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RESEARCH PAPER

Improving regulation

Preamble

There has been continual growth in the volume and scope of regulation in Australia over recent decades. Some of this growth may reflect a rational calculation that some risks that were formerly managed by individuals and businesses may be managed more efficiently and effectively through regulation. The increase may also reflect community demands on governments to regulate to address real or perceived risks and problems, despite the costs borne by governments and businesses (and ultimately consumers).

A key assumption underpinning such explanations of the growth of regulation is that society is making an informed choice about the trade-offs associated with additional regulation. Another is that the new regulations are effective in solving problems and reducing risk.

However, several national and state reviews have raised concerns that at least some regulation is not delivering a net benefit to the community.

If regulation is not well-designed and effective in addressing problems, or is no longer effective because of changing circumstances, then community wellbeing can be improved by eliminating or modifying it.

Over the last decade, governments in Queensland and elsewhere have explored ways to improve how regulation is made, reviewed and administered. Despite some successes, there remain significant opportunities to pursue regulatory reform and modernise the regulatory regime.

The need to improve regulation has taken on an added urgency due to the nature of the pressing economic challenges facing the Queensland (and Australian) economy which has forced a renewed focus on ways to drive productivity and economic growth. As discussed in the Commission's paper, *Building Economic Resilience in Queensland*, countries with more efficient regulatory regimes are more likely to experience smaller economic contractions and faster recoveries.

This research paper complements and extends on this earlier work by examining how to tackle the challenge of improving regulation. It describes how regulation affects productivity and economic growth; explores the potential gains from focusing on improving the institutions and tools for making, reviewing and administering regulation; and identifies the main components of a regulatory reform agenda to support productivity and economic growth.

The Commission would like to acknowledge the authors of this paper— Jeffrey Hole, Carrie Haines, Angelina Bruno and Sean Mackay.

We welcome feedback on this publication.

About the Queensland Productivity Commission

The Queensland Productivity Commission is an independent statutory body that provides policy advice on complex economic and regulatory issues.

The Commission has an advisory role and operates independently from the Queensland Government—its views, findings and recommendations are based on its own analysis and judgments.

Further information on the Commission and its functions can be obtained from the Commission's website www.qpc.qld.gov.au

Contents

Key points

- With the quality of regulation having a direct bearing on productivity and economic growth, governments have identified regulatory reform as a key element of the economic policy response to the impact of the COVID-19 pandemic. As discussed in the Commission's paper, *Building Economic Resilience in Queensland*, countries with more efficient regulatory regimes are more likely to experience smaller economic contractions and faster recoveries.
- While it is beyond the scope of this research paper to assess the effectiveness or efficiency of regulation, several indicators suggest there would be a large productivity and growth dividends from improving regulation:
  - There has been a substantial increase in the volume of regulation over time in both Queensland and nationally.
  - Regulation is associated with significant costs to both business and government:
    - Queensland business expenditure on complying with state regulation could be in the order of \$3.5 to \$7 billion each year (or \$7,600 to \$15,200 per business). This is equivalent to around 1 to 2 per cent of Queensland's gross state product. These costs are likely to be more than double once Commonwealth regulation is included.
    - Regulatory complexity and high compliance costs reduce competition, as they act as barriers to new business entry. Both competition and business flexibility are vital to achieving the productivity growth and increased economic resilience needed to support sustainable economic growth and higher living standards. Some regulations can also be designed in ways that harm productivity, by constraining or distorting business production, employment and investment decisions.
    - Making and administering regulation accounts for a sizeable share of public spending. Improving state regulation provides an opportunity to improve public sector productivity and potentially free up resources to support the delivery of other public services.
- Although regulatory reform has been a focus at both the state and national level for over a decade, this does not appear to have resulted in large improvements in the quality or quantity of regulation. The evidence suggests that a broader approach to reform is required.
- Improved regulatory outcomes can be delivered through a regulatory reform agenda encompassing:
  - a clear regulatory policy that specifies (measurable) objectives, defines clear roles and responsibilities for improving regulation and establishes mechanisms for monitoring and reporting progress
  - ongoing and targeted reviews of the stock of existing regulation in important areas to ensure regulation is still needed and is designed in a way that avoids unnecessary compliance costs and distortions
  - rigorous analysis and assessment of the impact of new regulations
  - mechanisms for improving the administration and enforcement of regulation to ensure that clear benefits are being achieved at least cost to the community.

1. Introduction

Regulation affects every resident and business in Queensland. It affects most aspects of people's lives—the work they do and how they do it, the amount they are paid, the buildings they live and work in, how their personal information is shared and what they can do in their leisure time.

Box 1.1 What is regulation?

Regulation is generally considered to include any law or 'rule' that influences the way people behave.

Regulation may impose mandatory requirements upon businesses and other parts of the community, or it may seek a change of behaviour by providing incentives to improve economic, environmental or social outcomes.

Regulation includes not only Acts made by Parliament but also other subordinate and quasi-legislative instruments such as Regulations, standards and notices, mandatory industry codes of practice, accreditation schemes and local government by-laws.

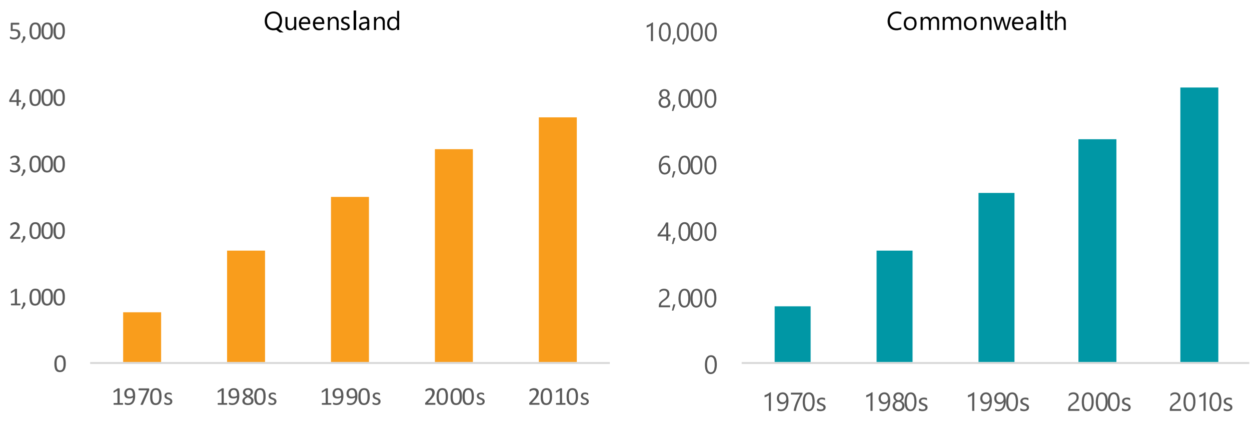
Queensland has primary responsibility for regulating areas that are not expressly identified as federal responsibilities. This includes schools, hospitals, the environment, roads, railways and other forms of public transport, public works, housing and non-residential construction, agriculture and fishing, police, prisons and emergency services. The local government sector is also an important regulator in areas such as waste and animal management, and building and planning approvals.

Regulation is intended to provide a range of benefits to the community. When regulation works well, it can support the efficient functioning of markets and improve outcomes for consumers and the environment. But where it does not, regulation can both fail to achieve its safety, environmental or consumer protection objectives and have unintended effects on prices, competition and business flexibility. While this can be due to poor regulatory design and implementation, it can also be caused by changes in circumstances, such as new technology or business models that were not contemplated when the regulations were first introduced. And because there is often strong resistance to changing or removing regulation, even if it is redundant or costly, the volume and complexity of regulation applying to business can increase over time—to the point where it becomes a major barrier to business flexibility, investment, employment and innovation.

Several developments have made it even more important to examine opportunities for regulatory reform.

First, there has been significant growth in regulation in Australia, including Queensland (Figure 1.1). In addition, the growing complexity of regulation has been highlighted as a challenge for businesses in several recent reviews of the impact of regulation in Queensland, especially those by the Better Regulation Taskforce and its predecessors (BRT 2017, 2018; RTRAC 2016).

Figure 1.1 Cumulative Acts passed in Queensland and federally since 1970



Source: Office of the Queensland Parliamentary Counsel website (accessed 7 August 2020); Federal Register of Legislation (accessed 26 August 2020).

The last comprehensive count of Queensland regulation identified over 72,400 pages of legislation and over 265,000 separate regulatory requirements (QCA 2013). Since then, more than 300 new Acts have been passed and over 1,600 subordinate regulations made (Table 1.1).

Table 1.1 New and repealed Queensland legislation (2014–2020)

Legislation	2014	2015	2016	2017	2018	2019	2020
Acts passed	65	35	66	44	30	38	39
Acts repealed	19	9	9	13	6	4	2
Subordinate legislation made	345	193	246	239	227	270	267
Subordinate legislation repealed/expired	57	41	52	53	40	51	32

Note: 2015 and 2017 were 'election years', which likely had less parliamentary sitting days.
Source: Office of the Queensland Parliamentary Counsel website (accessed 11 August 2020; 13 January 2021).

Second, consistent with national and global trends, productivity growth has slowed in Queensland (QPC 2020b). Productivity growth is vital for improving both living standards and government's capacity to fund increasing demands for a range of public services. However, improvements in productivity can be adversely affected by regulatory settings (for example, if settings unnecessarily restrict market entry or size, reduce competition or limit business flexibility).

Third, there are concerns about the quality or effectiveness of regulation and the efficiency of enforcement of regulation, in a number of areas. Recent public commentary across Australia has examined the adequacy of regulation (and its enforcement) in areas such as combustible building cladding, workplace death and injuries and environmental protection.

Fourth, the introduction of new technology and business models has challenged existing regulatory frameworks across jurisdictions in areas such as transport (taxi services, drones and electric vehicles), health, financial services, employment, streaming of video on demand, online shopping, cloud technology and food delivery. At the same time, new technologies open up opportunities for regulators to improve the way they administer and enforce regulation (BRT 2018).

Fifth, regulation has increased dramatically as part of the response to the coronavirus pandemic (COVID-19). Measures that have been implemented to manage the health crisis include restrictions on international and domestic travel, closures of schools and businesses, and restrictions on recreation and other activities.

Governments across Australia have also temporarily relaxed regulatory restrictions in areas such as retail trading hours, building and transport operations, take-away sales of alcohol by restaurants, and telehealth and other medical services. Recent reviews have recommended that such regulatory changes should be extended while an evaluation of their performance is undertaken—with the view that regulation is made permanent if there is a net public benefit (NSW Productivity Commission 2020). The Queensland Government has also indicated that it will assess the feasibility and ongoing merit of reforms to planning, pharmacy and telehealth, signature and witnessing requirements for legal documents, and regulations related to tenancies (Queensland Treasury 2020).

Lastly, Australia faces a major economic challenge in recovering from the effects of the health crisis. This has prompted calls for a focus on tackling regulatory barriers to business investment, employment and flexibility as part of a broader strategy to boost the economy and to ensure the economy is prepared for future shocks (Box 1.2).

Box 1.2 How can improving regulation aid economic recovery and improve resilience to future shocks?

The Commission's research paper *Building Economic Resilience in Queensland* (QPC 2020a) noted that efficient regulation can have a significant impact on the ability of the economy to respond, adapt and recover from shocks.

Responses to combat COVID-19 have had a large effect on economic activity. Although recovery has been stronger than expected, the Australian economy fell 1.1 per cent through the year to December 2020, and unemployment remains at 6.4 per cent (January 2021) (ABS 2020, 2021a). Forecasts in the Australian Government's Mid-Year Economic and Fiscal Outlook (December 2020) indicate that while the economy will continue to recover, unemployment is expected to remain high. Business investment[1], which had been weak preceding the crisis, fell sharply, declining 7.5 per cent over the year to December 2020 (ABS 2021b).

