

Deloitte Access Economics

Reforming regulation of the Australian food and grocery sector

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Australian Food and
Grocery Council

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Glossary

AAT	Administrative Appeals Tribunal
ABC	Activity-based costing
ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
ACT	Australian Competition Tribunal
AFGC	Australian Food and Grocery Council
AGCR Guidelines	Australian Government Cost Recovery Guidelines
APVMA	Australian Pesticides and Veterinary Medicines Authority
ANZSIC	Australian and New Zealand Standard Industrial Classification
BAU	Business as usual
BCC	Business Cost Calculator
Biosecurity (ex AQIS)	Biosecurity in Australia (previously Australian Quarantine Inspection Service)
CAC	Commonwealth Authorities and Companies
CBA	Cost-Benefit Analysis
CDL	Container Deposit Legislation
CGE	Computable general equilibrium
COAG	Council of Australian Governments
CoOL	Country of Origin Labelling
CRIS	Cost Recovery Impact Statement
DAE	Deloitte Access Economics
DAE-RGEM	Deloitte Access Economics – Regional General Equilibrium Model
DA (ex DAFF)	Department of Agriculture (previously the Department of Agriculture Fisheries and Forestry)
DIG	Daily intake guide
EFSA	European Food Safety Authority
EU	European Union
FDA (US)	Food and Drug Administration (United States)
FSANZ	Food Standards Australia New Zealand
FMA	Financial Management and Accountability
FoPL	Front of Pack Labelling
FRSC	Food Regulation Standing Committee
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GMO	Genetically Modified Organism
GP	General practitioner

IR	Industrial Relations
IP	Intellectual Property
MRL	Maximum Residue Limit
NCC	National Competition Council
NICNAS	National Industrial Chemicals Notification and Assessment Scheme
NMI	National Measurement Institute
NTC	National Transport Commission
OBPR	Office of Best Practice Regulation
OH&S	Occupational Health and Safety
PM&C	Prime Minister and Cabinet
ppm	parts per million
RIS	Regulatory Impact Statement
TGA	Therapeutic Goods Administration
SKU	Stock Keeping Unit
SPF	Sun Protection Factor
UK	United Kingdom
US	United States

Executive Summary

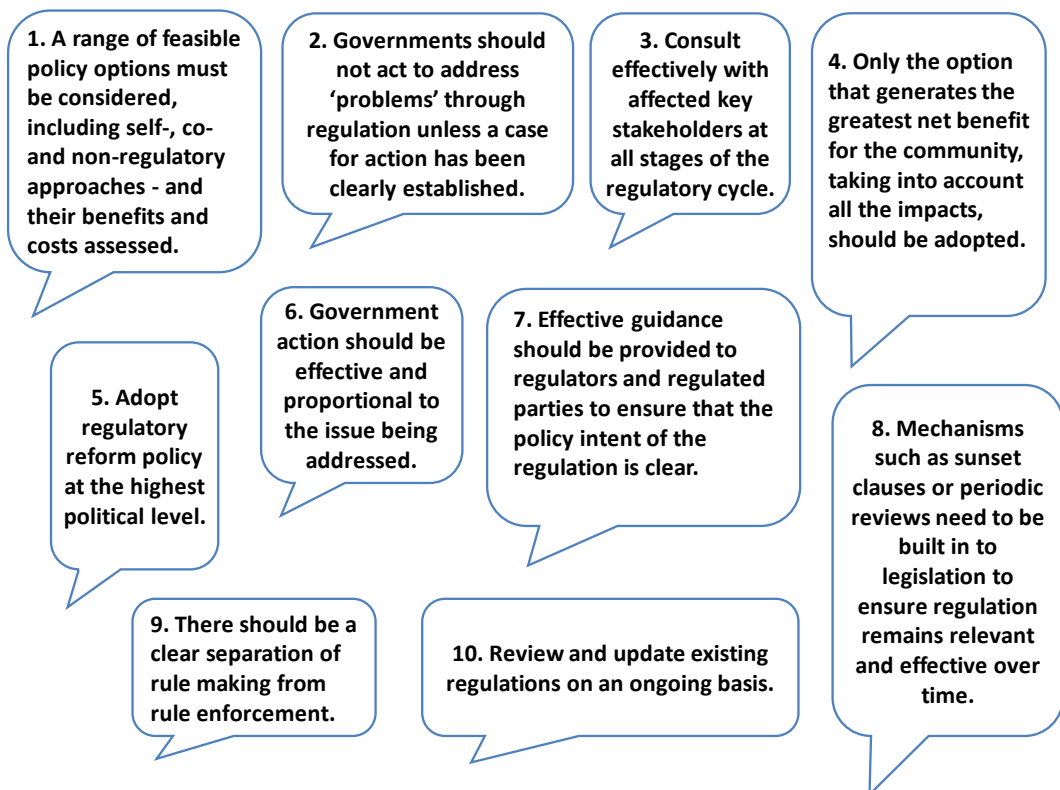
The Australian Food and Grocery Council engaged Deloitte Access Economics to work with food and grocery manufacturers to identify regulatory reforms for their sector, and to estimate the economic impacts of those reforms.

This report does not address issues of industry assistance, concessions or other government interventions to support the food and grocery sector. Rather, this report identifies options where the bureaucracy could spend *less* time and *less* money intervening in the food and grocery industry, allowing the competitiveness and growth of the industry to increase, while also producing a net saving to the Commonwealth budget. We have focussed on those areas of reform that can generate substantial savings in red tape or sovereign risk, while maintaining Australia's strong public health and safety standards.

Principles of good regulation

The principles of 'good' regulation are widely known, widely accepted, uncontroversial, and have been written about on many occasions. They are summarised below.

Figure i: Principles of good regulation



Source: DAE, COAG, OECD, NSW Government

While the principles are well documented, and worth repeating, achieving good regulation in practice is much harder. It is somewhat easier to say 'subject regulations to a robust cost-benefit analysis and consultation' than it is to build a regulatory culture where cost-

benefit analyses and consultation processes are a meaningful part of developing good regulation, rather than being treated as backfilling or box-ticking exercises, or ignored when the results are inconvenient.

Setting up the right frameworks, governance and procedures, so that the resulting regulation is optimal, is challenging. There is a lot of history, momentum and a large bureaucracy that has evolved around administering regulation in the current way, making it difficult and complex to achieve change, but not impossible.

National regulation of food and grocery manufacturing

This report focuses on national regulations specific to the food and grocery manufacturing sector. Regulations that affect a wider cross-section of manufacturing, and State/Territory regulations are also important to the food and grocery manufacturing industry, as is retail market concentration. However, the focus of this report is on reforms specific to this sector that can be implemented by the Commonwealth Government, or COAG/multi-jurisdiction reforms that can be led by the Commonwealth Government.

We have drawn on input from around 30 food and grocery manufacturers, as well as previous inquiries, reviews and taskforces into food and grocery manufacturing, to identify opportunities for reform. As many of the issues have been raised as a result of those past inquiries, reviews and taskforces (and noting industry concerns of ‘review fatigue’), we do not cover that ground again here, rather, this report focuses on tangible actions to deliver reform.

Regulating the regulators

The challenge is to ensure that Australia achieves optimal balance in the design, implementation and administration of our food and grocery regulations. Achieving this balance involves some complex trade-offs, and the public’s concerns around various issues (including the cost of living, employment, safety, animal welfare concerns and tolerance for risk) change over time.

Regulators of food and groceries are powerful – regulations are subject to some oversight on creation, but with little ongoing oversight. There are limited avenues for appeal. Regulators in other sectors (eg aviation) have an Industry Complaints Commissioner and a separation of the ability of the regulator to (a) determine the extent of regulatory approvals required; (b) set the cost recovery prices for it; and, (c) process applications for approvals. In the case of the food and grocery sector, the governance and structure of regulators have not evolved to the same degree as in other sectors, or as in other countries.

The current regulation of food and grocery manufacturing falls well short of best practice and may indeed be one of the poorest examples of industry regulation in Australia.

The major problems with current regulatory practice

Our consultations revealed five major problems with current regulatory practice for food and groceries. In approximate order of magnitude (beginning with the most significant impact on the sector), they are as follows:

Reinventing the wheel



Determinations by authoritative overseas regulators are not accepted – duplication, measures that overlap existing codes of practice and wasted regulatory effort

Not achieving best practice regulation



Not properly enforcing requirements for RIS/ impact assessment. CBAs done poorly, or not at all. Need for ex-post reviews and reduction of burdens over time.

Regulatory conservatism

Highly risk-averse approach. Imbalances from regulators not weighing jobs/cost of living impacts with health/ safety impacts. Slow approvals process.



Australian-specific standards

Uniquely Australian rules for labelling, approvals and registrations. Impedes trade, and create sovereign risks



Nano regulation

Regulatory creep resulting in over-regulation



Excessively detailed and onerous approval processes

Results of current practice

Some regulatory approval processes for low-risk products are excessively slow, uncertain and costly (sometimes taking years to grant approval for something with little apparent risk). These regulations do little to improve outcomes for humans, animals or the environment, yet impose costs, delays and lost opportunities on the industry.

Some products cannot navigate a way through, due to regulations akin to a 'dead end'. A rules-based approach to regulation has resulted in many examples where a low-risk or beneficial product cannot be supplied in Australia (in some cases, products that pose little risk were banned from the Australian market) due to arbitrary rules, rather than a common sense risk-based approach to improving outcomes for humans, animals or the environment.

There are some regulations that seem effective and are supported by industry. Some areas of regulation around food safety and hygiene were seen as important for the industry, although areas for improvement still exist.

An effective appeals mechanism does not exist. When a food or grocery company reaches a 'dead end' that blocks a product from being supplied to the Australian market, without reasonable justification, there is no robust mechanism for obtaining a review of the decision.

The current regulatory stance is overly risk averse, with a narrow focus on minimising risks to health and the environment. If this stance arose because the public were only concerned about health and environmental outcomes, and were not concerned about the cost of living, employment and consumer choice, then it would be fine. However, in this case, the implementation of regulations has evolved in a way that focuses on a more narrow set of issues than the set of issues that is important to the public.

A regulatory culture has developed where detailed evaluations are required for minor risks. The need for regulators to review long and complex dossiers

Regulating low risks in an onerous way



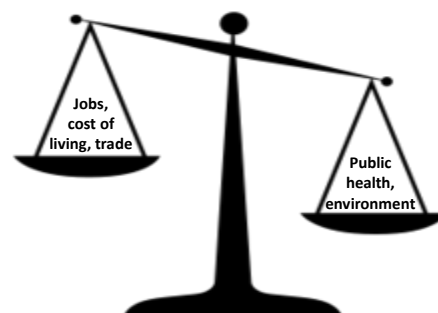
Costly and slow processes for approving low risk products. Not really improving safety, just slowing people down.

Regulatory 'dead ends'



Regulatory approval is 'not possible' or a new product just doesn't fit the existing categories

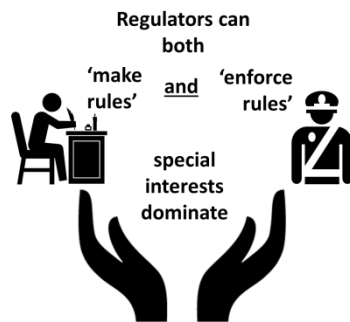
Regulatory imbalance



The regulatory 'filibuster'



Regulatory 'activism'



for many years before each approval can be granted erects high technical hurdles for low-risk products to be supplied to the Australian market.

Several national regulators in the food and grocery space are able to initiate new rules, make rules (eg decide on what should be regulated) and enforce rules (eg process and grant applications for registration), resulting in the potential for regulatory 'activism': the ability to expand the range of activities to be regulated and to create their own work program.

Regulatory 'silos'



Increasing regulation over time and the threat of new regulations create sovereign risk issues which threaten future investment in new production facilities. For example, investors considering a new product launch may be discouraged by threats of: future new regulations; a 'fat tax'; advertising restrictions; national container deposit legislation (CDL); front of pack labelling (FoPL) star scheme; and many other policies that are floated from time to time, all of which create uncertainty about the future viability of new investments.

Regulatory futility



A limited number of food ingredients, allergens or contaminants can cause illness if consumed in a *single* product on a *single* occasion: the regulation of which is mostly effective and necessary. A much greater number of food ingredients can contribute to the risk of illness depending on the combination of *several* products consumed on *several* occasions over a long period of time (or deficiencies from a lack of consumption): regulation of a single product or ingredient is likely to be ineffective at addressing a risk related to the combination of products consumed. Smarter options (such as smartphone apps) can address dietary issues relating to a combination of products consumed over time.

Island nation



Consumers are interested in a wide range of ethical, environmental or provenance attributes of the food and groceries they buy, and the list is growing rapidly. The ability to regulate information effectively, or to regulate these concerns, is very poor and can have unintended consequences. Again, smarter solutions could be developed, using

technology to provide information for those interested in certain attributes, rather than old-fashioned ink and paper solutions.

Since the Taskforce on reducing regulatory burdens on business (2006), there have been calls for reforms to prevent ‘*uniquely Australian*’ variations of international standards or agreements. As a small trading nation in a globalised world, there needs to be a very high threshold for the creation of uniquely Australian standards. Attempts by national regulators to block consumers from accessing (correct) information that is readily available on the internet (including on State Government websites) also seems futile.

Regulations that involve mandatory reporting, ‘name and shame’ requirements, or give official status and prominence to unfounded fears about certain food technologies can impede the production of healthy and nutritious food.

A range of other issues around intellectual property, maximum residue limits, regulatory overlap, regulatory silos, less onerous rules for imported products and various loopholes have also been identified. The details are in the main body of this report, and solutions are summarised below.

Consequences

The impacts of current regulatory practices include:

- **Choice:** many beneficial or low-risk new products are not supplied to the Australian market, or supplied with considerable delay, compared with other developed countries. Consumers are missing out on the range of products available in other countries, and businesses are missing out on revenue opportunities without adequate justification.
- **Cost of living:** excessive costs are imposed on businesses, including direct costs (employing staff to deal with compliance), payments of fees and charges to cost-recovering regulators, and the hiring of third party advisers to assist with compliance and regulatory applications. To the extent that some regulators are not fully cost-recovered, it is also costing taxpayers.
- **Investment and employment:** local investment, employment, production and growth opportunities are lost if red tape pushes production offshore. The path from research, trialling a new product, through to investment in local manufacturing capacity, is becoming more uncertain and difficult.

