*, 58, 1, 2020, pp. 129-175.

This paper is about the record of cross-country growth over the past fifty years and whether developing countries have made progress on closing the income gap between their per capita incomes and those of advanced economies. The conclusion is that, as a group, the developing countries have not made progress; and that this conclusion is supported by their survey of the literature on absolute convergence. This survey particularly emphasises published articles from the last decade. The paper closes with a brief examination of the recent literature on the cross-individual distribution of income. The authors assessment is that, in spite of the lack of progress on cross-country convergence, global inequality has tended to decrease since 2000.

In its simplest form, convergence suggests that poorer countries have the propensity to grow faster than the richer countries, so as to eventually catch up to them. The idea of convergence has its formal origins in a 1956 paper by Robert Solow, and its empirical treatment began in the mid-1980s being further motivated by the modern growth theory and empirics.

The authors undertook 'a crude internet search' revealing that, over the last thirty years, there have been thousands of papers (described as a 'voluminous literature') written on the subject of convergence. In addition, they observe that four of the most influential papers in the entire growth literature focus on convergence and account for almost 11,000 citations.

In spite of their belief that the concept of the long-run irrelevance of initial conditions is straightforward, the authors found that the empirical testing of convergence and understanding its mechanics are 'quite elusive'. They found that convergence 'is hard to pin down' because the concept can be operationalised in many ways, and because econometric approaches and data measurement issues remain a challenge in empirical tests.

The last two decades of an unprecedented wave of growth in many developing countries and emerging markets led many analysts to claim success, and to believe that 'this time is different'. In the authors' view, this recent optimism in favour of rapid and sustainable convergence is unfounded. Their conclusion is that, with the exception of a few countries in Asia that exhibited transformational growth, most of the economic achievements in developing economies have been the result of removing inefficiencies, especially in governance and political institutions. Further, while important and necessary in the process of development, these one-off level effects do not, in their view, stimulate continuing economic growth.

There are six sections in the paper: Introduction; Patterns and Facts on Growth over the last Half Century (eight subsections); Theoretical Considerations; Convergence Concepts; Empirical Evidence (four subsections); and Conclusions.

There are 294 items in the reference list, with year of publication ranging from 1928 to 2018. Economists cited include Anthony Atkinson, Robert Barro, William Baumol, Gary Becker, Frank Cowell, Angus Deaton, Milton Friedman, Clive Granger, Melanie Krause, Robert Lucas, Greg Mankiw, Jenny Minier, Frank Ramsey, Dani Rodrik, Paul Romer, Xavier Sali-i-Martin, Joseph Schumpeter, Robert Solow, Michael Spence, and Trevor Swan.

Literature Note: In this paper, the standard neoclassical growth model is referred to as the 'Solow-Swan' model, acknowledging the contributions of both Robert Solow ('A Contribution to the Theory of Economic Growth', *Quarterly Journal of Economics*, 1956) and Trevor Swan ('Economic Growth and Capital Accumulation', Economic Record, 1956).

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

Regulatory Decisions in Australia and New Zealand

Australia

Australian Competition and Consumer Commission (ACCC)

Measuring Broadband Australia – Twelfth Quarterly Report Released

On 29 March 2021 the ACCC published its **twelfth quarterly Measuring Broadband Australia report.**

Murray-Darling Basin Water Markets Inquiry – Final Report Published

On 26 March 2021 the ACCC published **Murray Darling Basin Water Markets Inquiry Final Report**.

Bulk Grain Ports Monitoring Report 2019-20 Published

On 19 March 2021 the ACCC published its **Bulk Grain Ports Monitoring Report 2019-20**.

Airline Competition in Australia March 2021 Report Published

On 17 March 2021 the ACCC published its **Airline Competition in Australia March 2021 Report**.

Wholesale Market Indicators Report December Quarter 2020 Published

On 19 February 2021 the ACCC published **the NBN Wholesale Market Indicators Report**.

Gas Inquiry January 2021 Interim Report Published

On 16 February 2021 the ACCC released **its tenth interim report** as part of its inquiry into Australia's gas supply arrangements.