In a cross-country comparison of crises, Bjørnskov (2016) found that countries with more efficient regulatory regimes are more likely to experience smaller economic contractions and shorter recoveries. The author argues this occurs because crises cause significant disruption to normal activity, making existing capital and labour resources temporarily redundant. Efficient regulatory regimes allow resources to be rapidly reallocated to respond to the crisis, or be redeployed to newly productive opportunities, thereby limiting the economic and social costs of the crisis.

Regulation can affect the ways in which businesses and individuals respond to this economic challenge. For example, if regulation is poorly administered it can slow or prevent businesses implementing new business models. Faced with the impacts of COVID-19, many businesses have had to pivot to new business models to help them survive (Guillén 2020). Many cafes and restaurants in Queensland, for example, have moved into take-away and home delivery, which for some necessitated obtaining a licence covering take-away alcohol sales.

The pandemic may accelerate several trends affecting business, including more remote work, shorter supply chains and enhanced use of technology by consumers and businesses (Guillén 2020). Regulation and regulators need to be able to accommodate or respond rapidly to changes in business operations to allow businesses to grow while identifying and addressing new risks.

[1] Defined here as private new capital expenditure.

The policy challenge facing governments, in Queensland and elsewhere, in dealing with these challenges, is to ensure that regulation is 'fit for purpose'—that existing and new regulations are well targeted, effective, proportionate and flexible, and that they are being administered in an effective and efficient manner by the responsible agencies.

This research paper seeks to contribute to public discussion about two key questions relating to the role of regulation in the Queensland economy:

1. How does regulation affect the economy, and particularly productivity growth in the private and public sectors? (chapter 2)
2. How can governments ensure that regulation is fit for purpose and supports productivity and economic growth in a rapidly changing world? (chapter 3)

Addressing these questions can help support discussion on improving regulation and identify regulatory reform opportunities. Because of the effort that goes into developing, administering, enforcing and complying with regulation, even small improvements in regulation have the potential to result in large improvements in public and private sector productivity, and through this, support improved economic growth and better outcomes for the community.

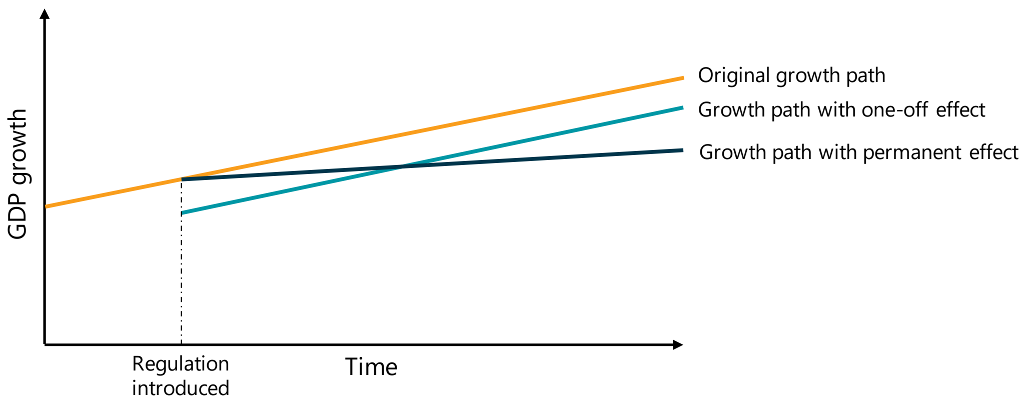
2. Economic impacts of regulation

Regulation can affect the economy—in particular, private and public sector productivity growth and overall economic growth. Both productivity growth and economic growth are strongly linked to living standards and the capacity of society to achieve other important social, environmental and redistributive goals.

2.1 Regulation can have a variety of positive and negative impacts on the economy

Regulation can affect either the *level* of productivity or economic activity or the *rate of growth* of productivity and economic output, or both (see Figure 2.1). For example, introducing a new regulatory requirement (such as the need to obtain a licence to operate) may increase business costs and reduce the amount of economic output, because the resources devoted to compliance would otherwise be used to produce goods and services (shown in Figure 2.1 as a shift down in the growth path of the economy). But if the regulation also keeps competitors out and reduces the incentive of incumbent businesses to invest in upskilling labour or improving production processes and products, then the rate of productivity growth in the relevant sector will fall, leading to a decrease in the rate of growth of the economy (shown as the growth path with permanent effect).

Figure 2.1 The impact of regulation on the level and rate of growth of the economy



Source: Adapted from Frontier Economics 2012.

Ways in which regulation can help boost productivity

Regulation can promote or inhibit the growth of productivity and economic output, depending on how it is designed and administered.

By addressing significant market failures—such as externalities, missing or incomplete markets, information asymmetries or public good attributes in certain transactions—regulation can increase the level of productivity and economic activity and increase productivity and economic growth rates. Two areas of state-based regulation that illustrate the relationships well are the regulation of natural resources and building and construction:

- *Environmental resources*: Regulation governing uses of the environment and natural resources can support long-term economic growth (even if this is not reflected in measured output) by addressing externalities such as pollution or by preventing over-exploitation of natural resources such as fisheries. Environmental regulations can also stimulate productivity and economic growth by encouraging innovation to develop more efficient ways to address externalities or exploit natural resources sustainably (Lanoie et al. 2011; Shao et al. 2020).[2]

- *Building regulation*: Building regulation is intended to address difficulties that consumers face in identifying quality builders and monitoring the quality of building works (particularly more complex structural features). By enhancing consumer confidence, building regulation can therefore encourage a greater level of building activity than would otherwise occur (VCEC 2010).

The potential for regulation to have a positive effect on productivity and economic output depends on how regulation is designed and administered. Most importantly, regulation needs to target *significant* market failures. Regulation will not deliver overall benefits if it does not address a material problem or is ineffective due to the way it is designed or administered. The impact may also depend on whether regulation is prescriptive about how businesses are to comply, or whether it allows for flexibility in achieving intended outcomes. One of the desirable features of outcome-based approaches such as tradeable permits, competitive auctions and taxes (which may require enabling regulation) is the incentives they provide to firms to innovate to reduce compliance costs.[3]

But regulation can also inhibit productivity growth

For regulation to make a positive contribution (that is, provide a net public benefit), the benefits of regulation must outweigh the costs that regulation imposes, including any adverse impacts on productivity and economic growth.

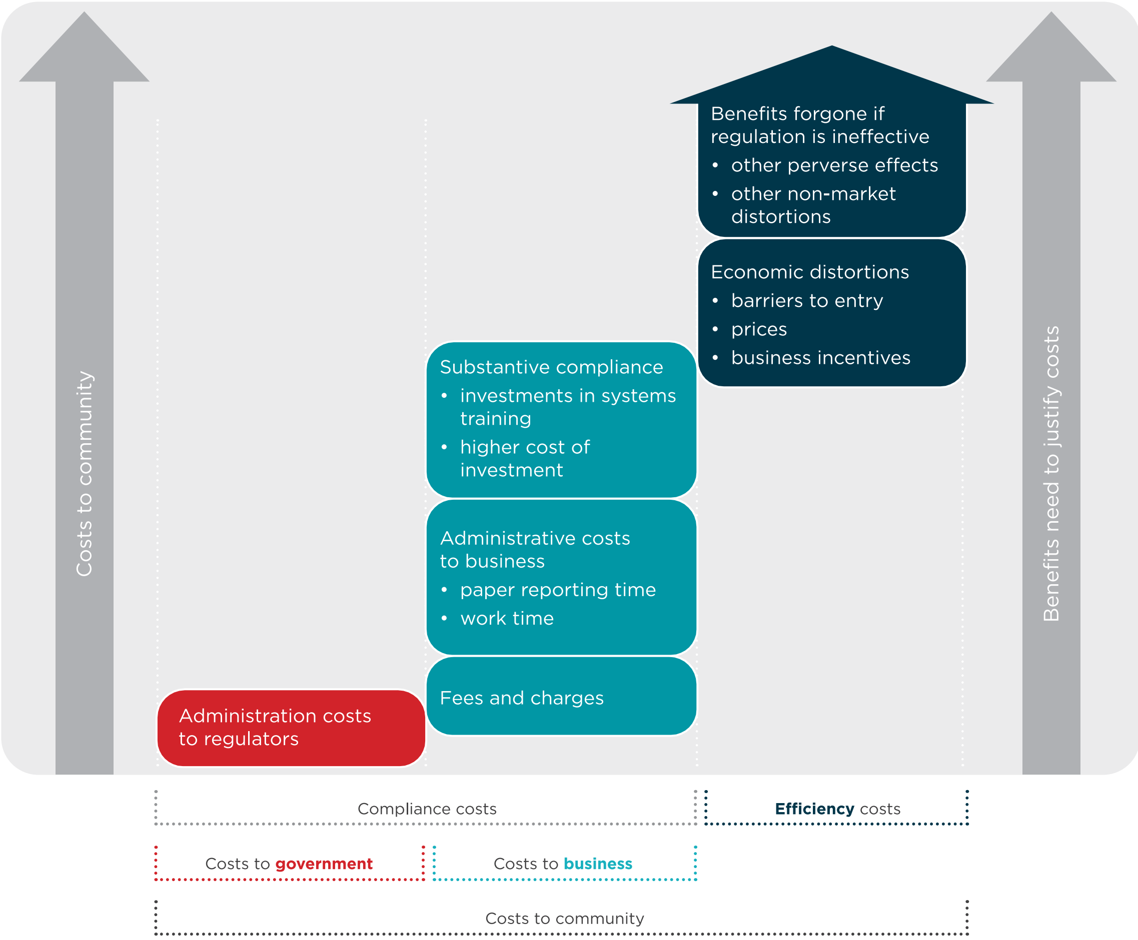
Regulation imposes several types of costs that can affect both the levels and rates of growth in productivity and economic activity. Typically, the costs of regulation are split into three main types (see Figure 2.2):

1. *Administrative costs to regulators* include the total costs to regulators to administer and enforce regulation.
2. *Compliance costs to business* include the administrative costs of undertaking paperwork, compiling information, and reporting to regulators. There can also be more substantive compliance costs, such as the investment in training, systems and services to comply with regulation. From a business perspective, the fees and charges paid to regulators impose an additional compliance cost.
3. *Efficiency costs* include the costs to society of distortions to businesses' production processes or changes in the type, quantity and prices of goods and services produced (den Butter et al. 2009). However, the costs also potentially include the benefits lost if regulation is ineffective or poorly administered.

[2] This is sometimes referred to as the 'Porter hypothesis', after the academic Michael Porter. According to this thesis, pollution represents a waste of resources: waste materials could be recycled or used to produce energy. Reducing pollution therefore leads to an improvement in the productivity of resource use. Properly designed environmental regulation can encourage innovation, which may partially or more than fully offset compliance costs. In other words, it is possible to reduce pollution emissions and production costs at the same time, resulting in 'win-win' situations (Lanoie et al. 2011, p. 804).

[3] Although there may be good reasons for using prescriptive regulation, such as to reduce uncertainty about business compliance obligations by limiting regulatory discretion (Decker 2018).

Figure 2.2 Costs of regulation



Source: Adapted from Figure 2.1 (PC 2011, p. 12).

Most of the available literature on the costs of regulation attempts to measure the first two types of cost. This potentially misses important long-run effects of regulation, because changes in the compliance costs to business are likely to have a once-off effect on productivity and growth levels, whereas changes affecting the efficiency costs of regulation can also affect the rates of growth in productivity and economic output.

Regulation may impose significant efficiency costs if it has one or more of the following effects:

- *Barriers to entry*. Regulation may restrict competition. While sometimes intended (for example, in placing limits on tourism in national parks), it is usually an unintended effect of regulation. High upfront costs associated with obtaining permits or licences, development approvals or other regulatory requirements may deter new business start-ups, giving existing businesses an advantage. Likewise, occupational licensing requirements can discourage people from entering regulated sectors or remaining in them (including on a part-time or casual basis). This can reduce competition by limiting the availability of appropriately licensed people and cause higher prices for consumers. Barriers to entry can harm productivity and economic growth by reducing competitive pressure on incumbents to innovate, and by encouraging wasteful lobbying to preserve or extend regulation.