The impacts of these regulatory practices make the cost structure of Australian food and grocery manufacturing higher than it needs to be, makes new investments more risky than they should be, and reduces the overall competitiveness of Australian food and grocery manufacturing. Because food and groceries are mostly internationally traded products, the consequences of regulation-induced lack of competitiveness have a more rapid impact on local manufacturers than for non-traded products and services.

Two approaches to improving regulation

Fortunately, there are some opportunities for reform, and many areas where regulatory burdens can be reduced without any significant increase in risks to human, animal or environmental health. Reform needs to follow a two-pronged approach: both a top-down and bottom-up approach, as described on the following page.

A top-down approach: make some broad but significant changes to the way regulation is approached and funded, thus creating the right incentives for regulators to themselves want to implement the ‘bottom-up’ reforms we have identified, while leaving some scope for individual regulators to figure out how to best implement reform in the areas of their responsibility. This would be a powerful and effective complement to the ‘bottom-up’ approach, by ensuring a motivation to reform is created within the regulators. Just as a strong \$A forced manufacturing to pursue efficiencies, a ‘funding depreciation’ could help drive efficiencies in regulators.

RED TAPE

A bottom-up approach: implement a number of specific changes to individual regulations, procedures and practices (an extensive list is provided at the end of this summary). There is the opportunity for several ‘quick wins’ by following this approach, delivering immediate relief to business, but also the potential for some changes to result in the government becoming embroiled in ‘trench warfare’, bogged down in dozens of complex changes to a number of regulators, and multiple reviews or inquiries. This also requires engaging in some reforms at a level of detail where regulators could potentially frustrate reforms.

The top-down approach to reform

The Government could consider the following changes (in addition to Coalition policy already announced, in relation to OBPR, repeal days, RISs and red tape):

- Cut the operating budgets of the rule-making regulators relating to the food and grocery sector by around $\frac{1}{3}$ to $\frac{1}{2}$. These include APVMA, FSANZ, NMI, NICNAS, the part of TGA relating to low-risk groceries, and the parts of ACCC involved in labelling and incident reporting. Put simply, to cut red tape, the most direct mechanism is to significantly cut the operating budgets of these regulators. There is ample scope to reduce activities back to the core, original purpose of protecting health and safety.
- Require regulators to process all applications within six months (time limits are needed so that reduced budgets cannot be used as an excuse for slower processing).
- Specify that the default decision (ie the null hypothesis) is to grant an approval, unless there are sufficient grounds to justify the refusal of an application.
- Instruct all regulators to focus their reduced resources on the areas of risk that regulators are more effective at reducing (eg focusing on product safety), and devote fewer resources to areas of: low risk; duplication; reinventing of wheels; self-initiated activities; low-risk companies with good compliance histories; or, areas where the effectiveness of regulation is low (such as lifestyle or chronic health issues).
- Create an effective appeals mechanism so that applications refused without a reasonable justification can be reviewed (see main report for more details).

The above solution (on its own) could achieve powerful change, though the Government would have less control or influence over the way regulators adapt to the new reality. This

may be a good thing, as it avoids having to micromanage the reform, and leaves the detail to the regulators to sort out, thus ensuring the Government's role remains to 'govern' the regulators rather than taking on an active role in 'managing' the regulators.

The reduction in operating budgets (which may be a combination of cost-recovered and appropriation-funded activities) of 'around $\frac{1}{3}$ to $\frac{1}{2}$ ' is clearly not a precisely calibrated figure. However, it is a broadly sensible assessment of the operating budget that would be needed if regulators reduced the time spent on duplication, reinventing wheels, low-risk products and low-risk companies. Because a large part of these regulatory functions are cost-recovered from industry, a cut to operating budgets would partly (and directly) flow through to lower fees and charges on industry and partly result in a net saving to the Commonwealth Budget, depending on the regulator (eg APVMA is almost entirely cost-recovered from industry, while FSANZ is largely appropriation-funded). Careful monitoring of cost-recovery arrangements would be needed to prevent any appropriation-funded activities being inappropriately shifted into the cost-recovery bucket.

A specific reform that bridges both the 'top-down' approach and 'bottom-up' approach is the consolidation of all regulation of food and grocery manufacturing into a single one-stop-shop (similar to the US FDA), and ideally to move that one-stop-shop into a central portfolio, or under the industry portfolio. This would merge a wide range of manufacturing regulations administered by FSANZ, APVMA, NICNAS, NMI, the part of TGA relating to groceries and cosmetics and the part of ACCC relating to labelling and incident reporting. This is a complex reform, but cannot be achieved without a hands-on involvement from Government to achieve this restructure. The potential for this change to improve the regulation of manufacturing is significant.

The bottom-up approach to reform

While there are a large number of problems to be addressed, and the risk of micromanaging reform, when combined with the 'top-down' pressure to reform, there are many specific problems and poor individual regulations that could be addressed fairly quickly. The bottom-up approach thus complements the top-down approach, by giving some guidance to regulators on where to best apply their reduced operating budgets, and by identifying areas where savings could be made (eg from reduced duplication of international standards and reinventions of wheels).

As well as specific issues (such as the regulation of MRL, sunscreen, FoPL Star ratings and CDL), the opportunities for reform summarised in the figure on the following page include some changes to the structure and design of regulation, which would improve how regulation functions:

Figure ii: Opportunities for reform



A full list of opportunities for 'bottom-up' reform proposed by AFGC members during our consultations and arising from our research (including those highlighted above) is in the main body of this report, and following the Executive Summary.

Benefits of these solutions

DAE (2011) noted that Australia's overall level of total factor productivity peaked in 2003-04. In 2008-09, the level of total factor productivity fell by 2.3 per cent compared to the previous year. This was the worst productivity performance in Australia in at least the last 25 years. On average, since 2001-02 productivity growth has made a negative contribution to Australia's economic growth.

Appropriate regulations, which are risk-based and subjected to rigorous cost-benefit tests before being introduced, can boost aggregate and industry-wide productivity by reducing barriers to entry and by improving the flexibility of input and product markets. However, poor regulations can have the opposite effect. Poor regulation is likely to have been a key contributor to the poor productivity performance of Australia in recent years.

Noting that food and grocery manufacturers face challenges in passing on the costs of red tape (particularly in the short term, due to retail market concentration, import competition and supply contracts), ultimately regulatory costs have to go somewhere – they either have

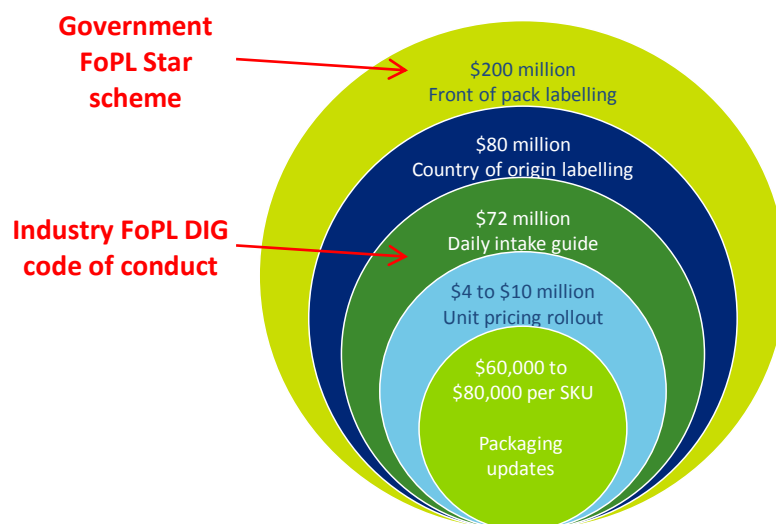
to be passed on as an increased cost of living for consumers, or where that is not possible, as a reduction in profits for producers (which invariably leads to reduced investment in new facilities or new products, and thus less choice for consumers).

The economic benefits of this competitiveness-increasing package of reforms were estimated based on inputs from industry stakeholders, with economy-wide impacts estimating using the DAE general equilibrium model. The model was customised to separate food and grocery from the rest of manufacturing using the industry classification in Appendix A of the AFGC State of the Industry report (2013).

The exact amount of reduction in red tape and the timelines over which those reductions are achieved depend on which combination of the above reforms are adopted and when. Some examples of costs of specific changes are shown in the figure below.

In particular, note the difference between the cost-effectiveness of an industry code of conduct such as the FoPL daily intake guide (DIG, \$72 million) and the cost if government introduces a FoPL Star scheme (\$200 million). Allowing for the sunk costs already invested in developing the FoPL DIG, which become redundant, implementing FoPL Star scheme would thus cost a total of \$272 million, and arguably result in little change to outcomes for consumers (noting there is little evidence that the FoPL Star scheme would influence consumer behaviour significantly more than the current code of practice, and the OPBR currently lists the FoPL Star scheme as non-compliant with COAG best practice regulation¹).

Figure iii: Cost examples for specific regulations



The following scenario illustrates the impacts of some of the more immediate and achievable reforms: a \$100 million (in 2011-12 dollars) per annum reduction of regulatory burden on the food and grocery manufacturing sector is estimated to increase GDP by \$243 million to \$255 million and employment by around 214 FTEs to 231 FTEs.

¹ <http://ris.finance.gov.au/2013/07/03/non-compliance-with-coags-best-practice-regulation-requirements-front-of-pack-nutrition-labelling-legislative-and-governance-forum-on-food-regulation/>

An ongoing reduction in regulatory burden of \$200 million per annum is within reach based on the reforms identified in this report, and may be higher in years if one-off implementations (such as FoPL Star scheme) were introduced. The economic impacts of savings of that magnitude (and allowing for a few years of transition to adjust to the new level of competitiveness) would increase GDP by \$485 million and increase employment by 462 FTEs.

Due to the large number of issues identified and the many opportunities for reform, the exact magnitude of economic impacts will depend on the measures adopted, and the extent of the reduction in resourcing for individual regulators.

Conclusion

Regulation of food and grocery manufacturing is poor and requires urgent reform. The problems are so significant that we have recommended both a 'top-down' approach and a 'bottom-up' approach to create: the right incentives; pressure to reform; and, the detailed ideas for implementing reform – all of which are necessary to achieve the scale of reform required.

With the potential gains from increased prosperity, lower costs of living and increased employment – and the mechanisms necessary to achieve reform – we recommend this reform package as a way forward for food and grocery manufacturing in Australia.

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Summary list of ‘bottom-up’ reforms

The following ‘bottom-up’ reforms were identified through the consultations and our research, and are explained in the main body of the report.

Businesses with a track record of compliance and good behaviour should be given a regulatory ‘light touch’, such as fast-tracked approval of applications.

Regulation of food safety should focus on *single* ingredients, allergens or contaminants that can cause illness if consumed on a *single* occasion, or acute illness from multiple servings consumed in a relatively short period of time.

Nutritional needs vary widely across individuals, and have a low correlation with the consumption of an individual product. Other solutions and technologies need to be investigated to address diet-related illness. Labelling on individual products is unlikely to be effective.

Regulatory evaluations should canvas all regulatory options, including public information campaigns, alternative interventions or industry codes of practice, rather than just mandatory regulations.

Businesses are generally best equipped to respond to consumer demands for information on ethical, environmental or provenance attributes of food, and to develop solutions for delivering this information to consumers. Regulators are rarely well placed to respond efficiently to the increasing range of information on attributes demanded by consumers. Broad-based regulations to prevent misleading claims already exist.

Measures already in place to identify some ethical, environmental or provenance attributes should be reviewed, particularly in light of more efficient technology solutions now available.

Allow regulatory decisions to be appealed, upon which the new statutory officeholder of the OBPR reviews the appeal (including making independent investigations and inviting submissions) and then recommends a decision to an appropriate designate (the Parliamentary Secretary of PM&C, Assistant Treasurer and Parliamentary Secretary of Finance would be good candidates to form a panel of designates that can weigh up appeals) for approval.

Remove the opportunity for regulatory ‘filibusters’ by requiring all regulatory approvals (or declined approvals, with reasons stated) to be concluded within six months. It should require approval from the above designate (drawing on advice from the statutory officeholder of the OBPR) for a regulator to be permitted to take longer than six months to make a decision. Additionally, the *default* should change so that an application is deemed to be approved once six months has passed, unless an extension has been granted.

Authorised third-party certifiers should be introduced so that government employees do not have a monopoly on undertaking evaluations and issuing approvals.

Regulators should not waste time and resources attempting to block information from being provided to consumers, when that information is already widely available from multiple sources such as the internet and State government websites.

Create mechanisms for dealing with regulatory 'dead ends', so that a way can be found to approve products that pose little risk.

Move away from rules-based regulation to risk-based regulation, by allowing general exemptions for low-risk products. Introduce a Biocidal Regulation to simplify the process for a broad range of low-risk disinfectant products.

Change the default position so that products that are already safely in use in the US/UK/Europe are accepted for use in Australia unless there is strong evidence to the contrary. This is particularly true of the complex chemical dossiers required for cosmetics in Australia that are already recognised in the US or EU.

Introduce a mechanism for investors considering a new production facility to lock in a 'regulation contract' up front that exempts it (under contract law) from future regulations or policy changes that may otherwise make the investment unviable.

Expand the Business Cost Calculator to include the costs from regulations that impede trade or discourage investment.

Anecdotally, the ACCC has been swamped with reports due to recent changes to reporting of incidents. More importantly, the reports are not all necessarily relevant (where there may have been a false alarm) or significant enough to prompt a product recall or other action. This regulation needs to be reversed.

'Name and shame' style regulations, including mandatory reporting, or giving official status to misplaced fears about food technologies, should be repealed, as these are likely to be counterproductive, and in some cases may actually reduce the quality and nutrition of food, or reduce the quality control tools available.

There would be social and regulatory cost savings associated with simplifying the process associated with 'switching' a medicine to 'over the counter'.

For example, allowing people to self-diagnose migraines (or to discuss with pharmacists) and obtain medicines over the counter, to reduce the need for people to attend a general practitioner. This frees up health system resources for potentially higher value uses. There are also potentially positive implications for worker productivity, reducing the duration of the illness and overall wellbeing of the person.

The trials, research or development required for some TGA regulatory approvals is not protectable intellectual property, so individual companies are not able to justify the cost of registration (if other firms can piggy back on that approval). A mechanism for data protection and a time period to recoup costs is required.

Require regulators to consider impacts (other than just health and environmental risks) when assessing applications. These include impacts on cost of living, employment, trade and investment.

Review appointments to the various food and grocery regulators' committees and advisory boards to ensure representation from the relevant food and grocery sector, and other portfolios, particularly Industry, Trade & Investment and Agriculture, and a central agency such as Finance or PM&C.