Australian Competition Tribunal (ACT)

Access Dispute between Glencore Coal and Port of Newcastle Operations (PNO) – Affording Additional Time

On 14 December 2020 **the Australian Competition Tribunal found** that it is reasonable to afford PNO an additional period of time in which to make an application to the Tribunal for the issue of a notice pursuant to s 44ZZOAAA(5) of the Competition and Consumer Act.

Australian Energy Market Commission (AEMC)

Energy Security Board's Future Directions on the National Electricity Market Released

On 4 January 2021 the AEMC released **details on the future direction of the National Electricity Market** (NEM), identifying four areas of reform to address key challenges facing Australia's electricity supply.

Annual Residential Electricity Price Trends Report Published

On 21 December 2020 the AEMC **published national residential electricity price trends data for 2020**.

Australian Energy Market Operator (AEMO)

Quarterly Energy Dynamics Report Q4 2020 Published

On 29 January 2021 the AEMO published its **Quarterly Energy Dynamics Q4 2020 Report** providing energy market participants and governments with information on the market dynamics, trends and outcomes during Q4 2020.

Australian Energy Regulator (AER)

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

On 16 March 2021 the AER published its report on **high wholesale electricity prices** in South Australia on 22 January 2021.

Pipeline Capacity Trading – Two Year Review

On 5 March 2021 the AER published a report reviewing the **implementation of pipeline capacity trading reforms**.

Wholesale Markets Quarterly Report Q4 2020 Published

On 18 February 2021 the AER released its latest **Wholesale Markets Quarterly Report**, which showed that wholesale electricity and gas prices in 2020 had dropped to their lowest levels since 2015.

Annual Gas Compliance Reports 2019-20 – Overview Published

On 11 February 2021 **the AER published an overview of reports** submitted by gas distribution and transmission pipeline operators in accordance with the Annual Compliance Order for 2019-20 for service providers of covered gas transmission and distribution pipelines.

High Wholesale Electricity Prices in NSW in November 2020 – Two Reports Published

On 29 January 2021 the AER published **two reports into prices in the wholesale electricity market in New South Wales** on 16 and 20 November 2020.

Retail Energy Market Performance Update Q1 2020-21 Released

On 18 December 2020 the AER released its **quarter one (Q1) 2020-21 retail energy market performance update data**, covering the period from July to September 2020.

Treatment of Inflation for Regulatory Decisions – Final Position Paper Published

On 17 December 2020 the AER released its final **position paper on the treatment of inflation in the regulatory framework**.

International Regulatory Approaches to Rate of Return – Final Working Paper Published

On 16 December 2020 **the AER released its final working papers** on international regulatory approaches to rate of return, and the Capital Asset Pricing Model (CAPM), and alternative return on equity models. These form part of the 2022 rate of return instrument, and reflect the AER's consideration of submissions received in response to August 2020 draft working papers.

National Competition Council (NCC)

Application for Certification of the Dalrymple Bay Coal Terminal Access Regime

On 18 January 2021 the NCC received an application for **certification of the Dalrymple Bay Coal Terminal access regime** which was previously certified on 9 May 2011.

Application for Certification of the Queensland Rail Access Regime

On 18 January 2021 the NCC received **an application from the Premier of Queensland** for certification of the Queensland Rail access regime.

Application for Certification of the South Australian Ports Access Regime

On 22 January 2021 the NCC **received an application** from the Premier of South Australia for certification of the South Australian ports access regime.

Australian Capital Territory

Independent Competition and Regulatory Commission (ICRC)

Review of the Retail Electricity Form of Price Control – Draft Report Released

On 26 February 2021 the ICRC released a draft report for its **review of the form of price control used to regulate retail electricity prices**. The draft report outlines the ICRC's draft positions and proposed implementation timing.

New South Wales

Independent Pricing and Regulatory Tribunal (IPART)

WaterNSW Rural Bulk Water Prices from 1 July 2021 – Draft Report

On 16 March 2021 the IPART published **its Draft Report** on WaterNSW's Rural Bulk Water Prices to apply for four years from 1 July 2021.