- *Unintended price distortions*. Regulation may distort prices for goods and services. While some regulations are designed to affect prices (for example, price regulation of monopoly electricity distributors is intended to avoid monopoly pricing), in other cases the effect may be unintentional. Unintended price distortions harm productivity and economic growth by encouraging businesses to move into activities with artificially high prices, and out of those that have artificially low prices.
- *Distorted business incentives*. While regulation aims to change business behaviour in positive ways, it can have unintended adverse effects. For example, regulations that tailor reporting and other requirements based on business size (measured in turnover or staff numbers etc.) can unintentionally discourage business expansion. This may harm productivity and growth, especially if larger firms are able to reap scale economies or are more likely to invest in skills or product and process innovation.

Box 2.1 illustrates some of the ways in which regulation may impose efficiency costs, adversely affecting productivity and economic growth.

Box 2.1 The impact of regulations—some examples

- **Land-use planning regulation:** Land-use planning regulations are intended to ensure that the impacts of new developments on amenity, environmental and other important community values are considered in decisions about land use and development. However, the form and implementation of land-use planning regulation can both distort house prices (by restricting the supply of dwellings, and by causing costly delays in development processes) and constrain structural change (by inhibiting the reallocation of land to more productive uses). The Productivity Commission (2017, p. 37) estimated that improvements to land use planning regulations and its administration in Australia could provide economic benefits worth up to $1.5 billion per year by reducing development delays and risks, streamlining documentation and reducing controls that restrict changes in land use over time.
- **Occupational licensing:** Occupational licensing can provide assurance to consumers and improve competence, but when it unnecessarily restricts market entry, it has been shown to increase rigidity and reduce mobility in the labour market, reduce productivity growth and lead to increased costs to consumers (Harper et al. 2015; Kleiner & Soltas 2019; PC 2008, 2014a; QCA 2015). The Productivity Commission (2015), for example, identified that restrictions on the tasks health professionals can perform limit the flexibility of healthcare services to respond to patient needs.
- **Endangered species:** A private conservation agency based in South Australia had generated a surplus of platypuses—more than is a sustainable population for the sanctuary. However, due to a prohibition on the sale of native animals (except on a government-to-government basis) it could not sell any of the platypuses (it received offers well in excess of $1 million per animal). In the absence of sales, surplus animals would need to be culled (Banks 2003).
- **Private conservation:** Some regulations intended to protect and preserve places of heritage or natural value can lead to perverse or unintended outcomes. For example:
  - Proposed endangered species regulations (instead of negotiated solutions between governments and landholders) may, due to concerns about infringements on property rights, lead to the pre-emptive destruction of habitats (Epstein, cited in PC 2004, 2006a).
  - Heritage controls restricting the use or development of some buildings have in some instances led to insufficient maintenance, eventually resulting in irreparable damage or 'strategic demolition' (PC 2006).
- **Pharmacy:** Multiple reviews of the regulatory restrictions on pharmacy ownership and location, (initially introduced in the 1930s to protect incumbent pharmacies when British chain Boots attempted to enter the market) have found that such restrictions limit both consumer access and choice and the ability of suppliers to meet consumer demand, and are likely to impose large costs on consumers and taxpayers (QPC 2018).
- **Transport:** Until recently, the taxi industry was heavily regulated in Australia, with regulations covering the number of taxis, prices, industry structure and service quality. While the stated reasons for some of these regulations were to ensure minimum levels of safety and service quality, most of the existing regulation did not have a strong rationale, and the costs resulting from restricting barriers to entry were heavily borne by consumers— for example, excess fares in Sydney were estimated to be almost $300 million per year (Abelson 2010; PC 1999).

2.2 Relationship between regulation, productivity and economic growth

International evidence

Several studies have examined the relationship between regulation, productivity and economic growth. Much of the literature attempts to quantify the effect of changes in regulation on economic growth using cross-country comparisons based on aggregate indicators of regulation, such those produced by the World Bank and the OECD.[4]

Surveys of this literature conclude that improving regulation has a positive effect on productivity and economic growth (Frontier Economics 2012; Parker & Kirkpatrick 2012).[5] One of the most recent and comprehensive studies, which covered 23 OECD countries (including Australia), found that a strong relationship exists between regulation[6] and total factor productivity (TFP)—a one per cent reduction in the degree of regulation produced a 0.2 to 0.5 per cent increase in TFP (Papaioannou 2017).[7] Andrews and Cingano (2014) also found a strong negative relationship between product and labour market regulations and productivity.[8] Similarly, a Reserve Bank of Australia research paper reported that lower initial levels of regulation are associated with higher TFP growth over subsequent years and that changes in labour and product market regulation have more of an effect in combination (Kent & Simon 2007).

The literature on regulation does not, however, identify the specific changes in regulation that bring about productivity gains. It does suggest that countries looking to raise productivity and economic growth should address the different types of cost that regulation imposes and establish institutional arrangements that support improvements in regulation.

The efficiency effects of regulation are likely to be at least as high as the direct compliance costs

The empirical literature suggests that the efficiency costs of regulation are at least as significant (or higher) than the direct compliance costs. These costs include the costs arising from restrictions on competition, innovation and flexibility. For instance, a cross-country study by the Swedish Agency for Growth Policy Analysis (2010) concluded that the efficiency costs resulting from regulations are considerable and are much larger than the direct costs of administration and compliance.[9] Similarly, a study for the United States estimated that the costs to business of complying with Federal Government regulation were evenly split between three categories: paperwork (administrative) costs; costs of environmental and other risk reduction (compliance); and price and entry controls (efficiency) (Hopkins 1998, p. 309). The implication of these findings is that regulatory improvement policies that only focus on reducing administrative and compliance costs may provide important one-off benefits but are less likely to permanently affect rates of productivity and economic growth.

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[4] For example, since 2004 the World Bank has reported annually on the time and costs of activities involved in starting or closing a business, such as registering a business or property, obtaining credit, obtaining construction permits and resolving insolvency. (World Bank 2019).

[5] As noted in these studies, the empirical literature is subject to several limitations relating to the complexity of measuring regulation, limitations of the techniques (particularly difficulties in determining whether regulation caused changes in economic growth or the reverse) and limitations in measurement of the benefits of regulation (some benefits of regulation are not accounted for in measures of economic growth).

[6] The study uses indicators of regulation for seven network industries (telecommunications, electricity, gas, post, rail, air and road transport) as a measure of the economy-wide level of regulation, covering the period 1975 to 2011.

[7] In the long run, after an initial adjustment period.

[8] The authors predominantly test allocative efficiency, a component of aggregate productivity. Results are robust to alternative measures of labour and total factor productivity.

[9] The study used the term 'indirect costs' in a manner analogous to efficiency costs (section 2.1), including the impact on business start-ups, business capital investment, and incentives to innovate (Swedish Agency for Growth Policy Analysis 2010, pp. 16–17). The direct costs of regulation were defined as the costs incurred by business to comply with regulation (equivalent to the way administrative and compliance costs to business are defined in section 2.1).

The quality of regulatory institutions matter

Regulatory institutions are defined as the systems covering the development of new regulation such as regulatory oversight, training and capacity building, and the use of regulatory quality tools such as formal consultation and regulatory impact analysis, as well as systems for reviewing the stock of regulation, such as regulatory burden reduction programs. Jacobzone et al. (2010) examined the relationship between regulatory institutions and economic performance for OECD countries. The study used information from surveys of regulatory institutions in OECD countries, and found that improvements in regulatory institutions made between 1998 and 2005 had a significant and positive impact on economic indicators including employment, GDP and labour productivity. The implication of the findings is that efforts to improve the institutions that influence the development of new regulation and the quality of the stock of regulation can help raise rates of productivity and economic growth.[10]

The impact depends on the type of regulation

Some of the empirical literature looks at how particular areas of regulation affect productivity and growth, such as product market[11], labour market and environmental regulation. According to Frontier Economics (2012), there is evidence demonstrating that high levels of product market regulation impact negatively on productivity and growth. Andrews and Cingano (2014) found that deregulating labour markets would have a stronger effect on improving productivity, relative to the effect of deregulating product markets. Other empirical work has shown that the effect of a change in product market regulation on productivity depends on the level of labour market regulation in a given country, and vice versa (Égert 2016; Kent & Simon 2007). The policy inference is that implementing product and labour market reforms jointly may bring more benefits than single market reforms.

The gains from reducing regulation depend on the existing levels of regulation

Not surprisingly, studies suggest that gains from reducing regulation are much greater in countries with highly regulated economies. The negative effects of regulation are also found to be more intense in countries close to the global productivity frontier[12] (Papaioannou 2017)[13], suggesting Australia may have more to gain from improving regulation compared to some other OECD countries.

2.3 Regulatory costs incurred by business

There is a small amount of Australian literature that attempts to quantify the administrative and compliance costs of regulation incurred by business. While these studies are national in scope and do not attempt to cover all the different types of cost of regulation (including those incurred by the public sector), they enable a rough estimate of administration and compliance costs faced by Queensland businesses (assuming the costs are proportional to Queensland’s 19 per cent share of national output) (Table 2.1).

[10] The study did not attempt to explicitly account for regulatory culture (the norms, values and beliefs of those responsible for developing or administering regulation), although regulatory institutions are designed to influence culture (NZPC 2014, pp. 4–5).
[11] Product market regulation typically covers a broad range of rules that affect business operations during the firm’s lifecycle, including start-up, operation and expansion, and exit (Frontier Economics 2012, p. 6).
[12] The global productivity frontier is a measure of productivity used to compare countries or firms. The frontier is defined as the best performing country or firm.
[13] Advanced economies close to the productivity frontier rely on innovation as the main vehicle of growth (growth through factor accumulation has been exhausted). Given a higher innovation rate depends on competition, countries close to the frontier have bigger gains from liberalisation. Similarly, Bourles et al. (2013) find that anticompetitive regulations in upstream industries have curbed productivity growth of OECD industries, with these effects stronger in industries that are close to the productivity frontier.

Table 2.1 Regulatory costs to business: aggregate estimates of administration and compliance costs

Estimate	Source	Scope	Methodology
State-level studies			
$7.5 b (3% of GSP)	CCIQ (2013)	State	Appears to be based on survey responses (e.g. hours spent on paperwork).
$2.5 b (1% of GSP)	QCA/OBPR (2012)	State and local	Extrapolation of NSW and VIC. estimates.
National studies			
$86 b (10% of GDP)	ACCI (2005)	Federal, state and local	Based on US study. Drawing on a range of cost components, data sources and estimation procedures.
$35 b (4% of GDP)	Productivity Commission (2006)	Federal, state and local	Business cost calculator; OECD 2001 survey.
$94 b (6% of GDP)	Deloitte (2014)	Federal, state and local	Budget papers; ABS; Deloitte survey; Productivity Commission.
Federal regulation			
$65 b (4% of GDP)	Department of Prime Minister and Cabinet (2014)	Federal	Aggregation of portfolio estimates. Extensive count of regulation followed by deregulation units and policy officers costing their own portfolio's regulation.
$47 b (3% of GDP)	Australian Treasury (2014)	Commonwealth Treasury Portfolio	Aggregation of agency estimates. ATO uses a standard costing model.

Note: Estimates have not been inflation-adjusted.
Source: ACCI 2005; Australian Treasury 2014; DAE 2014; Department of Prime Minister and Cabinet 2014; PC 2006b; QCA 2012.

Several key conclusions can be drawn from these studies.

- A conservative estimate (after removing outlier observations) suggests administration and compliance costs associated with state-based regulation are likely to be in the range of 1 to 2 per cent of gross state product (GSP).[14] Based on Queensland's GSP of around $350 billion, this implies that state-based regulations may impose administration and compliance costs on Queensland businesses worth $3.5 to $7 billion per year (or $7,600 to $15,200 per business).[15] However, significant uncertainty is associated with this estimate, as, for example, the findings of the business surveys listed in the table are likely to be biased upward, due to businesses self-reporting (PC 2006, p 153).