Consider whether some regulatory functions relating to food and groceries should sit under a different portfolio, for example, in New Zealand food regulation sits under the Ministry of Primary Industries.

Embed OBPR staff in regulatory agencies to improve regulation development.

To reduce regulatory activism, the functions of 'initiating rules', 'rule-making' and 'rule-enforcing' should be separated.

Regulators are sometimes unaware of the costs their actions have on industry, or too readily dismiss those. The OBPR should be given additional resources to independently consult with industry to verify claims that regulatory changes do not require a RIS (or CRIS where applicable), and to independently verify the RISs and CRISs received.

Efficiencies could be achieved by having a 'one-stop shop' which covers all required regulatory considerations for food and grocery, rather than having a duplicated process for multiple regulators. A combined one-stop shop 'rule-enforcing' regulator (like the US FDA) would have the power to approve all aspects related to a new product, and would be separated from being able to 'make rules'.

As a priority, reduce the number of regulators involved in regulating sunscreen, by removing the arbitrary rule about sunscreen sold in packages >300mL and simplifying the rules.

Review the operating costs, resourcing and business processes of regulators to ensure efficiency and the minimum cost necessary is recovered from industry.

To identify regulation that impose slow and costly processes on low-risk products, conduct an *ex post* cost-benefit analysis of each function of each special-purpose regulator (APVMA, FSANZ, TGA, NICNAS, NMI and some aspects of ACCC). Assess the proven benefits that have arisen during the past 5 years due to the activities of these regulators (for example, illnesses they have prevented), versus their operating costs, compliance costs and unintended consequences, compared with a scenario where only broad-based regulations (consumer law, criminal law, etc) existed.

The cost-benefit analysis should be commissioned by a central agency (such as Finance or PM&C) to avoid a perception of self-review by the agency in question. However, the agency under review should be consulted as part of the CBA.

After the initial round of reviews, all regulators should be subjected to a cost-benefit analysis of each of their functions on a rotating 5-year calendar.

Particular attention should be given to the costs and benefits of the current MRL process. The New Zealand approach of having default MRL values should be adopted. The onerous rule-based processes and the 266 pages of detailed and prescriptive regulations that have evolved in the area of MRL make it an urgent priority for reform.

Reductions in duplication across jurisdictions and harmonisation can be worthwhile, but only if all jurisdictions move to the 'best of breed'. Harmonising the nation on South Australia's CDL would be a backward step.

Permanent exemptions (under the Mutual Recognition Act) should not be granted (or have sunsets) where the effect of regulation imposes costs on consumers and businesses operating across multiple jurisdictions.

There should be a very high hurdle before adopting any Australian-specific standard for labelling ingredients, weights, measures, street addresses on labels, etc. The default should be to accept international labelling conventions unless there is strong evidence (and supporting cost-benefit analysis) demonstrating the need for an Australian-specific rule.

Regulation can impose relatively higher costs on domestic manufacturing than on competing imports, or prevent local manufacturers from using techniques or ingredients that are permitted in imported products. The best solution would be to reduce regulation on domestic manufacturing, but as a fall-back, to close loopholes and improve compliance on imports so that domestic manufacturing is on a level playing field.

1 Background

The Australian Food and Grocery Council (AFGC) engaged Deloitte Access Economics to work with the industry to identify implementable options for reforming regulation of the food and grocery sector in Australia, and to quantify the economic impacts of those proposed reforms.

Economy-wide, the (then) Productivity Commission Chairman Gary Banks (2012) noted that red tape reductions alone were estimated to be worth some \$12 billion in extra GDP. The Government's Policy to Boost Productivity and Reduce Regulation (2013) undertakes to reduce the red and green tape cost burden by \$1 billion per annum. Feedback from the food and grocery sector suggests that regulations specific to their industry could readily account for one-fifth, or \$200 million per annum, of this target.

The Government's target is thus expected to have significant implications for several sectors, including the food and grocery manufacturing sector. Policy reform will also assist the sector in boosting national productivity and competitiveness, and to pursue future opportunities in exporting food products to Asia.

In this context, this report commences the task of identifying practical opportunities for reform, and the areas where viable reductions in red tape can be found, to contribute towards these targets.

1.1 Industry overview

The Australian Food and Grocery Council (AFGC) represents the \$111 billion food, beverage, grocery and fresh produce manufacturing industry, the largest manufacturing sector in Australia. The industry employs over 298,800 people, with half of its employees employed in rural and regional areas (AFGC, 2013).

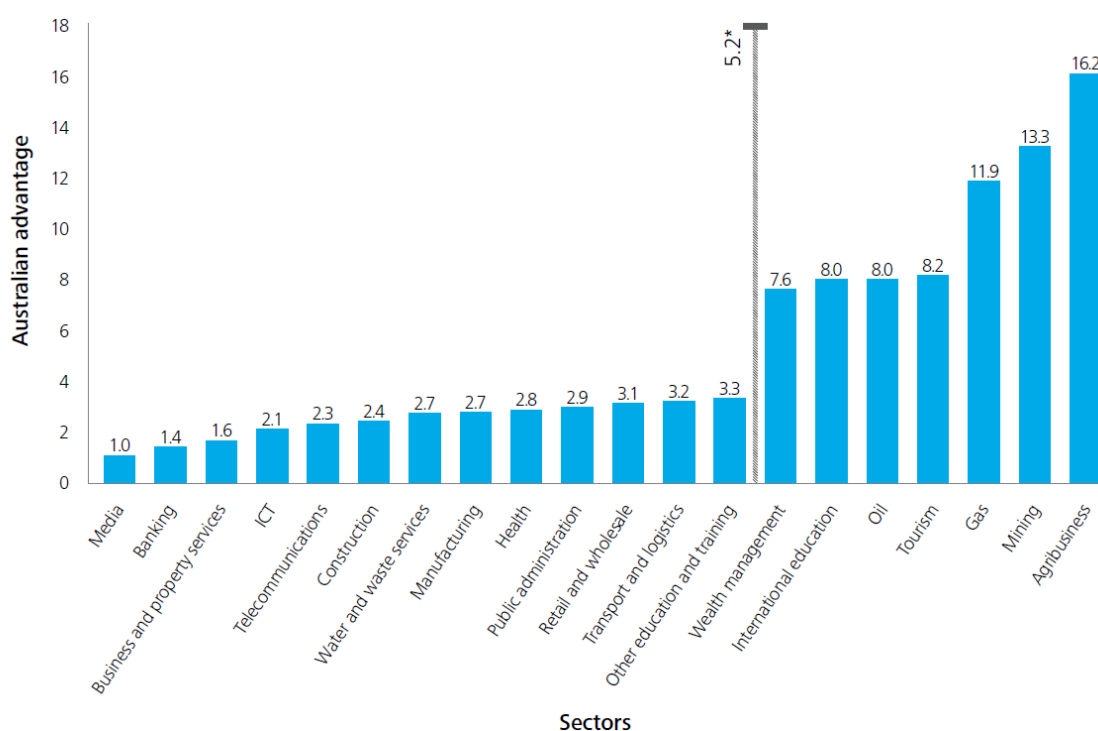
The food, beverage, grocery and fresh produce manufacturing industry is under pressure from rising costs and retail price deflation. In recent times, this has been compounded by subdued consumer confidence, weak economic growth and a strong Australian dollar.

In this difficult economic environment for the manufacturing sector, the AFGC is interested in pursuing improved business conditions for the food and grocery manufacturing industry, including identifying solutions for improving the efficiency of regulation in the sector. Improving efficiency will support the industry in making the most out of coming opportunities.

Deloitte's October 2013 report, "Positioning for prosperity? Catching the Next Wave", the third in a series of its *Building the Lucky Country* reports, identifies agribusiness (which is largely food production, but also fibre production) as one of five sectors poised for the next wave of Australian economic growth, due to demand from Asia for food and fibre. Indeed, agribusiness in Australia is expected to grow significantly faster than global gross domestic product as a whole over the next 10 to 20 years, and is the strongest area of Australian

advantage compared to the rest of the world (see Chart 1.1). This further highlights the value of removing regulatory barriers affecting the food export supply chain.

Chart 1.1: Areas of comparative advantage for Australia (relative advantage score)



Source: Deloitte Access Economics, 2013. * Average Australian advantage

Global population growth and rising incomes in emerging economies will continue to drive demand for food. On the supply side, constraints related to urbanisation and water shortages will place speed limits on overseas markets, while Australia stands to benefit from a lower dollar (in the longer term, compared with current levels).

1.2 Focus of this report

National regulation is the focus of this report, notably reforms that can be implemented by the Commonwealth, or negotiated by the Commonwealth through COAG, or COAG and New Zealand jurisdictions. Wider regulatory issues (such as IR or OH&S) that affect all manufacturing sectors, or state-specific regulations, are still important to food and grocery manufacturers, but are not the focus of this report.

Table 1.1 presents a range of regulations relevant to the AFGC, as well as their place in a timeline of past, current and future impacts. Some of these regulations are explored further in this report. Of particular concern to the industry are the 'future threats' raised from time to time by some government agencies (such as government-funded research into a 'fat tax' or a national CDL). Although these are not current policy, once they appear on a website ending in 'gov.au', they are added to the list of potential sovereign risks for any corporation considering an investment in a new product launch or production facility. As a result, the mere floating of new regulatory ideas can still have negative impacts on investor

confidence for the food and grocery sector. This could be addressed by evaluating potential impacts on business costs and investor confidence at the research proposal stage.

A related issue is the need to pay heed to social experiments that have failed in other countries, such as the Danish Fat Tax², which was scrapped after only a year. In spite of the evidence from a real-life experiment at a national scale, from time to time taxpayer funds are devoted to policies already proven as unviable.

Table 1.1: National regulation in the food and grocery industry

	Introduced in the past	Being considered now	Future threats
Compositional requirements	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Labelling requirements	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fat tax	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Children's TV advertisements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TGA regulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Environmental issues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Health issues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
National container deposit legislation (CDL)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: Deloitte Access Economics, 2013

The purpose of this report is not to examine the details of individual issues (which range from container deposits to country of origin labelling) – there are already many reports that go into detailed analysis of individual issues. Rather, this report aims to draw out the common themes and structural issues common to multiple regulators, and solutions.

1.3 Project approach

In August 2013, Deloitte Access Economics produced an Issues Paper and a Call for Submissions which was distributed to AFGC's membership. This was followed by stakeholder workshops in September, which were held in both Melbourne and Sydney. These workshops allowed members to provide specific examples of regulatory burdens, which were further supplemented by submissions provided to Deloitte Access Economics. We also conducted additional phone interviews for stakeholders who were unable to attend the workshops.

The information gathered from the workshops and submissions was collated and analysed by Deloitte Access Economics. This report presents the regulatory issues and opportunities identified by AFGC's members, and from our research, which has been used to inform the inputs into Deloitte Access Economics' computable general equilibrium (CGE) modelling of the impact of regulation reform for the food and grocery sector on the wider economy.

² <http://www.abc.net.au/news/2012-11-11/denmark-to-scrap-world27s-first-fat-tax/4365176>

1.4 Report outline

The following chapters of this report explore the opportunity for reform and the potential benefits.

Chapter 2 details the current regulatory environment for the food and grocery sector. Chapter 3 summarises the input provided by AFGC members in workshops and submissions to highlight some specific examples of regulatory burden on the sector, and opportunities for reform. Chapter 4 presents estimates of the cost of regulation to the industry, with Deloitte Access Economics' CGE modelling results presented in Chapter 5. References, the CGE modelling methodology, and methods for assessing the impacts of regulations are provided in Appendices A, B and C, respectively.

This report supplements the Issues Paper which provided background and context to this study. It included an outline of the characteristics of good regulation, detail on current regulation in the food and grocery sector and an overview of how the regulatory burden can be reduced.

2 The current regulatory environment

DAE (2011) noted that Australia's overall level of total factor productivity peaked in 2003-04. In 2008-09, the level of total factor productivity fell by 2.3 per cent compared to the previous year. This was the worst productivity performance in Australia in at least the last 25 years. On average, since 2001-02 productivity growth has made a negative contribution to Australia's economic growth.

In 2010, the Organisation for Economic Coordination and Development (OECD) concluded:

The challenge for Australia is to bring about a change in the culture of regulation; to move from a history of periodic reviews and incremental reforms to an embedded program of continuous improvement in regulation.³

A nation's regulatory environment – what the OECD refers to as an economy's regulatory culture – can have an important effect on productivity outcomes. This is true for individual industries and for the economy as a whole. Appropriate regulations, which are subject to rigorous cost-benefit tests before being introduced, can boost aggregate and industry-wide productivity by reducing barriers to entry and by improving the flexibility of input and product markets. However, poor regulations can have the opposite effect. Poorly designed regulations can reduce aggregate productivity growth and industry-wide productivity growth.

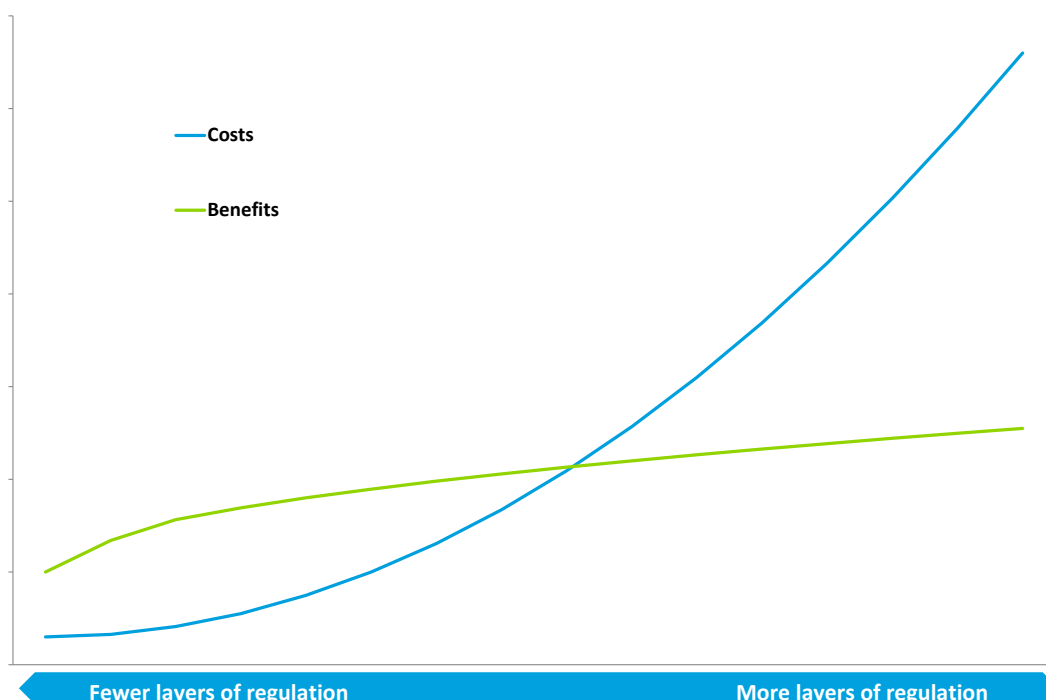
The food and grocery manufacturing sector is subject to a large number of well-funded national regulators, many of which are specific to this sector. Regulations have a range of objectives, including:

- protecting public health and safety;
- protecting the international reputation of Australian food and grocery products;
- the promotion of broader public health outcomes such as reducing obesity, heart disease and diabetes;
- providing consumers with information to enable informed choices; and
- preventing misleading and deceptive conduct.