Review of Water Management Prices from 2021 – Draft Report

On 16 March 2021 the IPART **published its Draft Report** on Water Management Prices to apply for four years from 1 July 2021.

Northern Territory

Utilities Commission

No reportable matters listed.

Queensland

Queensland Competition Authority (QCA)

Regulated Retail Electricity Prices for Regional Queensland for 2021-22 – Draft Determination

On 24 March 2021 the QCA **released** its Draft Determination on Regulated Retail Electricity Prices for Regional Queensland for 2021-22.

South Australia

Essential Services Commission of South Australia (ESCOSA)

SA Power Networks Regulatory Performance Report 2019-20

On 10 March 2021 the ESCOSA released **a report which outlines the performance of SA Water** for the period 1 July 2019 to 30 June 2020.

Final SA Water Regulatory Determination 2020 Monitoring and Evaluating Performance Framework

On 22 January 2021 the ESCOSA announced a regulatory determination in relation to the maximum revenue that the South Australian Water Corporation (SA Water) can recover from the provision of drinking water and sewerage retail services from 1 July 2020 to 30 June 2024: **SA Water Regulatory Determination 2020 (SAWRD20)**.

Tasmania

Office of the Tasmanian Economic Regulator (OTTER)

No reportable matters listed.

Victoria

Essential Services Commission (ESC)

Melbourne Water Price Review 2021 – Draft Decision

On 25 March 2021 the ESC released its **Draft Decision** on Melbourne Water's prices to apply for three years from 1 July 2021.

Minimum Electricity Feed-in Tariffs for 2021-22 – Final Decision

On 25 February 2021 the ESC released its **Final Decision** on the minimum electricity feed-in tariffs for electricity exported to the grid from small renewable energy sources to apply in 2021-22.

Annual Commentary on the Port of Melbourne's Tariff Compliance Statement

On 18 December 2020 the ESC provided **preliminary feedback** on the methods used by the Port of Melbourne to demonstrate compliance with the Government's pricing order.

Western Australia

Economic Regulation Authority (ERA)

Proposal for Access, Arc Infrastructure – Approval to Enter Negotiations

On 23 March 2021 the ERA announced it has approved Arc Infrastructure entering into negotiations on **Australian Western Railroad Pty Ltd's proposal** to access part of Arc's freight rail network.

Benchmark Reserve Capacity Price (BRCP) for 2023-24 Capacity Year – Final Determination

On 29 January 2021 the **ERA approved the AEMO's proposed revised BRCP** for the 2023-24 capacity year of $151,700 per megawatt per year, to take effect from the date and time specified in a notice to be published on AEMO's website.

New Zealand

New Zealand Commerce Commission (NZCC)

Tools for Assessing the 2020 Performance of Local Lines Companies Published

On 24 March 2021 the NZCC **published** tools for assessing the 2020 performance of local lines companies.

Annual Telecommunications Monitoring Report 2020 Published

On 17 March 2021 the NZCC **published its Annual Telecommunications Monitoring Report** for 2020.

Draft Decisions to Retain Regulation for Three Telecommunications Services – Feedback Sought

On 10 March 2021 the NZCC sought feedback on its **draft decisions** to continue regulation of number portability, PSTN interconnection and mobile co-location.

Chorus's Capex Proposal under the Fibre Regulatory Regime – Consultation

On 12 February 2021 **the NZCC announced it would consult on Chorus's proposal** to spend $1.6 billion over the first three years of the new fibre regulatory regime. Under the new regime, Chorus will be subject to price-quality regulation. A final decision is anticipated in September 2021, before finalising Chorus's first price-quality path in November 2021.

Technical Changes to Aurora Energy's Customised Price-Quality Path – Consultation

On 4 February 2021 the NZCC published and consulted on its **draft decision on Aurora Energy's CPP proposal**. Since publishing, the NZCC has identified two technical changes it proposes to make to the draft CPP determination.

Local Lines Companies Financial Performance and Service Quality

On 17 December 2020 the NZCC **published a report on how prices and service quality** of local electricity lines companies have changed over time.

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@accc.gov.au) and for mailing list enquiries please contact Genevieve Pound (Genevieve.Pound@accc.gov.au).