[14] For those national studies where compliance burden includes regulation from all levels of government, it is assumed that state and territory regulation contributes one third of the total compliance burden. DAE (2014) make a similar assumption when attributing the share of total cost to government of administrating regulation to state and territory governments.

[15] If all of this burden was ultimately passed on to consumers, state-based regulation would impose annual costs of between $300 and $600 per person in Queensland.

- When the costs of complying with Australian Government regulation are added, total regulatory compliance costs for Queensland-based businesses could range from 4 to 6 per cent of GSP or between $14 and $21 billion per year. The Australian Government is responsible for regulations relating to taxation (GST), financial regulation and competition and consumer protection.
- These estimates do not take account of the efficiency costs associated with regulation (Novak 2016), or the impact on economic resilience (the ability of the economy to respond to shocks such as COVID-19 or the GFC). The economic cost of regulation is likely to be larger than indicated by these studies, which do not attempt to measure the broader economic efficiency effects of regulation (such as the effects of barriers to entry, price distortions and unintended impact on growth rates or the impact of regulation on slowing the rate of economic adjustment to major economic shocks). If the efficiency costs were as large as the administration and compliance costs, the total costs of regulation to the Australian economy would be around 8–12 per cent of GDP.[16]

While these studies provide insufficient information to determine the main drivers of the cost estimates (such as the different types of cost identified in Figure 2.2, different areas of regulation, or the role of administration and enforcement in influencing reported costs), this topic has been canvassed in other independent reviews (Box 2.2).

Box 2.2 Potential drivers of regulatory costs incurred by business

Independent reviews of regulation by bodies such as the Productivity Commission and Queensland's Better Regulation Taskforce identify some of the factors driving regulatory compliance costs. For instance, recent reports by the Productivity Commission covering mining, resources, agriculture and retail trade (PC 2013, 2014c, 2016, 2020) identify the following cost drivers:[17]

- **Time and effort required to identify and understand regulatory obligations**: Common business concerns relate to the effort required to report information to (potentially multiple) regulators, and the time to complete applications for permits, licences or other approvals. As these costs are often fixed, their impact is sometimes felt disproportionately by small businesses due to their lower turnover and lack of specialised staff to handle regulatory matters (BRT 2017; PC 2016).
- **The way regulations are designed**: Regulations that create or increase barriers to entry, participation, diversification or expansion in a market, through limiting the number, size or operating model and mix of businesses or individuals (for example, through strict licensing or outmoded or overly prescriptive requirements) can reduce competition, innovation and productivity. This in turn can lead to increased prices (and/or a reduced range of products or services) and costs to consumers and other businesses (Harper et al. 2015).
- **The way regulation is administered**: Complex and unnecessarily lengthy approval processes in areas such as land and infrastructure development are often identified as a major driver of regulatory compliance costs. The Productivity Commission in its *Shifting the dial* report, for example, stated that as much as half of the costs of regulation can be due to the way it is administered (PC 2017, p. 241).

Economic conditions may also be an important and under-appreciated factor driving the costs of regulation—regulation can influence the pace and shape of recovery by influencing the capacity for business to redeploy human and capital resources.

[16] Novak (2016) considers that accounting for the efficiency costs of regulation in Australia would push up previous estimates of the costs of regulation to at least $176 billion per year (11 per cent of GDP).
[17] The Queensland Government's BRT and its predecessor the Red Tape Reduction Advisory Council (RTRAC) have identified similar drivers of regulatory cost in Queensland (BRT 2017, 2018; RTRAC 2016).

2.4 Regulatory costs incurred by government

One issue that has received little attention in the regulation literature is the impact of regulation on government expenditure (shown in Figure 2.2 as the administration cost to regulators) and the productivity of regulators.[18]

Limited budgets mean that governments must make strategic decisions about how to allocate public resources to meet changing regulatory and other priorities. Good information on the size and distribution of current spending can help to identify opportunities to improve public sector productivity by administering and enforcing state-based regulation more efficiently. The productivity of regulators also affects the cost of doing business, because many regulators charge fees for licences and inspections based on their costs to administer and enforce regulations.

Regulatory spending in Queensland

There is a lack of information on current public spending on administering and enforcing regulation Australia-wide. In Queensland, there is no comprehensive publicly available list of regulators[19], and no standardised approach to presenting information on public spending by Queensland regulatory agencies (which can include both government departments and regulatory bodies). Instead, information on public spending on administering and enforcing regulation is available across a variety of sources, including departmental and regulator annual reports, departmental service delivery statements and the state budget papers, and in a variety of formats.

These publicly available sources indicate that the cost of administering regulation in Queensland is funded from various sources, including through general budget allocation, levies imposed on regulated industries and fees paid by the beneficiaries of the regulation (or those who cause the problem the regulation is designed to address). However, information on Queensland regulators and departments undertaking regulatory functions is often combined and incorporated into the reporting by the regulator's responsible department.

Nevertheless, by using available information on spending in Queensland and comparing this with spending in Victoria (Box 2.3)—which publishes consolidated information for its regulators—a rough estimate was developed of *gross* spending by the Queensland Government on the administration and enforcement of regulation.

Box 2.3 Victorian regulatory spending

In 2018, the Victorian Office of the Commissioner for Better Regulation (OCBR) surveyed all Victorian regulators on their objectives, regulatory framework and operational data. The OCBR identified $9 billion in expenditure by 57 regulators in 2016–17[20], representing 15 per cent of total Victorian general government expenditure (OCBR 2019). Moreover, the survey showed that the top 10 regulators accounted for more than 80 per cent of expenditure by all Victorian regulators.

Regulatory expenditures in Victoria are, however, likely to be much less than the $9 billion reported in the OCBR survey. This is because some Victorian regulators perform non-regulatory functions such as providing fire control and emergency response services.[21] Expenditure on non-regulatory services was identified for the top Victorian regulators and deducted from total spending. This yielded an estimate of *gross* public spending on regulatory services in Victoria of approximately $3.2 billion, representing 5.4 per cent of total Victorian general government expenditure in 2016–17.[22]

[18] The focus in this section is on public spending to implement regulation applying to businesses. Government agencies must also comply with internal regulatory and reporting requirements. This issue and the associated costs are not considered in this section.
[20] A total of 57 out of 60 Victorian regulators provided responses to the OCBR.
[21] The estimate of Victorian Government regulators also includes workers compensation payments. While these could be classified as regulatory expenditures due to the compulsory nature of workers compensation schemes, this spending was instead treated as a non-regulatory service.

As the largest regulators in Queensland and Victoria regulate very similar activities, it is likely that Queensland devotes a similar share of its total public sector spending to implementing regulation. Based on the Queensland Budget, adjusting for the size of state economies,[23] *gross* spending on administering and enforcing regulation in Queensland is likely to be in the order of $2.6 to 3.1 billion per year.[24] To put this figure into perspective, it represents about 8 to10 per cent of Queensland Government expenditure on health and education combined.[25] Expressed on a per capita basis, gross spending on regulatory administration and enforcement averages around $510 to $620 per person in Queensland.

A key challenge for government is to determine where to focus its regulatory efforts in a budget-constrained environment. Given the large budgetary impact of creating and administering regulation, quantifying the overall regulatory spend could, at a minimum, help identify opportunities to improve public sector productivity and aid assessments of whether the focus of regulatory effort in Queensland is delivering the greatest overall community benefit. Improving transparency around the costs of regulators may also improve stakeholder monitoring or oversight of regulator performance.

[21] The estimate of Victorian Government regulators also includes workers compensation payments. While these could be classified as regulatory expenditures due to the compulsory nature of workers compensation schemes, this spending was instead treated as a non-regulatory service.

[22] Based on the 2016–17 Victorian Budget papers.

[23] Victoria's share of the national economy is 23.67 per cent versus Queensland's 18.94 per cent (ABS *Australian National Accounts: State Accounts, 2018–19*, cat 5220.). However, while Queensland's economy is smaller than Victoria's, Queensland is also the most decentralised state resulting in higher costs of service delivery to more remote regions (Queensland Government 2017).

[24] Based on 5.4 per cent of $57.59 billion (Queensland Budget papers 2018–19) = $3.1 billion.

[25] In 2018–19, the Queensland Government spent $31.3 billion on health and education.

3. Improving regulation

Given the potential productivity and economic gains that can be achieved from more efficient and effective regulation, this section identifies the main tools governments can use to deliver improved regulatory outcomes.

How do we ensure regulation is fit for purpose?

Well-designed and administered regulation that effectively targets significant market failures helps support well-functioning markets and delivers benefits for businesses, consumers and the community.

But even where there is an 'in-principle' case for regulation, regulation needs to be effective in targeting material policy problems and provide benefits that exceed the costs of both administering and complying with the regulation and any efficiency costs. If these conditions are not met—perhaps because a regulation was not needed or poorly designed, or perhaps because circumstances have changed—the community would be better off removing the regulations or modifying them. The challenge for governments, in Queensland and elsewhere, in a rapidly changing world is to ensure that regulation is fit for purpose—that new and existing regulations are well targeted, effective, proportionate and flexible, and that they are administered in an effective and efficient manner by the responsible agencies (Box 3.1).

Box 3.1 Characteristics of 'good' regulation

- It should be clear to stakeholders when and how the regulation applies to them.
- It should be consistent with other laws, agreements and international obligations.
- It must have a sound rationale and generate a 'net benefit' to the community (that is, the benefits outweigh the costs) compared to the current situation.
- It must have the 'greatest net benefit'—that is, it must be better than any other alternative regulation or policy tool, including non-regulatory options.
- It must be based on quality analysis and sensitivity testing, with sufficient detail of the assumptions underpinning it.
- It should be premised on what the intended results are, so that its performance in achieving these objectives is able to be assessed in the future.
- It must be enforceable; yet, compliance and enforcement activities should be appropriately designed and targeted.
- It should be evaluated over time to ensure its continued need, relevance and effectiveness.
- It needs to be administered by accountable bodies in a fair and consistent manner, accompanied by appropriate guidance and transparency.

Source: Adapted from Banks (2003), ORR (1998).

Why is the 'regulatory challenge' so intractable?

Improving regulation is not a simple task. Over the last two decades, multiple state and national reviews have identified the growing volume and costs of regulation as a concern:

- The Australian Government's Taskforce on *Reducing Regulatory Burdens on Business* (2006) noted that the cumulative impact of 'more than a century of regulatory activity' has subjected Australian businesses to 'a vast and complex array of laws and regulations' (p. 6) and that successive governments 'had not given as much attention to regulatory compliance burdens on business' (p. 16).

- The Productivity Commission (2011, p. xi) noted that while Australia's 'unprecedented' increase in regulation over recent decades had brought some benefits, it had also brought 'substantial costs'.

There have also been significant efforts from the industry and community sectors, as well as multiple initiatives and process changes from governments at the state and national level.

While there has been some success in specific areas, these initiatives do not appear to have produced widespread or sustained improvements in the quality and quantity of regulation. For example, a review by the NSW Auditor-General (2016) found that the NSW Government's red tape reduction program between 2011 and 2015 had been ineffective, due in part to deficiencies in transparency, oversight and capabilities (Box 3.2). A review of Victorian red tape and regulatory improvement programs in place prior to 2016 reached similar conclusions (Victorian Auditor-General 2016).

Box 3.2 New South Wales Performance Audit on red tape reduction

The Audit Office of New South Wales (AONSW) (2016) undertook an assessment of whether the NSW Government's initiatives and processes to prevent and reduce red tape between 2011 and 2015 were effective. The performance audit concluded that the initiatives were not effective. It found that:

- reported red tape savings were inaccurate, and the regulatory burden of legislation increased
- current regulatory assessment practices did not support the government's commitment to 'good regulation' and that many regulatory assessment activities lacked 'adequate scrutiny' or independent and objective oversight
- there was no central oversight within government of regulatory reform or red tape minimisation.