2.1 The regulatory layers

Consumers of food and groceries are protected by several layers of regulation. Each incremental layer of protection generally involves increasing amounts of detail and cost to administer those additional regulatory layers. However, those additional layers tend also to have diminishing benefits to consumers. Chart 2.1 on the following page illustrates the balance that needs to be struck between increasing costs and diminishing benefits.

³ OECD (2010) Australia: Towards a Seamless National Economy, Review of Regulatory Reform, page 118

Chart 2.1: Increasing costs, diminishing benefits of increased regulation

The regulatory and institutional framework around the regulation of public health and safety in the food and grocery sector is also complicated. For example, Figure 2.1 on the following page shows the multiple agreements and regulatory bodies involved in food safety regulation in Australia and New Zealand.

2.1.2 In the absence of regulation

The first safeguard for consumers is one that requires no regulation. Food and grocery manufacturers have a significant commercial incentive to provide safe products, and an incentive to innovate to meet consumer demands for quality groceries and nutritious food. It was not regulators that led to the invention of diet soft drinks or sugar-free chewing gum – these were innovations responding to consumer demands.

If a product does not live up to its claims, it is soon found out, without the need for any specific regulation. The internet makes it easy for consumers to research which products are the best to buy, or to find out which ones to avoid. The value of an established company's brand and reputation is a powerful incentive to maintain quality.

For many established, reputable companies the quality of their products is unlikely to decline in the absence of food and grocery regulators.

Equally, there will always be some companies from time to time that fall behind best practice, or take short cuts due to financial pressures, or succumb to the lure of short-term profits. It is this minority that has caused a high and indiscriminate level of regulation for all, including the well-behaved majority of producers.

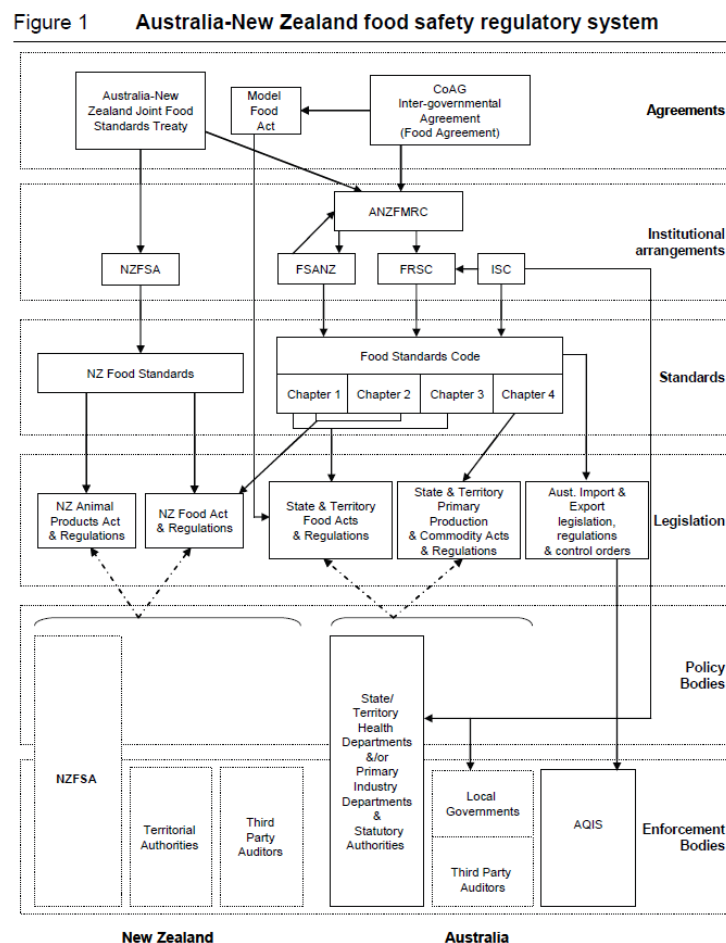
2.1.3 The broad-based regulators

The second safeguard for consumers is the general provisions in Australian Consumer Law (ACL), civil and criminal law, which provide penalties for bad behaviour. These include the threat of a product recall – a significant disincentive for a company to misbehave – and other penalties. We refer to these protections as the **'broad-based' regulators**, as they also apply to other sectors of manufacturing and service sectors.

2.1.4 The special-purpose regulators

For various reasons – some valid, some questionable – further levels of safeguards for consumers are deemed to be necessary for specific types of products, specific characteristics of products, or individual products. This third (and most problematic) set of safeguards for consumers we describe as the **special-purpose regulators**. Our aim in this report is examine regulatory reforms that may improve the activities of special-purpose regulators that relate to food and grocery manufacturing, and indeed, whether some activities are necessary at all.

Figure 2.1: Australia and New Zealand food safety regulator system (PC, 2009)



Source: Productivity Commission (2009)

There is roughly one special-purpose national regulator for each aisle of a typical supermarket (and that is not including State-based regulators). In several cases there is overlap that causes some products to be regulated by several of the following:

- FSANZ – packaged food, ingredients, labelling, chemical residues in food (in combination with APVMA);
- ACCC – country of origin, labelling, mandatory reporting of incidents (as well as administering some broad-based regulations);
- APVMA – some pet supplies, chemical residues in food (in combination with FSANZ), fly spray and insect candles, pool and spa chemicals, some garden supplies;
- NICNAS – chemicals such as detergents, cleaners and some personal care products;
- NTC – transport of dangerous goods;
- Biosecurity (previously AQIS) – inspects imported food items on behalf of FSANZ;
- TGA – vitamin supplements, over-the-counter medicines; and
- NMI – weights and measures, across both food and grocery items.

Further to the various regulators of groups of products above, some *individual* products have their own unique regulations and administrative processes. See Section 3.10 for an example of overlapping regulators.

2.2 Managing regulation and regulatory trends

Like all sectors, regulations in the food and grocery sector need to be carefully balanced between providing evidence-based protection for consumers and the industry, and creating an environment that doesn't stifle innovation and reduce consumer choice.

Two particularly pertinent issues arise when risks to public health and safety are very small, and when regulations are targeting indirect risks around lifestyle decisions.

Emerging regulatory trends include evolution along a number of dimensions:

- Objectives of regulation – the objectives of regulation are expanding beyond safety and nutritional information into environmental impacts, new technologies and other consumer values.
- Methods of regulation – these include bans, regulating product content and labelling, health and environmental warnings, restrictions on sales, marketing and age of consumer, and taxes.
- Regulatory instruments – regulation can range from mandatory statutes and formal delegated legislative instruments to co-regulation and self-regulation such as codes of conduct (or codes of practice) and guidance materials.

2.2.1 Balancing risks

Regulation of food and groceries involves the balancing of several risks, unknowns and future uncertainties, to *minimise* risk. As such, regulation should be assessed in a framework of probabilities and statistical errors, rather than a set of rules or processes aimed at *removing* risk.

Minimising regulatory errors is a key part of developing good regulation, and the risk of error needs to be acknowledged and incorporated up front, when regulations are being designed.

The errors are “Type I Errors” – the incorrect rejection of a true null hypothesis, such as preventing an ‘innocent’ (ie beneficial or low-risk) product, ingredient or chemical from being supplied in Australia; and “Type II Errors” where there is a failure to reject a false null hypothesis, such as allowing a ‘guilty’ (ie risky or unsafe) product, ingredient or chemical from being supplied in Australia. Later, we provide examples of how the current regulatory stance has resulted in an excessive bias towards reducing Type II Errors with the consequence of frequent Type I Errors.

If the public was only concerned by public health issues, risks to the environment and safety, then the currently regulatory stance may reflect the will of the people. However, people place greater weight on other issues, such as employment, cost of living and the economy. It is thus important that regulation strikes a similar balance to what is important to the public.

Further to this, there is a tendency of regulators to use a rules-based approach, such as the “blanket ban then provide exceptions” model of regulation. Notable examples include the novel foods standard (1.5.1), the GMO standard (1.5.2), food additives (1.3.1) and processing aids (1.3.3). This approach means that food innovators have a highly uncertain path to market, which can affect returns on investment (AFGC personal communication, 2013). Later, we provide several examples of where this rules-based approach inevitably fails to handle exceptions to the rules, and does not work well in a world where risks and outcomes follow a probability distribution rather than a deterministic or predictable pattern.

Regulation comes in many forms and from many sources (both government and industry-driven). While there is a range of necessary regulations across the sector, it is the cumulative impact of the multitude and overall accumulation of minor or peripheral regulations that underpin industry concern.

According to the World Economic Forum (2013), in 2007-08, Australia ranked 68th in terms of the burden of government regulation, falling to 128th (out of 148 countries) in 2013-14.

Burdens from regulation include:

- excessive regulatory coverage;
- overlap or inconsistency;
- unwieldy approval and licensing processes;
- heavy-handed regulators;
- poorly targeted measures;
- overly complex or prescriptive measures;
- excessive reporting requirements; and
- creation of perverse incentives. (Productivity Commission, 2007)

However, it should be noted that the incoming Coalition Government has committed to reduce the burden of regulation. The Government’s *Policy to Boost Productivity and*

Reduce Regulation outlines their goal of reducing the red and green tape cost burden by \$1 billion per year, some of which will benefit the food and grocery sector.

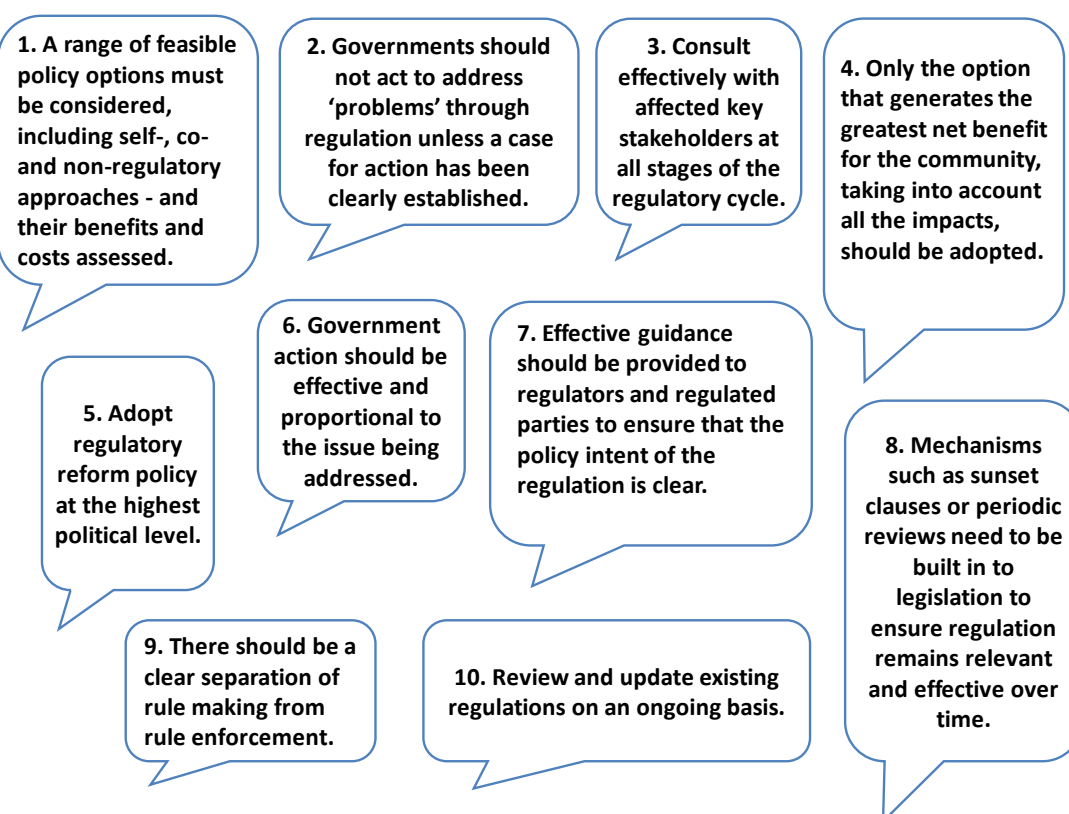
While estimates vary, discussions with the food and grocery industry indicated a consensus that the removal of excessive regulatory burdens on this sector could generate \$200 million of the targeted \$1 billion in reduce regulatory burdens. We examine these costs further in Section 4.

2.3 Principles of good regulation

There are a number of sources which provide principles of good regulation, including NSW Government (2009) *7 better regulation principles*, COAG (2007) *Principles of best practice regulation* and OECD (2005) *Guide for good regulation*. The common themes and relevant principles from these guides are detailed in Figure 2.2 below.

The principles of good regulation are widely known, and have been known for some time, but in practice are hard to achieve.

Figure 2.2: Principles of good regulation



Source: DAE, COAG, OECD, NSW Government

3 Regulatory issues and opportunities for reform

This chapter presents a number of issues and opportunities for reform raised by AFGC members at stakeholder workshops conducted in Melbourne and Sydney in September 2013, as well as phone interviews and written submissions. In total we discussed reform opportunities with around 30 food and grocery manufacturers.

Each issue and opportunity could be the subject of a detailed investigation. For example, an analysis of the feasibility of extending country-of-origin labelling by the Centre for International Economics (2006) resulted in a 94-page report on that one issue. Undertaking this level of detailed analysis is not possible for the wide range of issues canvassed in this report. Fortunately, there have been several regulatory reviews (including several by the Productivity Commission and the Taskforce on Reducing Regulatory Burdens on Business), and many of the issues raised by AFGC members aligned with yet-to-be implemented recommendations from these previous reviews. As such, the problems are well known, and are not revisited in detail here.

We acknowledge that there are likely to be manufacturer or regulator perspectives which are not covered here. That noted, we have focussed on regulations where there appeared to be a *prime facie* case for considerable savings in regulatory burden, while maintaining Australia's strong public health and safety standards.

We have drawn on a range of literature, information supplied by AFGC members and public reviews, but have not conducted cost-benefit analyses from first principles on each individual regulatory reform option in this report, nor detailed scientific research nor feasibility studies to verify the identified issues and reform options. As such, there may be aspects of the issues or implications related to the proposed solutions not captured here.

3.1 Types of regulations

There are several different objectives that give rise to regulation of food and grocery manufacturing, which are discussed under the following subheadings.

3.1.1 Food safety

In our consultations, the food and grocery industry was supportive of high standards of food hygiene – safe food is good for consumer confidence, good for business, and good for Australia's international trade reputation. And businesses would generally keep the same quality control procedures in their factories even if those regulations didn't exist.

Currently, there is no assessment made of a particular organisation's risk profile prior to products undergoing testing. All organisations are treated equally and must pass the same hurdles of proof regardless of demonstrated ongoing safety. There is no consideration of past performance or track record.

It is acknowledged that some organisations will be more risky than others, and may develop food and grocery products which could endanger the Australian public. On the other hand, large companies with strong safety records and established in-house quality control procedures are unlikely to develop unsafe products due to the repercussions for their brand.

There appears to be few provisions for a regulatory ‘light touch’ for businesses with a long track record of safe production methods. Businesses with a strong track record of compliance and safe practices should be given recognition for good behaviour and allowed a regulatory fast-track. This would free up resources for regulators to spend more time on areas of higher risk rather than wasting resources on the regulation of the majority of businesses that pose little or no risk to public safety. There is nothing gained from having a regulator spend months of time and tens of thousands of dollars to grant an approval for a company that has a track record of always having their applications granted. This is clearly a large cost and a large amount of regulatory effort that is generating no benefit.

Opportunity for reform

Businesses with a track record of compliance and good behaviour should be given a regulatory ‘light touch’, such as fast-tracked approval of regulatory applications.

3.1.2 Diet

The food we eat can affect our health but in a complicated way. Some health issues can occur from the consumption of a single product whereas other health issues arise due to a combination of genetics, age, gender, exercise, lifestyle and the pattern of consumption over time of many products through many outlets.

Some contaminants (such as *E. coli* or salmonella) may cause illness that indiscriminately affects a cross-section of the population, whereas others (for example, allergens) may only affect a small subset of the population, while remaining safe for most others to consume.

Health conditions that involve a reaction to the consumption of a *single* ingredient or *single* type of food on a *single* occasion include: Coeliac disease (gluten), allergies and illnesses caused by contaminants. Some ingredients may also cause acute illness from multiple servings consumed in a relatively short period of time.

Most other diet-related health conditions depend on the *combination* (or lack) of foods consumed over a *period of time* and a range of other genetic, age, gender, exercise and lifestyle factors. These include: obesity, diabetes (Type II), hypertension, stroke, high blood pressure, cholesterol, heart disease, cancer, gout, dental diseases, various vitamin or mineral deficiency-related illnesses (such as osteoporosis or goitres), and many others.

Putting aside the single-dose or single-ingredient risk factors (gluten, allergens and contaminants), the role of other product and ingredients are much more complex. A person can eat most things in moderation, and it can take a long period of over-consumption of ingredients (such as sugar or fat) or under-consumption of other ingredients (such as calcium, iodine, folate or iron) to develop health problems.

There is a vast scientific literature on health and nutrition, so the above summary of items into ‘single’ or ‘multiple’ consumption issues is acknowledged as a significant, albeit quite reasonable, simplification for policy purposes.

The combinations of items consumed are also different for different people. For example, a man working in a manual labour job will require a different diet to a woman working in an office job. Diets will differ for children, the elderly, pregnant women and for a range of different genetic dispositions – there is no ‘average’ person.

It is thus impossible, from a public policy perspective (as distinct from a health science or nutrition perspective), for a regulator to develop a single rating or other information that can be conveyed on a product label to describe the merit of consuming an individual product for the person who ends up buying that product. Rather, it requires an assessment of a person’s consumption and individual characteristics over a period of time – to do this requires a more sophisticated solution so that people can find accurate information on the composition of products that meet their needs, for a calorie intake appropriate to them. There is scant and mixed evidence to suggest that regulations such as front-of-pack star labelling are likely to improve diet-related health outcomes (and could be counter-productive for people who are different from the average – possibly exacerbating a dietary deficiency for some people). There is also a risk of ‘labelling fatigue’ if labelling is relied on excessively to solve complex dietary issues.

For ingredients where risks of nutritional deficiencies come from *under*-consumption rather than *over*-consumption (such as folate, iron and iodine, as opposed to sugar and fat), a careful evaluation must be undertaken before requiring mandatory fortification, or promotion of increased consumption. New technologies are evolving that may better target interventions designed to address nutrient deficiencies to the target audience.

Access Economics (2006) found that the benefits of fortifying flour with folate could exceed the costs of doing so – but subject to overcoming a number of technical issues and some uncertainties around costs. Other regulatory options available to Government, but outside the purview of FSANZ (such as public health education programs, or non-food vehicles for fortification), were also noted in that report. In spite of those caveats, mandatory fortification was introduced.

Opportunity for reform

Regulation of food safety should focus on *single* ingredients, allergens or contaminants that can cause illness if consumed on a *single* occasion, or acute illness from multiple servings consumed in a relatively short period of time.

Nutritional needs vary widely across individuals, and have a low correlation with the consumption of an individual product. Other solutions and technologies need to be investigated to address diet-related illness. Labelling on individual products is unlikely to be effective.

Regulatory evaluations should canvas all regulatory options, including public information campaigns, alternative interventions or industry codes of practice, rather than just mandatory regulations.

3.1.3 Ethical, environmental and provenance attributes

There is an interest among some consumers to know whether food or grocery items have certain attributes. These attributes (generally speaking) do not cause physical harm if accidentally consumed (unlike contaminants or allergens that may cause physical illness if accidentally consumed, or affect a subset of the population), but rather are attributes that are important to people and if consumed could invoke an emotional or psychological response, or reflect firmly-held beliefs or cultural traditions relating to certain attributes, which are important to members of those groups in the community.

These attributes include: Australian-made, Australian-owned, imported, organic, genetically modified, vegan, vegetarian, carbon neutral, carbon footprint, food miles, energy efficient, cage free, sow stall free, hormone free, dolphin safe, orang-utan safe, irradiated, free trade, fair wage, biodynamic, and so on.

Some beliefs are potentially misguided – for example, some consumers may think that ‘organic’ means that no chemicals are used in production (this is clarified here http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/organic_food). Similarly, some consumers may think that ‘genetically modified’ or ‘irradiated’ food is something more dangerous than the reality. The Bill and Melinda Gates Foundation’s recent investment in Golden Rice is one example where GM crop innovations potentially lead to nutritional breakthroughs (<http://www.gatesfoundation.org/what-we-do/global-development/agricultural-development/golden-rice>).

The question here is not whether a person should care whether their food or groceries contain certain attributes that are important to them – people are entitled to their beliefs, even beliefs contrary to the scientific facts. Rather, the question is whether the regulators can effectively regulate in this area, or whether there are more suitable solutions to give those people the information they seek about the attributes of the food they consume, without giving ‘official status’ to unfounded fears, misinformed assumptions, or the next ethical, environmental or provenance concern (of which the list is expanding rapidly).

There is evidence that the market works to a large degree – for example, if sufficiently many people demand food with a certain attribute, producers will respond and supply it. There are already provisions in ACL to prevent misleading claims about food having a certain attribute, and industry codes that can define what terms like ‘organic’ or ‘cage free’ mean. Consumers with internet access can also easily access information on the products they buy – the effectiveness nowadays of regulating this type of information is low.

Smartphone technology enabling mobile access to the internet and an increasing range of Apps enables consumers to access specific information tailored to personal interests with a commensurate reduction in the relevance of indiscriminate regulations. This is consistent with the recommendations of the Select Committee on Australia's Food Processing Sector.

Opportunity for reform

Businesses are generally best equipped to respond to consumer demands for information on ethical, environmental or provenance attributes of food, and to develop solutions for delivering this information to consumers. Regulators will rarely be well placed to respond more efficiently to the increasing range of information on attributes demanded by consumers. Broad-based regulations to prevent misleading claims already exist.

Measures already in place to identify some ethical, environmental or provenance attributes should be reviewed, particularly in light of more efficient technology solutions now available.

3.2 Timeliness and rigour in applications

The most frequent issue raised in our consultations with food and grocery manufacturers was the lack of timeliness of regulatory decisions. In some cases, businesses had waited several years for a new ingredient or formulation to be approved by the special-purpose regulator relevant to their product. As well as the costs involved in the regulatory assessment, there are costs in the form of forgone revenues from delay in supplying products to the Australian market, and a delay for consumers in accessing new products or improvements.

This issue with timeliness at FSANZ was identified in 2006, in the *Taskforce on Reducing Regulatory Burdens on Business*, p59 and remains an impediment for business. Timeliness of decision making at APVMA was raised in DAE (2012), and the extract below shows the most recent 2011/12 data. Of the more complex applications (with a generous target timeframe of 6 to 12 months), just over half of those were completed within that timeframe. Simply reporting KPIs has not been sufficient to encourage improvement in this area, and for cost-recovered applications there is no fee reduction for the applicant when the regulator does not complete the application within the timeframe.

Of those completed, the APVMA did not refuse a single application – every pesticide assessment (which includes garden supplies like snail bait and fly spray) resulted in the application being granted (some were withdrawn by the applicant). For veterinary assessments, including pet supplies (like flea collars and some pet foods), less than 1% of applications were refused.

A regulator that is both very slow, and rarely declines an application, must be questioned in regard to the risk it is preventing, or whether a risk actually exists. By definition, a ‘risk gate’ (ie a risk assessment gate that businesses must pass through) that always lets everything through cannot be having an impact on outcomes – so that risk gate could just be left open. A regulatory assessment process that rarely prevents anything cannot exert much impact on health or safety outcomes, so if subjected to a cost-benefit analysis must result in a very low benefit:cost ratio.

Figure 3.1: APVMA approvals within timeframe – pesticides (incl garden supplies)

OUTCOME OF APPLICATION										SUMMARY (Determination period)					
Class of application	Granted	In timeframe	% in timeframe	Refused	In timeframe	% in timeframe	Withdrawn	In timeframe	% in timeframe	TOTAL finalised	Number in timeframe	% in timeframe	Av. clock On (months)	Av. elapsed time (months)	In process at end of year
Modular (modules to be assigned) or TBA	1		1	100%			-		-	1	1	100%	0.0	26.4	
2 to 3 month	1437	1356	94%				-	38	23	61%	1475	1379	93%	1.9	4.4
5 month	218	143	66%				-	23	16	70%	241	159	66%	5.6	14.8
6 to 8 month	74	41	55%				-	10	7	70%	84	48	57%	7.5	16.0
9 to 12 month	55	29	53%				-	10	6	60%	65	35	54%	12.0	32.0
13 to 15 month	17	11	65%				-	6	5	83%	23	16	70%	18.0	42.0
TOTALS:	1802	1581	88%	0	0	-	87	57	66%	1889	1638	86.7%			1028

Source: www.apvma.gov.au

Figure 3.2: APVMA approvals within timeframe – veterinary medicines (incl pet supplies)

OUTCOME OF APPLICATION										SUMMARY (Determination period)					
Class of application	Granted	In timeframe	% in timeframe	Refused	In timeframe	% in timeframe	Withdrawn	In timeframe	% in timeframe	TOTAL finalised	Number in timeframe	% in timeframe	Av. clock On (months)	Av. elapsed time (months)	In process at end of year
Modular (modules to be assigned) or TBA															
2 to 3 month	563	543	96%	-			-	5	5	100%	568	548	96%	1.0	5.5
5 month	115	105	91%		2	1	50%	11	9	82%	128	115	90%	4.3	14.9
6 to 8 month	34	18	53%		1	0	0%	19	14	74%	54	32	59%	9.5	29.5
9 to 12 month	22	17	77%		4	4	100%	13	9	69%	39	30	77%	8.1	27.8
13 to 15 month	14	8	57%				-	5	4	80%	19	12	63%	14.2	45.4
TOTALS:	748	691	92%	7	5	71%	53	41	77%	808	737	91.2%			810

Source: www.apvma.gov.au

The issues with timeliness include:

- a long length of time, in absolute terms, to approve applications, sometimes taking several years;
- uncertainty around the time until a decision will be taken (ie not knowing if it will take 18 months or 3 years) making it difficult to make business plans and creating investment uncertainty;
- most of the applications being eventually approved anyway;
- high costs recovered from industry to pay for lengthy regulatory risk assessments (and for work that would typically have diminishing returns, in terms of the risks reduced as time spent increases); and
- a lack of robust approval mechanisms to challenge poor regulatory decisions (of the less than 1% of veterinary applications that were not granted, some queries were raised in consultations whether some of those few should have been granted).

Not all Australian regulatory decisions are like this – it seems to be a performance issue particularly prevalent in food and grocery regulation, and APVMA and FSANZ in particular. By way of example, the ACCC recently assessed a complex regulatory application: the Qantas and Emirates partnership. It was arguably a more complex matter than many food or grocery regulatory applications, with billions of dollars at stake. However, the ACCC adhered to its six-month time limit (including conducting public consultations in that time), and processed the 7 Sep 2012 Application ending with a 27 March 2013 Authorisation. It

also provided a Draft Determination on 20 Dec 2012 and an Interim Authorisation on 17 January 2013. This timeline, with draft and interim decisions, allowed those businesses to plan for the partnership to commence at the start of the Northern Summer schedule (31 March 2013) and gave regulatory certainty. If the Authorisation had not been granted, an appeals mechanism would have been available through the Australian Competition Tribunal (ACT).

In the case of food and grocery applications, regulatory decisions for seemingly minor matters can take several years, with little impetus to reach a decision, and no mechanism to place a deadline on the decision.

In many other industries, rather than government employees having a monopoly on the role of assessing applications or issuing approvals, there are authorised certifiers (ie private third parties that are permitted to grant approvals on behalf of the regulator). This is a possibility for reform, to bring some commercial discipline to approval processes.