Source: AONSW 2016.

There could be many reasons that the volume of regulation continues to increase and further progress to improve regulation has not been made. The regulatory 'system' is large and complex. Governments have incomplete information on the economic impacts of regulation and, indeed, even on their own spending on administering and enforcing regulation. Adding to the challenge is that:

- economic and other conditions facing governments and regulators are rapidly evolving
- the cumulative impact of many individual regulations, across multiple levels of government and jurisdictions, can make it difficult for those affected by the regulation (and governments) to identify and prioritise specific improvement opportunities.

The growth in regulation may, in part, reflect growing prosperity; as incomes have grown, people have expressed a greater desire for safety, security and fairness, along with an expectation that governments will provide public and private goods through regulation, amongst other tools. Concerns about the performance of markets, especially since the global financial crisis, have resulted in further regulatory interventions in areas such as finance, building and construction, and energy.

A key risk is that new regulation is introduced, with little informed consideration of alternatives, as a way of being seen to be responsive, to immediate policy challenges. As noted by Banks (2006):

> *In these circumstances, there seems to be a tendency for policy-makers and regulators to focus on new regulation, and less on whether existing regulation is sufficient … Indeed, when faced with the crisis of the moment, 'doing something new' has obvious political attractions, even if it overlays existing measures partly directed at the same thing …*

> *… There is also more scope to 'get away with' regulatory overlaps and inconsistencies because many of the costs of regulation are diffuse and 'off-budget' — they are incurred by a multitude of businesses and individuals across the economy. (p. 13)*

While the conditions under which regulation can improve community welfare are well known, there is growing concern that governments and regulators are too quick to respond to community pressures or identified risks by adding to the stock of regulation, rather than pushing back on unwarranted fears or by improving the enforcement of existing regulations. As noted by the Australian Government's Taskforce on Reducing Regulatory Burdens on Business (2006):

> *[R]egulators face their own incentives to minimise risk — in this case, the risk that they will be criticised for failing to 'protect' consumers. (p. 15)*

There is also a view that governments are slow or reluctant to repeal or modify existing regulations that are ineffective or impose more costs than benefits, due to real or perceived concerns about making some in the community worse off (PC 2017).

What can be done to improve regulation?

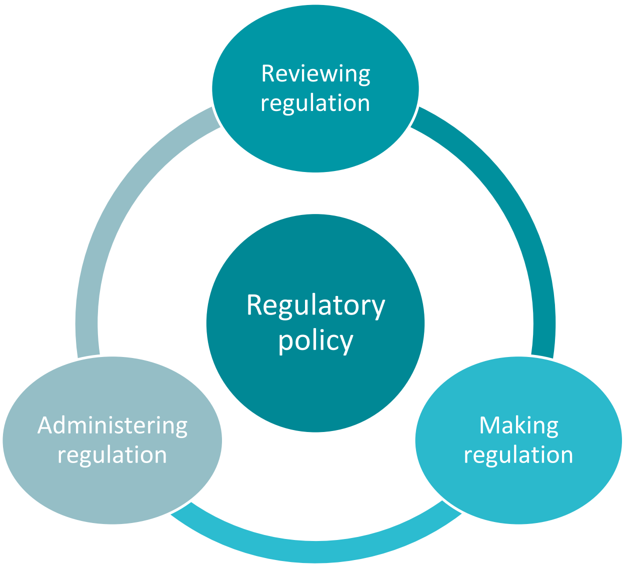
Both the international evidence (section 2.2) and experience in Australia suggest there are no simple solutions or shortcuts to improve regulation. What the evidence does suggest, is that there should be an intensive focus on 'when, what, and how' governments regulate.

In a broad sense, the tools to help ensure regulation is fit for purpose in a changing world are well known and have been documented in a number of reviews undertaken in other jurisdictions, as well as in guidance from organisations such as the Australian Productivity Commission and the OECD. But the key challenge has been implementing those tools in a way that directly addresses the underlying causes of suboptimal regulation.

The remainder of this paper examines several approaches to improve regulation through the prism of the 'best practice regulatory system' identified in Figure 3.1. Such a system generally comprises an overarching regulatory policy that specifies (measurable) objectives, defines clear roles and responsibilities for improving regulation, and establishes mechanisms for monitoring and reporting progress (section 3.2). Supporting the policy are mechanisms which frame the core elements of a regulatory reform program:

- *stock review*—to improve the design of the stock of *existing* regulation to ensure it remains effective and efficient in a changing world (section 3.3)
- *regulatory review*—the formal process to rigorously assess *new* regulation to ensure that proposed regulations are appropriately designed and their impacts have been adequately analysed and considered (section 3.4)
- *regulation administration review*—to encourage improvements in the administration (and enforcement) of regulation (that is, how regulators regulate) (section 3.5).

Figure 3.1 Elements of a systematic approach to improving regulation



3.2 Regulatory policy

Guidance on improving regulation from organisations such as the OECD and others recommends development of a regulatory policy to guide, direct and encourage the effective implementation of the tools for improving regulation. This reflects a view that clear objectives, well-defined and clear accountabilities, and transparency are the key to improving the quality of regulation.

A regulatory policy can comprise many elements, but key features include:

- clearly defined goals and priorities for improving regulation
- clearly defined roles and accountabilities for ministers, departments, agencies and regulators
- the level and allocation of public resources for improvement efforts, such as the funding provided to build capabilities and encourage improvements
- arrangements for consulting stakeholders and for independent and transparent monitoring and reporting on results.

Queensland already has some of the elements of a regulatory policy. The *Queensland Government Guide to Better Regulation*, for example, identifies processes to support the rigorous development of new regulation and sets out some requirements for managing some of the stock of regulation (for example, the approach to reviewing sunsetting subordinate legislation). It also describes the requirement for some regulatory bodies to report annually on implementation of model regulatory practices.

A regulatory policy on its own will not address the risk of 'over-regulation.' However, it can help to set responsibilities and accountabilities for improving regulation, encourage cultural change and, provide a clear roadmap. When accompanied with transparency around performance it can also strengthen incentives to improve regulation.

The importance of establishing a comprehensive regulatory policy should not be understated. This is highlighted by the experience with the legislative review program under the National Competition Policy (Box 3.3). This program contained many elements of a regulatory policy by establishing clear accountabilities, addressing the allocation of resources and incentives, and providing for independent oversight, public reporting, and stakeholder consultation.

Box 3.3 National competition reforms—legislation review program

As part of the National Competition Policy 1995 (NCP), the Australian and state and territory governments agreed to review and, where appropriate, reform regulations that were identified as restricting competition. The agreement:

- required jurisdictions to develop a review and reform schedule identifying all legislation within their jurisdiction that restricts competition
- established an independent body (the National Competition Commission) to monitor and report on implementation of the commitment to review regulation
- provided for agreed payments from the Australian Government to states and territories that complied with the terms of the agreement (based on the advice of the NCC).

Governments subsequently identified 1,800 pieces of legislation to be reviewed. A stocktake of progress published in 2010 reported that governments had reviewed and, where appropriate, reformed around 85 per cent of this legislation. Out of Queensland's 170 areas of legislation identified for review, around 68 per cent appear to have been subsequently repealed or modified.

Previous assessments of the effect of the NCP argued that the legislative review program 'played an important role in winding back barriers to competition and efficiency across a wide range of economic activities' (PC 2011, p. 29). The NCC considered that the legislation review program resulted in a 'material reduction in unwarranted competition restrictions', but that government self-assessment as the basis of reform had been 'limiting' (Harper et al. 2015, p. 116).

Source: PC 2011, Australian Government Competition Policy Review 2015, National Competition Council (2010).

3.3 Managing the existing stock of regulation

One of the few strategies that has shown to be effective in improving the quality of regulation is the evaluation of the 'stock' of regulation that has accumulated over time, to ensure its continued relevance and effectiveness. Evaluation can effectively target the key issue—regulatory design—and provide a robust assessment of whether a regulation supports the public interest or not.

Management of the stock of regulation involves more than arbitrarily 'cutting red tape.' Rather, it means:

> *retaining 'good' regulation, while removing or amending regulation that is no longer fit for purpose (PC 2011, p. 18).*

Regular reviews can detect those existing regulations that no longer provide a net public benefit and those that may no longer be fit for purpose due to, for example, changes in technology, preferences and industry and market conditions (Box 3.4).

Box 3.4 Reasons for the ongoing review of the stock of regulation

Technology and changing conditions and preferences

The introduction of new technology and business models have challenged, and may be constrained by, existing regulatory frameworks, if those frameworks exclude certain technical solutions (for example, remote or online application processes) or hinder innovation. In some cases, the regulation may simply be out of date, with technological advances, or changed consumer, industry or government preferences and practices rendering a regulation ineffective or redundant (NZPC 2014; PC 2011; QCA 2012; NSW 2020).

Delayed and/or cumulative regulatory impacts

The impact of the regulation, whether it is performing as intended, and the way it interacts with other legislation may not be identified or felt until long after its introduction. In addition, while individual regulations may, on their own, represent a low regulatory burden, the cumulative burden of these regulations on an industry may be significant and require review (NZPC 2014; OECD 2008).

Duplication or inconsistency

The duplication and inconsistency of regulation, both within and between governments, may contribute to increased uncertainty and risk, leading to a reduction in the effectiveness and efficiency of the regulation (QCA 2012).

Increasing the efficiency of existing regulation can boost economic resilience

A study by Bjørnskov (2016) found that countries with more efficient regulatory regimes are more likely to experience smaller economic contractions and shorter recoveries. This occurs because the quality of a country's regulatory regime affects the speed with which human and capital resources are redeployed to newly productive opportunities.

Managing the stock of regulation is not simply repealing 'old' legislation or undertaking ad hoc single reviews. Rather, it is best approached by adopting a long-term, ongoing process to embed a culture of continuous improvement. It should be based on frequent review; effective analysis of the need for and performance of the regulation(s); and, the continual demonstration that the regulation, or how it is administered, is the policy tool that provides the greatest net benefits to the community (OECD 1997; PC 2011; QCA 2012).

Box 3.5 Queensland's 'stock' of regulation

Queensland has 565 Acts and 452 subordinate instruments (for example, regulations and codes of practice) in force.[26]

Of these Acts, 125 have not been amended in the last 10 years and 66 have not been amended in over 20 years.

Subordinate instruments are reviewed (and mostly remade) more regularly, because they automatically expire after 10 years (unless action is taken to preserve them). There are, however, several regulations that have been exempted from expiry on multiple occasions (upwards of 10 years) on the grounds that they are under 'review.'

While no information is readily available on when Acts were last reviewed (rather than just amended), the QCA noted in 2015 that of the 153 pieces of Queensland legislation with restrictions on competition, only 27 (18 per cent) had been formally reviewed in the preceding 10 years.

Source: Office of the Queensland Parliamentary Counsel (2020); QCA (2015).

When done effectively, the identification and reform of regulations that are considered no longer fit for purpose can generate large economic and social benefits—by reducing costs, enabling structural change, lifting productivity and improving consumer choice and opportunity (PC 2011; QCA 2012).

How could regulatory reform efforts be prioritised?

Managing and reforming a large stock of regulation can represent a substantial undertaking and is not without cost. Accordingly, reform efforts should to be prioritised towards regulations that would deliver the biggest gains to the community (PC 2011).

Determining what areas of the stock of regulation to initially review should focus on those regulations that:

- impose material and increasing costs or distortions on the community
- following reform, could deliver significant net economic benefits to the community
- are likely to have been affected by changed circumstances (for example, due to technological or demographic change) since they were introduced or last reviewed—which may indicate they are no longer fit for purpose.