3.2.2 Appeal mechanism

As noted above, there is also no suitable appeal mechanism if the regulated company feels that the regulator has misread the situation, or has been overly risk-averse. The Administrative Appeals Tribunal (AAT) can review whether procedures and legal frameworks have been followed, but our feedback from the industry is that it is not well equipped to assess whether the balance of risks, benefits and costs and national interest were weighed appropriately.

Indeed, the only persons able properly to assess whether a regulatory decision meets with the public interest in terms of risks, costs and benefits, are elected officials. Unlike regulators, elected officials are accountable to the electorate and have the appropriate authority to weigh the various risks, impacts and the public interest (including employment, trade, cost of living, environment and health impacts) of the regulatory decision.

An appropriate process could be for the new statutory officeholder of the OBPR to review the regulatory decision (taking into account submissions from the company, the regulator and other interested parties), and then make a recommendation to a suitable elected official in a central portfolio able to weigh the whole-of-government issues (employment, cost of living, health, environment, etc) and thus apply a public interest test to resolve the dispute. Possible candidates to form a panel for adjudicating on appeals could be the Assistant Treasurer, the Parliamentary Secretary to the Prime Minister and the Parliamentary Secretary to the Minister for Finance.

Opportunity for reform

Allow regulatory decisions to be appealed, upon which the new statutory officeholder of the OBPR reviews the appeal (including making independent investigations and inviting submissions) and then recommends a decision to an appropriate designate (the Parliamentary Secretary of PM&C, Assistant Treasurer and Parliamentary Secretary of Finance would be good candidates to form a panel of designates that can weigh up appeals) for approval.

Remove the opportunity for regulatory ‘filibusters’ by requiring all regulatory approvals (or declined approvals, with reasons stated) to be concluded within six months. It should require approval from the above designate (drawing on advice from the statutory officeholder of the OBPR) for a regulator to be permitted to take longer than six months to make a decision. Additionally, the *default* should change so that an application is deemed to be approved once six months has passed, unless an extension has been granted.

Authorised third-party certifiers should be introduced so that government employees do not have a monopoly on undertaking evaluations and issuing approvals.

3.3 The regulatory ‘dead ends’

After timeliness, the next most problematic area of regulatory failure is what we describe as the regulatory ‘dead ends’ – when new food or grocery products fall between the cracks because there is no mechanism for them to be approved for sale in Australia.

This goes beyond the usual ‘red tape’ or ‘green tape’ compliance costs of obtaining approvals, to situations where approvals are not able to be given. It occurs when rules-based regulation meets the inevitable exception to that rule, which makes it impossible to supply a new product to the Australian market, or to invest in a new manufacturing plant. This occurs due to regulatory failure, not due to any demonstrable risk to people, animals or the environment. It may be best described as ‘invisible tape’.

Examples

There are hundreds of products that are not able to be supplied to the Australian market, and many manufacturing jobs that do not exist, because of the consequences of rules-based regulations unable to handle exceptions to the rule, or that make it unviable to supply low-volume products to the Australian market.

The following examples are cases where businesses were keen to provide a safe product to the Australian market, or to provide customers with information about certain health attributes of their products, but were not able to obtain regulatory approval:

- New foods: Simplot sought to supply a new product to the Australian market, called ‘Pancake Pods’ (a snack made of two pancakes with a sweet filling) which is safely sold in several other countries. However, it could not be approved because the regulator (Biosecurity Australia, formerly AQIS, which administers regulations for imported food on behalf of FSANZ) did not have a definition for ‘pancakes’: essentially ‘pancakes’ didn’t exist as a permitted type of food. As a result of this regulatory ‘dead end’ the item could not be supplied to the Australian market, resulting in lost sales.
- There is an arbitrary rule about making health claims for products with added sugar. No doubt, the national regulator has a reason why this rule has merit, but ultimately a rules-based approach tends to lead to exceptions to the rule, which are not handled well under a rules-based approach. Cranberry juice is a possible exception to the rule, as a product that reduces urinary tract infections, but the manufacturer is

not allowed to inform consumers of those potential health benefits, because cranberries are tart and require added sugar (although we understand the end product has similar levels of sugar as other fruit juices). In this case, there is another regulatory 'dead end' created.

An unusual aspect of the national regulator's decision to prevent this information from being provided to consumers is that other State regulators do the exact opposite (such as the extract below from www.betterhealth.vic.gov.au). There is also ample information on the health benefits of cranberry juice available by searching on the internet, so it would seem to be a costly waste of resources for a regulator to attempt to block one channel of providing this information to consumers.

From the Victorian Health department:

For women who have recurrent UTIs, daily intake of cranberry juice or capsules can reduce their incidence. Cranberry juice appears to lower the ability of E. coli to stick to the urinary tract lining cells. Let your doctor know if you are having cranberry juice as it can alter the effectiveness of some antibiotics.

- One part of the bureaucracy has been promoting the consumption of 'five servings of vegetables and two servings of fruit'.⁴ At the same time, another part of the bureaucracy denied an application by a food manufacturer to label their vegetable products as contributing one of those five servings of vegetables a day.
- Complex arrangements requiring companies to be able to trace a small amount of an ingredient used in an intermediate product, that is then used by another company as an ingredient in a final product, back up the supply chain to the original source, when it is unlikely that any risks have survived the processing.
- Another arbitrary rule is not being able to carbonate a beverage that makes a health claim about added vitamins. Again, while the regulator may have reasons for why this rule was made, this type of rule is ultimately arbitrary rather than scientific.
- Several other examples were given on a confidential basis, by food and grocery manufacturers that did not wish to be identified. These examples were mainly around issues of regulators not accepting overseas evidence from producers not registered in Australia, or not allowing products that are already in use safely in the US, UK and Europe (countries with very high safety standards).

One solution is to have the ability to create new categories or to create exemptions when these anomalies arise. The appeals mechanism noted above would be a way of resolving the 'exceptions to the rule'.

A more substantial reform would be to move away from rules-based regulations towards risk-based regulation. An example of rules-based regulation is where disinfectant products (generally low-risk products) require a lengthy approval process for each product, which could be simplified by introducing a Biocidal Regulation that covers a group of chemicals that all perform a similar function.

In the specific cases above, greater discretion and common sense should be exercised by regulators so that seemingly trivial classifications or arbitrary boundaries created by rules do not hold up trade or commerce. This is particularly an issue for the time and resource

⁴ <http://www.healthactive.gov.au/internet/healthactive/publishing.nsf/Content/tips>

intensive requirements to develop and submit chemical dossiers for small volume component chemicals used in cosmetics in Australia, already recognised in the US or EU.

Opportunity for reform

Regulators should not waste time and resources attempting to block information being provided to consumers, when that information is already widely available from multiple sources such as the internet and State Government websites.

Create mechanisms for dealing with regulatory ‘dead ends’, so that a way can be found of approving products that pose little risk.

Move away from rules-based regulation to risk-based regulation, by allowing general exemptions for low-risk products. Introduce a Biocidal Regulation to simplify the process for a broad range of low-risk disinfectant products.

Change the default position so that products that are already safely in use in the US/UK/Europe are accepted for use in Australia unless there is strong evidence to the contrary. This is particularly an issue for the complex chemical dossiers required for cosmetics in Australia that are already recognised in the US or EU.

3.4 Encroaching regulations

Some regulations may start out as a sensible approach in the design phase, and pass a cost-benefit test, but after implementation, procedures for approvals are adopted that make those regulations far more complex and onerous to business than was estimated in the RIS at the time of introduction. A post-implementation review can help, but with considerable delay. The level of detail and complexity requested by regulators largely occurs unchecked.

Increasing regulation over time, and the threat of new regulations, creates ‘sovereign risk’ which threatens future investment in new production facilities. For example, investors considering a new product launch may be discouraged by threats of future new restrictions, a ‘fat tax’, advertising restrictions, a national CDL, FoPL or many other policies that are floated from time to time, which create uncertainty about the future viability of a new investment, due to more onerous regulations being introduced in future.

Impacts of regulations may also extend beyond purely compliance or red tape costs, to impacts such as impeding trade or discouraging investments. These impacts need to be included in the evaluation of costs of a proposed regulation.

Opportunity for reform

Introduce a mechanism for investors considering a new production facility to lock in a ‘regulation contract’ up front that exempts it (under contract law) from future regulations that may otherwise make the investment unviable.

Expand the Business Cost Calculator to include the costs of regulations that impede trade or discourage investment.

3.5 Mandatory reporting obligations

Some food production technologies (such as irradiation) can be beneficial if conducted properly. However, a mandatory requirement to identify these technologies, combined with misinformation from some quarters (thus giving a level of prominence and official status to an unfounded fear) could have the perverse effect of making food less safe or less nutritious than it could be.

Under the Australian Consumer Law, there is a requirement for food and grocery companies to report to the ACCC any allegation of injury, illness or death associated with a product. Food was not initially intended to be captured under the reporting requirements, but was included in the last stages of the bill's passage through Parliament.

Previously, under the TGA definition, an incident was defined as a situation where a person was hospitalised, with the cause of the hospitalisation confirmed as related to a product. In this case, a producer had to report within 15 days of the incident.

In comparison, under Australian Consumer Law a report must be made within two working days from the company being aware of an incident. An incident is defined as someone attending a general practitioner (even if no treatment / prescription resulted from that visit). This has led to a significant number of 'false positives' where incidents have turned out not to be related to the product.

Examples

In the case of food products, where consumption has led to someone becoming unwell and attending a GP, it is possible that they have become unwell for reasons other than the food they have just consumed.

Microbiological testing associated with incidents can take 2-4 weeks for results, leading to many reported false positives. A submission to DAE quoted an AFGC study of 457 incidents in 2012 which found that 75% were false positives, with only 17 followed up by the ACCC and none resulting in product recalls. It was also noted that the costs associated with reporting studies took up over 100 days of company time which could have been otherwise utilised.

If there are concerns that incidents were not previously reported in a timely manner, it is possible to tighten the reporting period on its own, without resorting to a change in the definition of 'serious'.

Some other overly onerous 'name and shame' style regulations (such as compulsory reporting of listeria) could actually have the perverse consequence of discouraging some methods of quality control – hence the amount of quality control testing could actually *increase* in the *absence* of some 'name and shame' style regulations.

Opportunity for reform

Anecdotally, the ACCC has been swamped with reports due to recent changes to reporting of incidents. More importantly, the reports are not all necessarily relevant (where there may have been a false alarm) or significant enough to prompt a product recall or other action. This regulation needs to be reversed.

‘Name and shame’ style regulations, including mandatory reporting, or giving official status to misplaced fears about food technologies, should be repealed, as these are likely to be counterproductive, and in some cases may be actually reducing the quality and nutrition of food, or reducing the quality control tools available.

3.6 Classification of medicines

There are several classifications of medicines, including those that can only be obtained with prescriptions, those that can be sold over the counter at a pharmacy, and those that are available for purchase at supermarkets and convenience stores.

Changing between these classifications is known as ‘switching’ which is highly regulated in Australia by the TGA, despite being more open to innovation overseas.

Examples

A medicine may switch from prescription to over-the-counter where research and innovation has demonstrated that the product can be sold based on self-diagnosis rather than needing to visit a general practitioner.

Opportunity for reform

There would be social and regulatory cost savings associated with simplifying the process associated with ‘switching’ a medicine to ‘over the counter’.

For example, allowing people to self-diagnose migraines and obtain medicines over the counter reduces the need for people to attend a general practitioner. This frees up health system resources for potentially higher value uses. There are also positive implications for worker productivity, reducing the duration of the illness and overall wellbeing of the person.

Experience in other sectors/overseas

The New Zealand system for approving switches is more open to innovation than in Australia, where experience indicates that more switches are rejected than passed. Adopting a less risk-averse model similar to New Zealand, could reduce the social and regulatory costs to the economy.

3.7 Intellectual property

When new products or formulations are developed, they must go through rigorous testing to ensure safety for consumers. This testing is costly and can be a lengthy process but can allow for new products to be marketed. An issue with the current system, however, is that there is no system in place to protect the intellectual property related to complementary medicines.

Hence, once a product is approved for manufacture and sale, other organisations can free ride on the testing and market their own version of the product without conducting their own research. There is therefore little incentive for companies to invest in product testing if they do not have a period of exclusive rights to recoup costs once the product is approved. This can drive manufacturing, research and development to offshore markets with more efficient regulatory systems, at the expense of the Australian market.

Examples

New formulations of complementary medicines must be tested before being commercially available. This product testing is a costly and lengthy process before a product can be marketed as having particular benefits or being suitable for consumption to manage particular conditions.

Swisse Wellness (2013) has noted that investment by the complementary medicines industry has been “denied even the most basic of intellectual property (IP) protections afforded to every other class of goods”. Further, even without data exclusivity (which is part of the pharmaceutical model), this protection would “at least provide the chance for those who invest in science and research to at least make a return on investment and that would stimulate an avalanche of innovation via science and research, which could generate globally attractive products commercialised out of Australia.”⁵

A potential solution is a data protection mechanism: formulations of vitamins and supplements are not able to be patented (in contrast with pharmaceutical molecules), this, coupled with a requirement that Australian trials are required for a new formulation makes it commercially unviable for companies to recover the investment in field trials of a new formulation, as all manufacturers will be able to piggy back on that approval. As a consequence of this regulatory ‘dead end’, some potentially beneficial vitamin and supplement formulations are not able to be supplied to the Australia market. Swisse Wellness Pty Ltd suggested that several million dollars in investment in new trials and new products would occur if this problem could be solved. A solution is for the TGA to introduce a ‘data protection’ period of 5 years (a similar mechanism is already in place to address a similar issue for agvet chemicals at APVMA).

This is a second-best reform: the best solution is to simply remove the need for low-risk products to need such onerous regulatory approval processes or for TGA to accept trial data from overseas. However, if those requirements are to remain in place, a mechanism to allow manufacturers a period of exclusivity to recoup the costs of trials is needed.

⁵ George Livery, <http://www.swisse.com/au/about-swisse/587/time-to-protect-a-growing-australian-industry>

Opportunity for reform

The trials, research or development required for some TGA regulatory approvals are not protectable intellectual property, so individual companies are not able to justify the cost of registration (if other firms can piggy back on that approval). A mechanism for data protection and a time period to recoup costs are required.

Experience in other sectors/overseas

Patents are used in a number of industries to guarantee exclusive rights to exploit a particular development for the life of the patent. Appliances, mechanical devices, computer-related inventions, business methods, biological inventions and biological materials may be patented.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) regulates patent periods following successful research and development of chemical products, which supports the development of new active constituents.

One solution being used in China is to offer regulatory protection rather than intellectual property protection to stimulate investment and innovation.