As noted by the Productivity Commission (2011):

> *[P]rioritisation requires more than a set of criteria that allow governments to identify high return reforms. It also requires a process that can gather the information, conduct and test the analysis, and deliberate to choose priorities. The regulatory system needs to support this process as well as more routine activities. (p. 20)*

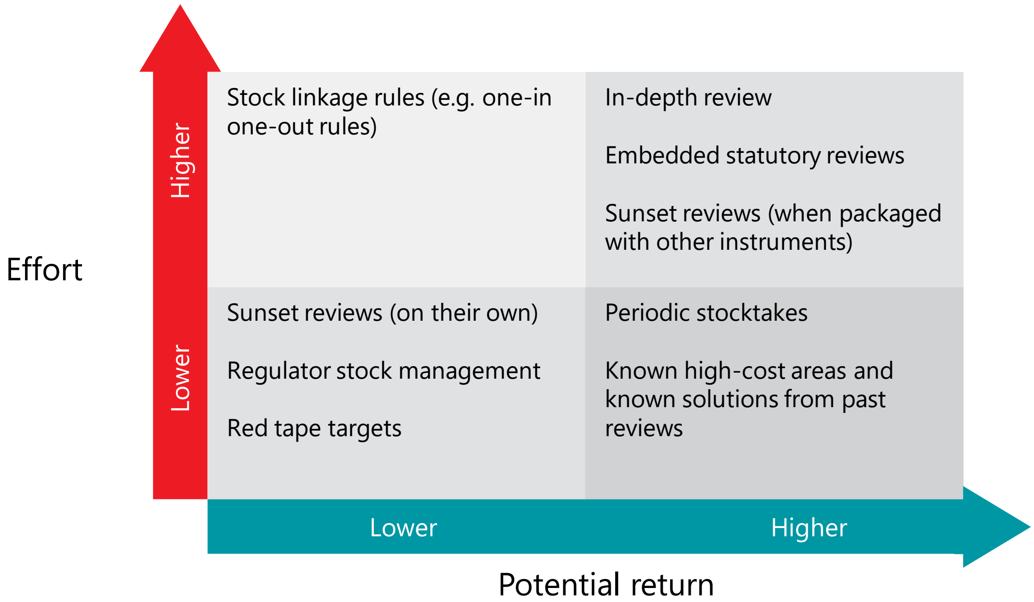
There are various approaches to managing the stock of regulation, ranging from routine activities to more major undertakings. The OECD have developed best practice principles in relation to ex post evaluation and recommends a suite of approaches to regulatory review be used—these include programmed reviews, ad hoc reviews and ongoing management approaches (OECD 2020a).

[26] As at 15 July 2020.

The Productivity Commission, in its 2011 report on identifying and evaluating regulation reforms, found that the highest returns from efforts to manage and review the stock of regulation were from periodic stocktakes and from known high cost problems or known problems from prior reviews (PC 2011). Lowest returns were from sunset reviews (on their own), crude 'one in, one out' rules and major red tape costing exercises.

Figure 3.2 summarises the effort and effectiveness of selected stock management approaches, based on Productivity Commission research. In this framework, high effort, low return options should generally be avoided, with a focus (at least initially) on approaches that require least effort but are likely to generate highest returns.

Figure 3.2 Effort-effectiveness matrix of selected stock management approaches



Adapted from PC 2011.

While there is unlikely to be any single best approach to managing the stock of regulation, the widely held view is that there is greater value in more targeted, in depth reviews of packages of regulations or regulation within industry sectors that potentially give rise to excessive regulatory burdens—undertaken as part of a comprehensive regulatory management framework (PC 2011; NSW 2017).

Potential areas for future review

Priorities for review should be guided by the criteria discussed above, and be informed by consultation with both government and non-government stakeholders. While it is beyond the scope of this research paper to identify reform options, Box 3.6 sets out some significant areas of state regulation that may benefit from review.

Reviews in identified areas may also present opportunities to:

- move, where beneficial, from a prescriptive approach (which specifies how businesses must comply) to one that specifies the outcomes to be achieved (allowing businesses greater freedom to determine how to comply), or adopts non-regulatory measures such as voluntary codes
- reduce the reliance on regulation to achieve government objectives by adopting more efficient market-based approaches, such as auctions, competitively allocated grants and tradeable permits
- improve the administration of regulation by adopting leading regulatory practices, such as simple online forms, streamlined approval processes, and better targeted, risk-based compliance checking and enforcement processes.

Box 3.6 Key areas of state regulation

Building and construction regulation—construction comprises 7.5 per cent of GSP, 17 per cent of business establishments and nearly 10 per cent of total employment in Queensland. Thousands of regulations, codes and standards cover construction, aiming to ensure safety, consumer protection and environmental standards. However, some regulation may not necessarily achieve these objectives, and can have unintended consequences which increase costs for businesses and home buyers.

Land use planning and development—the property industry is estimated to account for 11.4 per cent of Queensland's economic activity. Queensland's planning and land use framework consists of various Acts, Regulations, policies and plans, with responsibilities for delivery and operation shared between the state and local governments. Recent reviews have identified housing supply and affordability, planning and development regulations and processes, and infrastructure charging arrangements as areas that may benefit from further review (Harper et al. 2015; LGAQ 2020; PC 2017; Property Council of Australia 2019).

Local government regulation—Queensland's 77 local governments are responsible for administering a range of state laws (in areas like food safety, and land use and development) and making their own laws (for example, about parking, animals, and business approvals). The implementation and administration of local government regulatory activities affect a broad range of business activities, but little is known about the scale and scope. Previous reviews indicate that local government regulation may be a significant and increasing burden on business and affect competition (QCA 2013; Harper et al. 2015).

Occupational regulation—the coverage of occupational licensing in Queensland is substantial, with 84,000 licences registered to the Office of Fair Trading for 13 licence classes and 90,000 licensees across over 120 licence class types registered with the Queensland Building and Construction Commission (Queensland Government 2019, 2020a). Occupational licensing has been identified as an area where there is considerable scope to improve regulation, to allow greater workforce flexibility, including labour mobility across state borders (Harper et al. 2015; PC 2008, 2014b; QCA 2015).

Environmental regulation—Queensland businesses face a number of regulations related to the environment in areas such as habitat protection, biodiversity, and air and water quality. While there is often a clear rationale for some form of policy action to protect the environment, it is important to ensure any requirements effectively achieve their environmental objectives without imposing unnecessary costs on the community. Several studies have identified regulatory requirements that may overlap across levels of government and concluded that there are more effective ways to manage environmental risks—including through the use of market based approaches (Abito 2020; Muller & Mendelsohn 2012; PC 2016, 2017, 2020; Raufer 1996).

Tourism and hospitality regulation—tourism directly accounts for 4 per cent of Queensland's GSP and 6 per cent of employment. Regulation of the sector fulfils a range of important functions, such as protecting Queensland's unique natural resources. However, if not designed and implemented well, regulation can impose significant costs on tourism businesses and customers, reduce competition and product offerings, and be a significant barrier to development and growth of the tourism sector.

Business establishment and approvals—business licensing, including registrations, permits and approvals, is a significant source of state government regulation that imposes rules and requirements on many businesses. The number of licences required to start a business can be an impediment to business formation, as many licences involve both direct and indirect costs on entrants. The Regulation Taskforce identified administration compliance costs as an area that stands out in terms of the likely significance of the burdens for individual business and the number of businesses potentially affected (Regulation Taskforce 2006).

3.4 Developing new regulation

Best practice regulatory policy involves complementing the management of the stock of regulation with mechanisms to improve the quality of new regulation. Regulatory impact analysis (RIA) aims to ensure that new regulation is needed, the best tool for the job, and designed to avoid imposing unnecessary costs on business and the broader community.

Using regulatory impact analysis to inform the making of new regulation

RIA is a systematic approach to assess the impacts of proposed regulatory measures. It is designed to improve the quality of regulation by providing relevant and timely information to government decision-makers about the expected impacts of different options for addressing policy issues.

While RIA is an aid to decision-makers, it has other important benefits, including:

- building community support for contentious measures by identifying the severity of the problem that regulation is intended to address
- providing an evidence base to expose self-interested or misguided calls for additional regulation by providing a vehicle for exposing exaggerated claims, highlighting the real cause of problems, and clarifying intended outcomes
- preventing regulatory failures by providing a vehicle to test the likely effects of a new regulation and uncover better ways to achieve the objectives
- identifying those likely to be adversely affected by new regulations so that any unintended effects can be addressed
- providing a way to respond to feedback on regulatory proposals and build acceptance by documenting how concerns have been addressed.

In Queensland, state government agencies must consider the application of RIA when developing regulatory proposals, under policy requirements set out in the Queensland Government Guide to Better Regulation (the RIA guide). Queensland's RIA policy, as outlined in the RIA guide, reflects nationally agreed best practice principles for regulation making. Under the RIA guide, where a proposed regulation is likely to have a 'significant impact', a Regulatory Impact Statement (RIS) is required to be completed by the relevant agency. The Commission's Office of Best Practice Regulation (see Box 3.7) is responsible for objectively assessing the adequacy of the analysis against the requirements set out in the RIA guide.

Box 3.7 The Office of Best Practice Regulation

The Office of Best Practice Regulation (the OBPR) administers the Queensland Government's regulatory review requirements, and assists agencies in ensuring regulation is necessary, well-designed and fit for purpose.

The OBPR also delivers training and guidance, provides formal advice on the quality of regulatory review, and oversees the regulator performance framework.

In 2019-2020 the OBPR's regulatory review activities included:

- providing advice on 299 regulatory proposals, including on a range of regulatory measures introduced by the government in response to the COVID-19 pandemic
- delivering training on regulation to 446 policymakers
- formally assessing and providing advice on 17 Regulatory Impact Statements (RISs) / Post-Implementation Reviews (which often address complex policy issues).

Source: Queensland Productivity Commission Annual Report 2019-20 (QPC 2020c)

Making RIA work in practice

RIA does not guarantee good regulatory outcomes, but instead provides a structured and transparent process to help achieve that outcome.

Many jurisdictions have experienced challenges in making RIA processes work effectively.

One of the major issues is that RIA is sometimes viewed as a barrier to timely decision-making by policymakers, who may then seek to avoid RIA through the use of exemptions (Box 3.8). As noted by the OECD (2020b):

> *While RIA can be looked at as a "good policy-making process", naturally, there might be forces militating against its use, be it bureaucratic inertia, political need for speed, [and] an appetite to adopt certain politically sensitive proposals without much scrutiny … (p. 16)*

Box 3.8 Exemptions from RIA

Many Australian jurisdictions, including Queensland, provide for regulations to be exempted from their RIA frameworks in exceptional circumstances.[27] However, one common criticism is that exemptions are granted for 'major proposals' that would most benefit from RIA (Borthwick & Milliner 2012). Excessive use of exemptions can increase the risk of regulatory errors and compromise the credibility of regulatory policy making in the eyes of stakeholders (PC 2011).

The Commission aids transparency by publishing the number of cabinet exemptions granted each year in Queensland (as reported to us) in our annual report. Since July 2017, 60 regulatory proposals (Bills and proposed regulations) were granted an exemption from the RIA process in Queensland. Around 37 RIS documents were assessed by the Commission in the same period.

A second challenge is that key decisions, such as policy options being determined, narrowed or ruled out are being made before RIA is undertaken. For example, reviews into the use of RIA in New South Wales, New Zealand and at

[27] In Queensland, such circumstances may include the need to urgently implement government policy priorities or situations where public consultation on a proposal would not be appropriate and may compromise the public interest.

the Commonwealth level have found the quality of RIA to complement a regulatory proposal was inconsistent and, in some cases appeared to represent 'little more than a "tick the box" exercise' (Audit Office of NSW 2016, p. 4).

A third challenge is that agencies may lack the skills and the information needed to provide sufficiently rigorous analysis. Gaps in the capability of those devising regulation has been identified as having the potential to undermine 'the credibility of regulation and the achievement of the regulatory outcome' (NZPC 2014, p. 111).[28]

There is evidence of positive impacts…

While most of the studies on the effectiveness of RIA have concentrated on the quality of the RIA *processes* there is empirical evidence confirming the importance of RIA in delivering better regulation and improving regulatory outcomes. For example, one study on the benefits of RISs in Victoria found that the RIA process had led to significant savings in the costs imposed by Victorian regulations, relative to a situation with no RIA process (Abusah & Pingario 2011). In a more substantive literature review of studies that assessed the application of RIA, Kirkpatrick and Parker (2012) concluded that overall:

> *the adoption of RIA has had a positive effect on economic welfare, particularly where the internal RIA process is subject to external scrutiny. (p. 28)*

…But the processes to support it relies on incentives and 'buy in' from government and stakeholders

Ultimately, the impact and success of RIA processes depend on the incentives and commitment to effective use of RIA. It is not just government and departments, however, that must be committed to RIA for it to work effectively—all stakeholders and the community have a role to ensure that RIA is effective. As noted by the OECD (2020b):

> *In addition to the support from inside the administration, a buy-in from stakeholders external to government creates a demand for good RIA. Activating key stakeholders that are in the private sector, civil society, media, and parliament not only creates demand for RIA but also provides mechanisms making policy makers and civil servants more accountable for their decisions to these stakeholders. This creates an incentive for political leadership, legislature and regulators to support RIA. (pp. 16–17)*

Overall, RIA can lead to 'better quality' regulation, when it is used effectively. However, RIA, in and of itself should not be considered a 'magic formula'. As noted by the OECD (2020b):

> *RIA should be perceived as an iterative process of considering and evaluating policy alternatives that contributes to improving the policy capacities of the administration to make better decisions rather than a magic formula which automatically generates the best solution to every problem*
>
> …
>
> *Far from being a technocratic tool that can be simply ''added on'' to the decision making system by policy directive, it is a method for transforming the view of what is appropriate action. Once this is clearly understood, it is easier to appreciate the long-term perspective for a RIA and its role in the policy decision process. (p. 29)*

[28] In Queensland, the Office of Best Practice Regulation provides training and guidance to agencies on best practice regulation (see Box 3.7).

3.5 Administering regulation

The impact of regulation on productivity and economic growth partly depends on the way regulation is administered and enforced. Reviews of regulation elsewhere have noted that regulators are at the 'sharp end' of delivering on the objectives of regulation and are a key influence on the regulatory experiences of businesses and individuals. As noted by the NZPC (2014):

> *Even where businesses and individuals understand and broadly agree with the need for regulation, it will often be the behaviours, practices and actions of the regulator that determine the level of compliance with the regime and hence whether the intended benefits are achieved. (p. 54)*

What does good administration and enforcement look like?

There are multiple theories about what good regulatory practice looks like (Box 3.9). These theories stress different things but have several common elements:

- **Evidence-based and problem (risk)-focused.** Regulators focus on using evidence to detect and identify problems and determine priorities. For example, recognising the compliance record of regulated entities in making assessments of risk and using earned recognition approaches[29] to encourage compliance. In its idealised form, risk-based regulation offers an evidenced-based means of targeting the use of resources and of prioritising attention to the highest risks, based on a transparent, systematic, and defensible framework (Black & Baldwin 2010, p. 181). Regulators may also draw on information from other regulators in undertaking risk assessments and developing regulatory strategies.
- **Use the best tool for the job.** There is a variety of regulatory tools ranging from information provision through to licence removal that can be implemented to achieve policy outcomes. While mechanisms, such formal notices or financial and criminal penalites can be used to enforce compliance, non-regulatory mechanisms should also be considered, such as awards and financial and other types of incentives. Prescriptive regulations can sometimes be a major impediment to implementing a risk-based, responsive approach to regulatory administration and enforcement. For this reason, recent reviews of regulation have recommended adopting more flexible, outcome-based approaches to regulation in some instances (see below).
- **Regulatory cooperation.** Regulators work with other regulators, and with other non-government partners (such as industry associations and community groups) to understand and solve problems. Information sharing among regulators can ensure that regulatory activities are consistent and do not unnecessarily duplicate compliance effort or enforcement activity. In addition, working with relevant affected stakeholders, who may have 'different understandings about risk and the objectives of regulation,' helps to ensure that the objectives of the regulatory regime and the regulators' strategy are not undermined (NZPC 2014, p. 64).
- **Supportive culture and skills.** Regulatory staff need to have a clear and shared understanding of regulatory goals and approaches; regulators need an increasingly diverse skill set (beyond legal and compliance to include skills in data handling, digital technology and evaluation); and staff require ongoing training and support (particularly in areas such as prioritising risks).
- **Strong feedback loops.** The different regulatory strategies all stress the importance of evaluating and reviewing the effectiveness of interventions to enable adjustments based on experience and changing circumstances. In practice, there is often uncertainty about the nature of the risk or problems to be addressed. Regulation can be viewed as a risky experiment requiring monitoring and evaluation (Banks 2003).

[29] Earned recognition refers to actions by a regulator to reduce the administrative burden of regulation on businesses with a strong track record of compliance with standards (e.g. reducing audit frequency or reporting obligations).

Box 3.9 Approaches to administration and enforcement

A survey by Bluff (2018) identified five main theories or frameworks to explain how regulators regulate: risk-based regulation, the regulatory craft, responsive regulation, smart regulation and strategic enforcement. These approaches may be reflected in how regulatory frameworks are designed but also influence how regulations are administered.

Risk-based regulation relies on systematised decision-making to prioritise regulatory activities and deploy resources based on an assessment of risks to the agency's objectives. In practice, assessments of risk range from the qualitative through to more science-based assessments. Regulatory responses are proportionate to risks.

Regulatory craft advocates a focus on important problems (specific harms, threats or risks) to be addressed and developing tailor-made solutions for each problem. Regular evaluation to check the outcomes and consider adjustments is a key feature of this approach. The selection of problems and response strategies may involve information and actions by multiple agencies.

Responsive regulation is based on a pyramid of regulatory strategies escalating from self-regulation to highly prescriptive regulation with strong punishments. In applying this approach, regulators communicate an approach that starts with advice and persuasion but has the capacity to move into increasingly tougher regulatory approaches (in both designing and implementing regulation). To reward good performance, de-escalation can also be employed (e.g. relaxing reporting, inspection or other compliance obligations).

Smart regulation is broader than responsive regulation, by involving a range of actors (e.g. third parties acting as surrogate regulators) and by employing a combination of mechanisms (including information strategies, industry self-regulation, and market mechanisms such as legal liability, tradeable permits, taxes and charges).

Strategic enforcement responds to challenges associated with regulating complex industries that utilise multiple suppliers of labour or small businesses. The approach involves focusing regulatory enforcement on firms in different levels in the supply chain, such as franchisors, and property developers and property owners, rather than individual workplaces.

Finally, theories of regulatory practice recognise that regulator performance is a function of institutional factors not directly related to risk assessment, regulatory responses and compliance attitudes and behaviour. Examples of such institutional factors include:

- regulator independence and how it affects the ability to make decisions and respond to political, public or other pressures (NZPC 2014, p. 74)
- the constitutional, statutory and legal obligations on regulators
- accountability arrangements including scrutiny by Parliament and related institutions (such as the auditor-general and Parliamentary Committees)
- guidance and policy on the administration and enforcement of regulation.

Approaches in other jurisdictions

Like most jurisdictions, Queensland allocates responsibility for improving the administration of regulation primarily to individual departments and regulators. Following trends elsewhere, the Queensland Government has implemented several initiatives to improve regulatory practices. For example, the Better Regulation Update released in 2019 identifies initiatives to improve the online availability of regulatory information and regulatory services to help reduce paperwork and related compliance costs (Department of Small Business and Training 2019).

And like several other jurisdictions, the Queensland Government has also introduced a Regulator Performance Framework, which sets out a range of model regulatory practices, with regulators required to report annually on implementation.[30] The OBPR oversees the Framework and will undertake a review and evaluation of the Framework's effectiveness in 2021.

Other jurisdictions are also tackling the issue of improving the administration and enforcement of regulation through systemwide initiatives. While there is limited information on the effectiveness of these different initiatives, they illustrate the types of approaches that governments are taking to drive improvements in the way regulation is implemented. Approaches range from light-handed methods such as providing broad guidance and principles, to establishing mechanisms to facilitate performance improvement (such as the establishment of forums to disseminate best practice), and in some cases, developing new institutions within the government to actively drive performance improvement. Some examples are set out below:

- **Statements of Expectations**: The Victorian Government requires ministers to issue a 'statement of expectations' (SOE) to each of their portfolio regulators, which communicates, and provides guidance on, how the regulator should manage risks and work with business to understand their compliance obligations. Regulatory agencies are then required to provide a response to the minister detailing its strategy to meet these expectations and how it will evaluate and report on its progress. While some statutory agencies in Queensland are currently provided SOEs by the relevant minister (as a requirement under relevant legislation) there is no consistent, whole-of-government use of SOEs in a regulatory context.
- **Regulator performance reviews**: The United Kingdom established a program of regulator performance reviews (so-called Hampton reviews) in an attempt to have systematic, public, peer reviews of regulators, applying a performance assessment framework. The Australian Government has a similar program of reviews under its Regulator Performance Framework (Australian Government 2014). Performance reviews may be targeted (taking the legislative framework as given), or seek to identify ways to improve regulatory frameworks to enable more effective regulatory approaches to be implemented (such as changes to make legislation less prescriptive and more outcome-focused, and increasing enforcement options).
- **Facilitating knowledge sharing and regulatory cooperation**: One of the functions of Victoria's Better Regulation Commissioner is to convene a Regulators' Forum—a regular meeting which brings together the leaders of Victoria's largest regulators and relevant departmental staff. The purpose of the forum is to facilitate information sharing and improve regulatory practice among participating regulators.
- **Stakeholder interaction**: The United Kingdom's 'Regulatory Delivery Directorate' (now superseded by the Office for Product Safety and Standards) was created to, amongst other things, ensure the concerns of business were heard and influence policy, work with stakeholders to achieve the right policy outcomes in better ways, and help businesses and regulators work together to solve local issues. Better Regulation Victoria (and the Commissioner for Better Regulation) works with businesses and not-for-profit organisations to identify opportunities to improve regulation, including improving regulators' interaction with business on administration and compliance and enforcement).

These examples illustrate the increasingly diverse array of approaches to encourage and shape improvements in the administration of regulation.

[30] Further information the Regulator Performance Framework is available on the Commission's website: https://qpc.qld.gov.au/regulator-performance-framework-3/

4. Conclusion

As noted in the Commission's research paper on building economic resilience, improving regulation can play a key role in aiding economic recovery from the economic effects of COVID-19 and improving the resilience of the economy to future shocks. Actions to increase the effectiveness—and therefore the benefits of regulation—have the potential to permanently increase productivity and economic growth rates. Importantly, small changes in productivity and economic growth rates can have a large impact on living standards over time.

To make a positive contribution to growth, the total benefits of regulation must outweigh the total costs. Some costs of regulation are more easily identified, such as the costs of administration and compliance. This paper estimates the administration and compliance costs in Queensland at $3.5 to $7 billion per year, based solely on the imposition of state-based regulation. When also accounting for the efficiency costs of regulation, there is clearly a large potential productivity and growth dividend from improving regulation.

There is also a potential budget benefit from efforts to improve regulation through reform of regulatory administration and enforcement. Based on comparisons with Victoria, total gross expenditure by regulators in Queensland is likely to be between $2.6 and $3.1 billion per year.

Regulations can also impose efficiency costs if the regulation is excessively complex, or poorly designed and administered. These efficiency costs are more difficult to measure but likely to be just as important as the more easily identified costs. The efficiency costs of regulation are specific to each situation and each regulation. Factors such as technological changes and the increasing complexity of regulation require the regular review of existing regulation to ensure it remains well-designed and well-targeted, and is therefore fit for purpose.

Recent experience of regulatory improvement initiatives in other jurisdictions and formal guidance from bodies such as the OECD, suggest that improving regulation involves a number of core elements:

- adopting a clear regulatory policy that specifies (measurable) objectives, defines clear roles and responsibilities for improving regulation and establishes mechanisms for monitoring and reporting progress
- implementing targeted and ongoing reviews of the stock of existing regulation to ensure it is still needed and designed in a way that avoids unnecessary compliance costs and distortions
- undertaking rigorous analysis and assessment of the impact of new regulations
- adopting mechanisms for improving the administration and enforcement of regulation to ensure that clear benefits are being achieved at least cost to the community.