3.8 A narrow focus

A further reform, and to reduce the number of appeals that might arise from the above mechanism, would be for the regulators to take into consideration a wider set of issues when determining an application.

Currently, the various food and grocery regulators focus on minimising health and environmental risks, without sufficient regard for the impacts of minimising those risks on other outcomes, such as the cost of living, employment, trade and investment.

This is reinforced in the governance arrangements. Several AFGC members we consulted expressed concerns that the many committees and advisory boards associated with the various food and grocery regulators lack representation from the relevant food or grocery sector and from portfolios, particularly Industry, Trade & Investment, Agriculture and a central agency such as Finance, Treasury or PM&C.

Combined with generous operating budgets and the rule-making ability discussed below, this has created a culture where regulators pursue a range of special interests and public policy positions that may not align with the views of the wider public.

In other jurisdictions, such as New Zealand, the governance arrangements and assessment of applications ensure a variety of views and professions are represented, and some food manufacturing regulatory functions sit under the NZ Ministry of Primary Industries rather than under the Ministry of Health. Additionally, OBPR staff could be embedded in regulatory agencies to improve the development of regulations.

Opportunity for reform

Require regulators to consider impacts (other than just health and environmental risks) when assessing applications. These include impacts on cost of living, employment, trade and investment.

Review appointments to the various food and grocery regulators' committees and advisory boards to ensure representation from the relevant food and grocery sector, and other portfolios, particularly Industry, Trade & Investment and Agriculture, and a central agency such as Finance or PM&C.

Consider whether some regulatory functions relating to food and groceries should sit under a different portfolio, for example, in New Zealand food regulation sits under the Ministry of Primary Industries.

Embed OBPR staff in regulatory agencies to improve regulation development.

3.9 Initiating changes, rule-making and rule-enforcing

There are several parts to any regulation:

- **Initiating a change to the rules:** a new risk or concern is raised and an investigation is initiated into whether a change to an existing regulation, or new regulation should be introduced.
- **Rule-making:** creating the rules that businesses need to adhere to, for example, assessing whether a new requirement should be imposed, or whether certain types of ingredients or chemicals require registration.
- **Rule-enforcing:** compliance, processing applications for registration, issuing licences or certificates, amending codes and lists.

Several food and grocery regulators are able to play a policy development and advocacy role in terms of determining the agenda (initiating changes to rules), the areas to be regulated and interventions to meet certain policy objectives. For example, there are many items that FSANZ has placed on its own work plan.⁶ At the same time some also perform the role of the umpire that enforces the rules.

A reform option is to remove the ability of regulatory agencies to make rules or to create their own work program, by restricting their roles to the 'independent umpire' role of rule-enforcing. As part of implementing this, the OBPR should automatically reject any RIS that submitted by a regulator, thus reserving the ability to change regulations (and to develop and submit RISs) to the relevant department.

⁶ <http://www.foodstandards.gov.au/code/changes/workplan/Documents/Work%20Plan%20LATEST.pdf>.

Examples

The TGA is an example of an agency that can initiate processes, make rules and enforce rules through its power to make Therapeutic Goods Orders. It is recognized that such Orders are subject to disallowance upon Parliamentary review, but this accountability to Parliament is not a complete answer to the problems inherent in its structure, which is conducive to regulator ‘activism’. This creates uncertainty for businesses because the goalposts can shift unexpectedly.

Under the current FSANZ model, the initiation of a new rule or regulation can be made by FSANZ itself, who then undertakes the ‘rule making’ function of evaluating the rules it has initiated. After approval by the Ministerial Council, enforcement of rules is carried out by the States and Territories, and for imported food, Biosecurity Australia (formerly AQIS).

One example of this being a problem is where FSANZ is able to decide whether or not a regulatory impact statement (RIS) is required for its own submission on a change to its own regulations. A draft submission for a change in regulations (P1025) was deemed by FSANZ to have ‘no impacts’ on business and hence not requiring a RIS. However, AFGC members have expressed concerns with this, with an industry survey identifying significant compliance costs related to updating forms and documents, training costs and impacts on other legislation and regulatory requirements.

In such cases, the OBPR is only able to assess the RIS based on the information they are given, that is, FSANZ’s view on whether a RIS is required (and then is done properly). The OBPR needs to have greater powers in this space to review more widely, and the ability to prevent conflicts of interest or regulatory activism.

Currently, the regulator is able to make an assessment of whether a regulatory change requires a RIS. Until now, the OBPR has not been sufficiently resourced (for example, to conduct its own investigations or to consult with industry) to be able to assess whether the regulator’s assessment of a RIS not being required is correct.

Opportunity for reform

To reduce regulatory activism, the functions of ‘initiating rules’, ‘rule-making’ and ‘rule-enforcing’ should be separated.

Regulators are sometimes unaware of the costs their actions have on industry, or too readily dismiss those. The OBPR should be given additional resources to independently consult with industry to verify claims that regulatory changes do not require a RIS (or CRIS where applicable), and to independently verify the RISs and CRISs received.

Experience in other sectors/overseas

There are examples in other industries where there has been a separation of ‘initiating-rule changes’, ‘rule-making’ and ‘rule-enforcing’ to prevent regulatory empires being created, or regulatory activism, by preventing a regulator from expanding the scope of the activities it regulates. For example:

- Price regulation of airports: the Assistant Treasurer initiated a review, instructing the Productivity Commission to conduct an inquiry and recommend which airports, and which assets within the airport, should be subjected to what level of price regulation. The responsible Ministers (Minister for Infrastructure and Transport, and the Assistant Treasurer) then considered and largely adopted the PC recommendations. The ACCC performs the day-to-day enforcing of those regulations. Note here that the PC cannot initiate a review of airport regulations without receiving instructions.
 - While issues do arise with airports developments, the regulatory framework has balanced many complex issues, resulting in extensive private investment in airport infrastructure.
- Airspace classification: after receiving an Airspace Change Proposal⁷ from a proponent to initiate a rule change, the Civil Aviation Safety Authority's Office of Airspace Regulation assesses the proposal to determine the level of air space regulation in that volume of airspace, Airservices Australia then enforces that level of airspace regulation, and the ACCC determines the pricing of the air traffic control service. This separation occurred to ensure a perception that the revenue-generation from higher levels of air traffic control provision (ie cost recovery of 'rule-enforcing' activities) were not seen to be influencing the decision of the level of air traffic control (ie the 'rule-making' function).
- A third example is in telecommunications and other infrastructure, where the 'rule-making' decision of which assets to regulate is made by the NCC, while the ACCC undertakes the 'rule-enforcing' of regulating prices or capital works in those sectors.

3.10 Multiple regulators

Separate regulators are responsible for different aspects of a product, which means that a product may need to pass through several rounds of assessment, potentially with duplicated documentation, prior to approval.

Examples

Sunscreen is regulated by three different regulators, and it depends on a number of rules, including whether the package is >300mL and the sun protection factor (SPF). The extract in Figure 3.3 on the following page shows the level of demarcation in regulation of sunscreen and the three different regulators involved.

⁷ <http://casa.gov.au/manuals/regulate/acm/form1284.pdf>

Figure 3.3: Regulatory roles for sunscreen

Therapeutic sunscreens	Cosmetic sunscreens
Regulated by the TGA	Regulated by NICNAS (ingredients) and the ACCC (labelling)
Includes: <ul style="list-style-type: none"> • All "Primary sunscreens" • "Secondary sunscreens" that are not "cosmetics" as described in Cosmetic Standard 2007¹³ - mainly moisturisers containing sunscreen with an SPF greater than 15 • all sunscreens (SPF 4 or more) that contain an insect repellent • sunscreens with ingredients that are from humans, or particular organs from: <ul style="list-style-type: none"> ◦ cows ◦ sheep ◦ goats ◦ mule deer. 	Includes secondary sunscreens that are "cosmetics" as described in the Cosmetic Standard 2007 ¹³ , namely: <ul style="list-style-type: none"> • Moisturisers with sunscreen if SPF is 15 or less (pack size no more than 300 mL) • Sunbathing products with SPF between 4 and 15 (pack size no more than 300 mL) • Lip balms/lip sticks with sunscreen (any SPF) • "Make-up" products with sunscreen (any SPF)

Source: www.tga.gov.au

This poses significant regulatory red tape, for example, for products where the same SPF15 lotion is sold in multiple pack sizes (below and above 300mL). As well as sunscreen-specific regulations administered by ACCC, TGA and NICNAS, the front-of-pack volume measurement on all products is regulated by NMI. The amount of overlapping regulation is likely to be increasing the cost of sunscreen in Australia above where it could be.

Opportunity for reform

Efficiencies could be achieved by having a 'one-stop shop' which covers all required regulatory considerations, rather than having a duplicated process for the multiple regulators. A combined one-stop shop 'rule-enforcing' regulator (like the US FDA) would have the power to approve all aspects related to a new product, and would be separated from being able to 'make rules'.

As a priority, reduce the number of regulators involved in regulating sunscreen, by removing the arbitrary rule about sunscreen sold in packages >300mL and simplifying the rules.

Experience in other sectors/overseas

In the US, the Food and Drug Administration (FDA) monitors food, drugs, medical devices, radiation-emitting products, vaccines, blood, biologics, animal and veterinary products, cosmetics and tobacco products. This 'superbody' covers the regulation of a number of products, reducing the administrative burden for manufacturers and hence simplifying the process of bringing a product to market.

Australia is, of course, much smaller than the US, but has chosen to have greater disaggregation of its food and drug regulators.

Such a 'superbody' experiences economies of scale in information, where smaller regulators must seek information which has already been provided elsewhere. By reducing the red tape burden (and hence costs) faced by manufacturers, it is likely that a wider range

of products can be developed, leading to benefits to society and the economy through improved product choice.

3.11 Efficiency and cost recovery

Most of the regulators relevant to the food and grocery manufacturing industry cost-recover the cost of their regulatory activities from industry, in the form of fees, charges and levies for regulatory services such as: registrations, amendments to codes, applications and approvals. There is also some appropriation funding of some regulators to cover activities that are not able to be cost recovered.

The Australian Government Cost Recovery Guidelines (2005, currently being reviewed by the Department of Finance) provide a framework for recovering costs from industry in connection with the provision of a regulatory service (there is also recovery outside these guidelines, such as the APVMA levy, imposed using a tax Act rather through fees and charges under the AGCR Guidelines). To the extent that some of the regulatory costs associated with MRLs in food or pet supplies are partly recovered through a levy that applies further up the agri-food supply chain, the economic impacts of unnecessary regulation may be even greater.

Unlike appropriation-funded agencies, there is arguably less fiscal discipline on a cost-recovered agency (such as the potential to mitigate the impact of measures such as 'efficiency dividends' by allocating more resources to cost recovered activities). Where costs are recovered from industry, and the regulators themselves are able to determine the time and process to be followed to issue a regulatory approval, it also creates potential conflicts of interest – regulators can 'expand their empire' to a degree, by deciding the time and costs needed to process regulatory approvals.

As part of justifying cost recovery arrangements, agencies conduct 'activity based costing' (ABC), to varying degrees, which is an exercise of allocating costs and overheads pro-rata across regulatory activities to justify fees and charges. Unfortunately, ABC on its own does not demonstrate that those activities are being performed promptly, cost effectively, or at minimum cost necessary (as required in the AGCR Guidelines), it only allocates the existing level of cost.

Most regulatory activities should be fairly routine tasks: processing applications for registration, issuing licences, amending codes and list, assessing permits, inspecting facilities, auditing compliance, and so forth.

Opportunity for reform

Review the operating costs, resourcing and business processes of regulators to ensure efficiency and the minimum cost necessary is recovered from industry.

3.12 A cost-benefit analysis of special-purpose regulator activities

The need to conduct a cost-benefit analysis and regulatory impact statement before introducing a new regulation is a well-known recommendation. So too, is the call for ex-post cost-benefit analysis of regulations that may have become redundant or inefficient.

While conducting CBA and RIS of individual regulatory changes are important, a cost-benefit analysis of an entire regulatory agency, or each function within an agency, is rarely seen. We are not aware of any cost-benefit analysis being undertaken to demonstrate the net benefits of regulator's activities have generated over the past (say) five years.

For example, is there evidence that decisions taken by APVMA over the past five years (or specifically the subset of APVMA regulations that relate to food and groceries) have led to better outcomes than if some function performed by APVMA didn't exist (relying instead on broad-based regulations) or if those decisions were not taken? As noted earlier, there is *prima facie* case that some 'risk gates' could be left open.

By way of comparison, research agencies such as the various Cooperative Research Centres and the various agricultural Research and Development Corporations, routinely subject their research programs to ex-post and a-priori CBAs to ensure their research is appropriately targeted, and to learn how they can improve the focus of their research activities. Regulators could adopt a similar discipline of reviewing where their regulatory interventions are actually generating benefits that justify their often large operating budgets. Forcing regulators to assess where decisions they have taken have changed outcomes is a useful discipline (in particular, whether their activities have caused a measurable ex-post reduction in incidents, injuries or fatalities). This would guard against the possibility that regulators are expending a lot of effort on activities which are not causing a measurable improvement in outcomes.

Opportunity for reform

To identify regulation that impose slow and costly processes on low-risk products, conduct an ex-post cost-benefit analysis of each function of each special-purpose regulator (APVMA, FSANZ, TGA, NICNAS, NMI and some aspects of ACCC). Assess the proven benefits that have arisen during the past 5 years due to the activities of these regulators (for example, illnesses they have prevented), versus their operating costs, compliance costs and unintended consequences, compared with a scenario where only broad-based regulations (consumer law, criminal law, etc) existed.

The cost-benefit analysis should be commissioned by a central agency (such as Finance or PM&C) to avoid a perception of self-review by the agency in question. However, the agency under review should be consulted as part of the CBA.

After the initial round of reviews, all regulators should be subjected to a cost-benefit analysis of their functions on a rotating 5-year calendar.

3.13 Maximum Residue Limits

MRLs are an example of rule-based regulation resulting in complex and lengthy regulations. In 2009, a Productivity Commission report (*Performance Benchmarking of Australian and New Zealand Business Regulation: Food Safety*) noted

The processes for registering and specifying appropriate maximum residue limits of chemicals are more streamlined and timely in New Zealand than in Australia.

However, nothing has been done about this issue, that we are aware of: it remains a problem and was raised by several manufacturers during our consultations. We are not aware of an ex-post cost-benefit analysis having been conducted to check whether the regulatory process relating to maximum residue limits (MRL) for each food ingredient actually generates a benefit that justifies its cost, or whether the complex involvement of both APVMA and FSANZ in regulating MRLs is the best model.