References

Abelson, P 2010, 'The high cost of taxi regulation, with special reference to Sydney', *Agenda: A Journal of Policy Analysis and Reform*, vol. 17, no. 2, pp. 41–70.

Abito, JM 2020, 'Measuring the welfare gains from optimal incentive regulation', *The Review of Economic Studies*, vol. 87, no. 5, pp. 2019–48.

Australian Chamber of Commerce and Industry 2005, *Holding Back the Red Tape Avalanche*, position paper, November.

Andrews, D & Cingano, F 2014, 'Public policy and resource allocation: evidence from firms in OECD countries', *Economic Policy*, vol. 29, no. 78, pp. 253–96.

Audit Office of NSW 2016, *New South Wales Auditor-General's Report Performance Audit: Red Tape Reduction*, August.

Australian Bureau of Statistics 2020, Australian national accounts: national income, expenditure and product, September 2020, cat. no. 5206.0, 2 December.

— 2021a, Labour force, Australia, December 2020—Underemployment in Australia, cat. no. 6202.0, 21 January.

— 2021b, Private New Capital Expenditure and Expected Expenditure, Australia, December 2020, cat. no. 5625.0, 25 February.

Australian Government 2014, *Regulator Performance Framework*.

Australian Treasury 2014, *Treasury Portfolio Annual Report on Deregulation*.

— 2020, Australian Government Mid-Year Economic and Fiscal Outlook 2020-2021.

Banks, G 2003, 'The good, the bad and the ugly: economic perspectives on regulation in Australia', address to the Conference of Economists, Business Symposium, Hyatt Hotel, Canberra, 2 October.

— 2006, 'Regulation for Australia's federation in the 21st century', presentation to the 2006 Melbourne Institute/The Australian Social and Economic Outlook Conference 'Making The Boom Pay: securing the next generation of prosperity', The University of Melbourne, 3 November.

Bjørnskov, C 2016, 'Economic freedom and economic crises', *European Journal of Political Economy*, vol. 45, pp. 11–23.

Black, J & Baldwin, R 2010, 'Really Responsive Risk-Based Regulation', *Law & Policy*, vol. 32, no. 2, pp. 181–213.

Bluff, E 2018, 'Regulatory Theories and Frameworks' in M Fabian & R Breunig (eds), *Hybrid Public Policy Innovations*, Routledge, New York, NY.

Board of Architects of Queensland 2017, *Annual Report 2016–17*.

Board of Professional Engineers of Queensland 2017, *Annual Report 2016–17*.

Borthwick, D & Milliner, R 2012, *Independent review of the Australian Government's Regulatory Impact Analysis Process*, Department of Finance and Deregulation, Australian Government.

Better Regulation Taskforce 2017, *Better Regulation Taskforce: Industry Review Report*, Queensland Small Business Advisory Council, August.

— 2018, *Better Regulation Taskforce Regulatory review project*, December, Queensland Small Business Advisory Council.

den Butter, FAG, de Graaf, M & Nijsen, A 2009, *The Transaction Costs Perspective on Costs and Benefits of Government Regulation: Extending the Standard Cost Model*, Tinbergen Institute discussion paper no. 09-013/3, available at SSRN eLibrary, http://dx.doi.org/10.2139/ssrn.1345789.

Deloitte Access Economics 2014, *Get out of your own way; Unleashing productivity*, Building the Lucky Country series no. 4.

Department of Agriculture and Fisheries 2017, *Annual Report 2016–17*.

Decker, C 2018, *Goals-based and rules-based approaches to regulation*, BEIS research paper no. 2018/8, Department for Business, Energy and Industrial Strategy, UK Government, London.

Department of Environment and Heritage 2017, *Annual Report 2016–17*.

Department of Prime Minister and Cabinet 2014, *Annual Deregulation Report*.

Department of Environment and Science 2017, *Annual Report 2016–17*.

Department of Employment, Small Business and Training 2019, *Queensland Better Regulation Update 2019*, November, Queensland Government.

Égert, B 2016, 'Regulation, institutions, and productivity: new macroeconomic evidence from OECD countries', *American Economic Review*, vol. 106, no. 5, pp. 109–13.

Department of Energy and Water Supply 2017, *Service Delivery Statement 2017-2018*.

Frontier Economics 2012, *The impact of regulation on growth*, prepared for the Department of Business, Innovation and Skills, May, UK Government.

Guillén, MF 2020, 'How Businesses Have Successfully Pivoted During the Pandemic', *Harvard Business Review Online*, 7 July, viewed 8 August 2020, https://hbr.org/2020/07/how-businesses-have-successfully-pivoted-during-the-pandemic.

Harper, I, Anderson, P, McCluskey, S & O'Bryan, M 2015, *Competition policy review*, final report, March, Australian Government.

Hopkins, TD 1998, 'Regulatory costs in profile', *Policy Sciences*, vol. 31, no. 4, pp. 301–20.

Jacobzone, S, Steiner, F, Ponton, EL & Job, E 2010, *Assessing the Impact of Regulatory Management Systems: Preliminary Statistical and Econometric Estimates*, OECD working papers on public governance no. 17, OECD Publishing, Paris.

Kent, C & Simon, J 2007, *Productivity Growth: The Effect of Market Regulations*, research discussion paper, Reserve Bank of Australia.

Kleiner, MM & Soltas, EJ 2019, *A Welfare Analysis of Occupational Licensing in U.S. States*, working paper no. 26383, National Bureau of Economic Research, USA.

Lanoie, P, Laurent-Lucchetti, J, Johnstone, N & Ambec, S 2011, 'Environmental policy, innovation and performance: new insights on the Porter hypothesis', *Journal of Economics & Management Strategy*, vol. 20, no. 3, pp. 803–42.

Local Government Association of Queensland 2020, 'Beyond Covid-19: the economic impacts and what to do', 13 August, viewed 28 August 2020, https://www.lgaq.asn.au/news/article/1009/beyond-covid-19-the-economic-impacts-and-what-to-do.

Muller, NZ & Mendelsohn, R 2012, 'Efficient pollution regulation: getting the prices right: reply', *American Economic Review*, vol. 102, no. 1, pp. 608–12.

Novak, M 2016, *The $176 billion tax on our prosperity*, red tape research report no. 1, May, Institute for Public Affairs.

NSW Productivity Commission 2020, *Continuing the productivity conversation*, green paper, August.

New Zealand Productivity Commission 2014, *Regulatory institutions and practices*, June.

Office of the Commissioner for Better Regulation 2019, *Victorian Regulators: An Overview, 2016-17*, Victorian Government.

Organisation for Economic Co-operation 1997, *The OECD Report on Regulatory Reform: Synthesis*, Paris.

— 2008, *OECD Guiding Principles for Regulatory Quality and Performance*, OECD Publishing, Paris.

— 2020a, *Reviewing the Stock of Regulation: OECD Best Practice Principles for Regulatory Policy*, OECD Publishing, Paris.

— 2020b, *Regulatory Impact Assessment: OECD Best Practice Principles for Regulatory Policy*, OECD Publishing, Paris.Office of the Queensland Parliamentary Counsel 2020, *Queensland Legislation*, Queensland Government, viewed 8 November 2020, https://www.legislation.qld.gov.au/.

Office of Fair Trading 2017, *Outcomes Report 2016–17*.

Office of Industrial Relations 2017, *Annual Report 2016–17*.

Office of Liquor and Gaming Regulation 2017, *Statistical Report 2016–17*.

Office of Regulation Review 1998, *A Guide to Regulation (second edition)*, December.

Office of State Revenue 2017, *Annual Report 2016–17*.

Papaioannou, SK 2017, 'Regulations and productivity: long run effects and nonlinear influences', *Economic Modelling*, vol. 60, pp. 244–52.

Parker, D & Kirkpatrick, C 2012, *The economic impact of regulatory policy: A literature review of quantitative evidence*, August, Measuring Regulatory Performance series, expert paper no. 3, OECD.

Productivity Commission 1999, *Regulation of the Taxi Industry*, research paper, Canberra.

— 2004, *Impacts of Native Vegetation and Biodiversity Regulations*, inquiry report no. 29, April, Canberra.

— 2006a, *Conservation of Australia's Historic Heritage Places*, inquiry report no. 37, April, Canberra.

— 2006b, *Potential Benefits of the National Reform Agenda*, report to the Council of Australian Governments, Canberra.

— 2008, *Annual Review of Regulatory Burdens on Business: Manufacturing and Distributive Trades*, research report, August, Canberra.

— 2011, *Identifying and evaluating regulation reforms*, research report, December, Canberra.

— 2013, *Mineral and Energy Resource Exploration*, inquiry report no. 65, September, Canberra.

— 2014a, *Australia's automotive manufacturing industry*, inquiry report no. 70, March, Canberra.

— 2014b, *Geographic labour mobility*, research report, April, Canberra.

— 2014c, *Relative Costs of Doing Business in Australia: Retail Trade*, research report, September, Canberra.

— 2015, 'Improving Australia's health system: what we can do now', PC News, May.

— 2016, *Regulation of Australian Agriculture*, inquiry report no. 79, November, Canberra.

— 2017, *Shifting the dial: 5 year productivity review*, inquiry report no. 84, August, Canberra.

— 2020, *Resources Sector Regulation*, draft report, March, Canberra.

Prostitution Licensing Authority 2017, *Annual Report 2016–17*.

Property Council of Australia 2019, *Queensland confidence continues to decline*, media release, 11 April, viewed 28 August 2020, https://www.propertycouncil.com.au/Web/Content/Media_Release/QLD/2019/Queensland_Confidence_Continues_to_Decline.aspx.

Queensland Building and Construction Commission 2017, *Annual Report 2016–17*.

Queensland Competition Authority 2012, *Measuring and Reducing the Burden of Regulation*, issues paper, August.

— 2013, *Reducing the Burden of Regulation in Queensland*, annual report, February.

— 2015, *Industry Assistance in Queensland*, final report, Volume 1, July.

Queensland Competition Authority 2017, *Annual Report 2016–17*.

Queensland Productivity Commission 2018, *Cost–benefit analysis of establishing a pharmacy council*, August.

— 2020a, *Building Economic Resilience in Queensland*, research paper, August.

— 2020b, *Queensland productivity update 2018–19*, research paper, April.

— 2020c, *Annual Report 2018–19*, August.

Queensland Racing Integrity Commission 2017, *Annual Report 2016–17*.

Raufer, RK 1996, 'Market-based pollution control regulation: implementing economic theory in the real world', *Environmental Policy and Law*, vol. 26, no. 4, pp. 177–84.

Regulation Taskforce 2006, *Rethinking regulation: Report of the Taskforce on Reducing Regulatory Burdens on Business*, report to the Prime Minister and the Treasurer, January, Canberra.

Residential Tenancies Authority 2017, *Annual Report 2016–17*.

Red Tape Reduction Advisory Council 2016, *Red Tape Reduction Advisory Council Report*.

Shao, S, Hu, Z, Cao, J, Yang, L & Guan, D 2020, 'Environmental regulation and enterprise innovation: a review', *Business Strategy and the Environment*, vol. 29, no. 3, pp. 1465–78.

Swedish Agency for Growth Policy Analysis 2010, *The Economic Effects of the Regulatory Burden*, report no. 14.

Department of Transport and Main Roads 2017, *Annual Report 2016–17*.

Victorian Competition and Efficiency Commission 2010, *Local government for a better Victoria: an inquiry into streamlining local government regulation*, draft report, April.

Victorian Auditor-General 2016, *Reducing the Burden of Red Tape*, May, Victorian Auditor-General's Office.

World Bank 2019, *Doing Business 2020: Comparing Business Regulation in 190 Economies*, October, Washington DC USA.

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