In New Zealand, a single agency is responsible, and we understand that rather than employing people to evaluate MRLs for each food ingredient, there is a default value for each chemical which avoids specifying a value for each chemical for each type of food. That is, a number of costly regulators could simply be replaced by a default value. If, as we suspect, a cost-benefit analysis shows that the work that goes into amending lists of MRLs results in negligible impact in outcomes (ie the risks in this area are near-zero with or without this regulatory burden), then a default MRL could replace a large amount of regulatory work of little benefit to health or safety.

The issue of MRLs is particularly important because recent advances in laboratory testing equipment are threatening to cause an explosion in the number of microscopic (and often harmless) quantities of chemicals that can be detected. Some of these chemicals have always been present, but at undetectable levels, in those foods and the improvement in testing equipment *on its own* is not sufficient to demonstrate a new risk has been found.

In terms of the 'risk gates' discussed earlier, applications to change the MRL are usually approved and the residues present are at levels well below the MRL, so this gate does not seem to be preventing any risks.

For a food that does not have an MRL for a particular chemical, there is a need to have that chemical approved for that food (see above for further discussion). For example, even though there may already be MRLs specified for a particular chemical to be present (at low levels) in strawberries and blackberries, if raspberries is not on the list, it is necessary to apply for a MRL for that chemical residue to be added to the list specifically for raspberries (otherwise, if that chemical is detected, even at much lower concentrations than already approved for strawberries or blackberries, in a batch of raspberries, a product recall is

required).⁸ This is an example of rules-based regulation that has gone too far. While there are obviously good reasons to have limits on chemical residues in food, the regulatory process that led to the 266-page list of MRLs⁹ needs urgent review. The following extract from the MRL (mg/kg of residue) is just one small example (there were two full pages just for this one chemical) of the degree of rule-based regulation that has evolved in this area.

Carbaryl			
FS	0240	Apricot	10
VS	0621	Asparagus	10
FI	0326	Avocado	10
FI	0327	Banana [in the pulp]	5
GC	0640	Barley	15
FB	0264	Blackberries	10
FB	0020	Blueberries	7
FT	0289	Carambola	5
GC	0080	Cereal grains [except Barley and Sorghum]	5
FS	0013	Cherries	5
FC	0001	Citrus fruits	7
SO	0691	Cotton seed	3
FI	0332	Custard apple	5
FB	0266	Dewberries (including Boysenberry and Loganberry)	10

Opportunity for reform

Particular attention should be given to the costs and benefits of the current MRL process. The New Zealand approach of having default MRL values should be adopted. The onerous rule-based processes and the 266 pages of detailed and prescriptive regulations that have evolved in the area of MRL make it an urgent priority for reform.

3.14 Jurisdictional duplication

In some cases, regulation is duplicated by different governments, for example at the state and federal level, or between different states. Where regulators have overlapping requirements, the burden on industry is increased. Further, the jurisdictions may have conflicting regulations depending on the regulators' understanding of the operating environment and their specific focus.

In the food and grocery industry, container deposit legislation varies across states (South Australia and Northern Territory), leading to labelling and cost impacts to address the different jurisdictional requirements and licencing arrangements. Different state agencies also have varying interpretations of the standards and guidelines of the Dairy Farm Food Safety Program, in some cases requiring additional non-food safety authorisation, leading to increased cost and complexity for producers.

⁸ Furthermore, our understanding is that MRLs were originally designed to demonstrate appropriate use of the chemical when applied, but have become a de-facto food safety measure, which may not be appropriate.

⁹ See <http://www.comlaw.gov.au/Details/F2013C00857> or <http://www.apvma.gov.au/residues/standard.php>

Jurisdictional duplication affects several industries other than the food and grocery industry. Recent COAG reforms (particularly harmonisation as part of the Seamless National Economy reforms) have attempted to reduce this duplication across a number of industries.

The situation remains far from perfect, and food and grocery regulation has not yet been the target of this reform. It should be noted however, that harmonisation is not seen as a 'silver bullet' solution and in some cases, harmonisation has been reported to have resulted in costly and complex outcomes that are likely to outweigh its benefits. Rather than resulting in 'best of breed', some efforts at harmonisation lift all jurisdictions up to the same level as the most onerous jurisdiction.

In the case of CDL, most local councils already provide an efficient kerbside recycling service (from which councils receive income, by selling the recovered resources), and recycling is available at public events and stadiums. Australia already generates more broken glass than manufacturers can use (unlike aluminium, paper or steel, new glass cannot be made from 100% recycled glass – the optimal recovery of glass is less than half of that produced). To duplicate that with a parallel system that requires people to drive some (but not all) of their recyclable materials to a depot for refund is very strange indeed. A 10¢ refund on beverage containers (excluding 750mL wine bottles) and a network of refund depots, when we already generate more glass that we can use, makes this a costly and highly inefficient scheme.

A report by PricewaterhouseCoopers and Wright Corporate Strategy (2011) found the costs of a CDL would outweigh the benefits by \$1.4 billion.

The Mutual Recognition Act was passed in 1992 to put a brake on state-based regulations – and drive a national seamless economy. All States and the Commonwealth must sign off for permanent exemptions, and South Australia has a permanent exemption for its CDL.

Opportunity for reform

Reductions in duplication across jurisdictions and harmonisation can be worthwhile, but only if all jurisdictions move to the 'best of breed'. Harmonising the nation on South Australia's CDL would be a backward step.

Permanent exemptions (under the Mutual Recognition Act) should not be granted (or have sunsets) where the effect of regulation imposes costs on consumers and businesses operating across multiple jurisdictions.

3.15 Small country, big regulations

Australia represents around 1.2% of the GDP of the G20 group of nations, and 0.5% of its population. For some food and grocery items, our market is too small for local production to be viable and so the item is imported. For the food we export, other countries are unlikely to adopt our systems.

In many areas, Australia has unique or inconsistent regulatory requirements for weights, packaging and various other items. In 2006, the *Taskforce on Reducing Regulatory Burdens on Business* noted

‘uniquely Australian’ variation of international standards or agreements relating to regulations in the chemicals and plastics sector is contingent on a demonstration of net public benefit.

The creation of ‘uniquely Australia’ variations is more widespread than just chemicals and plastics – it occurs in weights and measures (administered by NMI), labelling, and by various other regulators.

In some cases, importers will incur the expense of relabelling or the cost of an Australian-specific production run to meet regulatory requirements. However, in other cases, it becomes prohibitive for multinational manufacturer to do a special production run or to unpack, relabel and repack a product, just for Australia, and so the item is not offered for sale to the Australian market.

Australian-specific labelling has evolved to such an extent that it is illegal to sell an Australian-labelled food products in the US (and vice versa). As a result, it is harder and more expensive for an Australian producer to export to the US (and vice versa) than it needs to be – different labelling requirements have become an impediment to trade.

Opportunity for reform

There should be a very high hurdle before adopting any Australian-specific standard for labelling, nutrition, ingredients, weights, measures, street addresses on labels, etc. The default should be to accept international labelling conventions unless there is strong evidence (and supporting cost-benefit analysis) demonstrating the need for an Australian-specific rule.

Experience in other sectors/overseas

In Australia, some regulations require research or field trials conducted in Australia to prove the safety and claims related to a product. The system in New Zealand, however, allows for greater recognition of international regulation with recognised equivalent regulatory frameworks and default accepted levels of risk (for example MRLs).

There are positives and negatives to both methods of operation. While the Australian regulation process ensures that results of research are relevant to the Australian context, in many cases it may just duplicate existing findings, adding to the costs of registration and acting as a deterrent to registration for some products.

Where Australian-specific standards are different to those accepted overseas, new research is likely to be required, despite a product being approved for use under a different standard overseas. An example of this is the lower ‘gluten free’ threshold in Australia (3 parts per million, with potential to go lower) compared to the traces allowed internationally (20 parts per million in the EU and US). Recently, FSANZ has sought to re-examine the EU’s EFSA health claims for foods for possible adoption in Australia, despite already rigorous analysis.

Potentially, the New Zealand system could allow some products to be registered despite not meeting domestic standards, however, it is a simpler system for producers which can increase the number of products available for sale. In such instances, the overseas standard is adopted in place of the New Zealand standard, where there is sufficient evidence that the standard is sufficient to ensure public health and safety. International labelling is also more likely to be accepted rather than imposing a new domestic standard (for example where the unit measurement information is located, either at the front or back of pack).

Another issue related to stricter Australian compliance requirements is that of technically non-compliant imports. Where locally produced items must meet stricter compliance requirements, imports are permitted which do not meet the local regulatory requirements. This situation arises because of the low enforcement and high level of technical complexity for product compliance. Domestic products which do meet compliance requirements are often not competitive compared to these non-compliant imports, which is damaging for local manufacturers.

There would be benefits associated with adoption the New Zealand model of regulation in Australia. Where there is a widely accepted international standard (for example in the US, UK or Europe), this could be adopted rather than requiring the onus of proof to be on local producers to adopt an Australian-specific standard. This would have the effect of red tape burden on producers to sell a product locally.

The Government's Policy to Boost Productivity and Reduce Regulation suggests that identifying and adopting international regulatory best practice will assist in improving productivity and competitiveness, including reducing differences in cross border regulatory requirements and standards.

Another solution would be to establish a series of agreed institutional relationships with leading regulators in other jurisdictions, and establishing a mutual recognition program for science, research and evidence for products. This would reduce the resource wastage associated with duplicating research onshore, but would require significant change over time.

3.16 Uneven enforcement

For some imported items, some AFGC members expressed concern that regulations applied to domestic manufacturers, but were not enforced as rigorously for similar imported items, or items trans-shipped through New Zealand. Another example raised was the ability of imported wine to use a fining agent called chitosan, but domestic winemakers are not permitted to use this product. This is currently being reviewed by FSANZ.

A high level of regulation of domestic manufacturing, combined with loopholes and weak enforcement, places local manufacturing at a competitive disadvantage relative to imports.

Opportunity for reform

Regulation can impose relatively higher costs on domestic manufacturing than on competing imported production, or prevent local manufacturers from using techniques or ingredients that are permitted in imported products. The best solution would be to reduce regulation on domestic manufacturing, but as a fall-back, to close loop-holes and improve compliance on imports so that domestic manufacturing is on a level playing field.

3.17 Implementation of reform

For the issues noted above, some are more easily implemented, while others involve multi-jurisdictional negotiations to achieve reform.

The Commonwealth Government can more readily implement changes to regulators that are within departments, or single-jurisdiction agencies. The following list summarises the status of key regulators (based on the Department of Finance FMA and CAC flipchart, 4 Oct 2013 update¹⁰):

- The following regulators are simply branches within a department: TGA (Department of Health) and NMI (Department of Industry). These regulators can be reformed relatively easily by the Government.
- The following regulators are FMA Act agencies (Commonwealth): APVMA and ACCC. These agencies have statutory officeholders but remain under the Commonwealth's jurisdiction.
- NICNAS has a statutory office holder, but is not a separate FMA Act agency, and its staff are part of the Department of Health.
- FSANZ is more complex, involving the States, Territories and New Zealand in the governance structure and establishment.

3.17.1 Quick fixes

Reforms relating to departmental functions and Commonwealth agencies are easier to implement than changes involving FSANZ.

Some changes to timelines, appeals processes and OBPR should be able to be implemented relatively quickly, as ministerial directives or procedural changes.

3.17.2 More complex changes

Separating 'rule-making' from 'rule-enforcing', and the creation of a single 'one-stop shop' are more significant reforms, involving multiple agencies and portfolios, but many of the agencies involved are within Commonwealth control, and the potential gains are great.

Changing regulation from 'rules-based' to 'risk-based' requires a significant change in both legislation and practice. Defining a type of risk and then assessing which product might

¹⁰ <http://finance.gov.au/publications/flipchart/docs/FMACACFlipchart.pdf?v=2>

pose risks is more complex than simply specifying a list of products that require approval or a set of checks that must be undertaken to receive approval. That noted, a reduction in funding (coupled with time limits on approvals) may indirectly encourage regulators to focus their resources on the areas of highest risk, without having to explicitly rewrite a large number of regulations.

4 Economic impact of regulations

The costs of regulations can be significant, particularly when they outweigh the potential benefits. It should be noted that the costs of inefficient regulation do not only fall on businesses, but to the extent that not all regulatory functions are cost-recovered from fees and charges to industry, some costs fall on taxpayers, particularly non-recoverable expenditures on administration, compliance and enforcement. A summary of the costs of regulation to businesses and government is provided in Table 4.1.

Table 4.1: Costs of regulation

Costs to business	Costs to government
Compliance – the time required to understand and fulfil requirements and the expense of changing systems or equipment	Administration – regulations require a workforce to manage and administer
Direct charges – related to government fees, charges and levies for the delivery of regulatory services	Compliance – systems and processes are required to ensure regulations are met
Limitations – on accessing or using new technologies or pursuing efficiencies	Limitations – unnecessary regulation limits business activity and government revenues while increasing administrative and compliance costs
Enforcement – regulatory breaches can lead to lengthy and expensive legal processes and punitive costs	Enforcement – regulatory breaches can lead to lengthy and expensive legal processes and punitive costs

Source: National Farmers' Federation, 2013

4.2 Costs of packaging updates

George Weston Foods (2013) has estimated that packaging updates cost between \$60,000 and \$80,000 for each stock keeping unit (SKU) which needs to be changed. This is a conservative figure which does not include costs associated with resources, packaging/regulatory/legal review processes, updates to databases, communication updates or write-off costs for superseded packaging. George Weston Foods manages over 1,000 SKUs.

Front of Pack labelling (FoPL) systems have also imposed significant costs on industry. Currently, a labelling system is being finalised by the Food Regulation Standing Committee (FRSC) to address obesity in society. There is debate over whether this is an effective strategy to tackle dietary issues, but even in a voluntary form, the introduction of new FoPL Star rating will cost industry \$200 million, with some costs likely to flow through to consumers. This cost will be on top of the \$72 million already invested by industry on its current FoPL scheme, the Daily Intake Guide (DIG). As such, the cost of the FoPL Star rating regulation is not only the cost of implementing that, but also the cost of making redundant the already-similar FoPL DIG industry code of conduct.

In 2011, a RIS conducted by SA Health found that the cost of regulation in South Australia to move in line with the national *Principles for Introducing Point-of-Sale Nutrition Information*

at *Standard Food Outlets*, by having kilojoule information on products displayed in significant chain food retailers, would have a cost to business between \$2 million and \$3 million. There were no costs expected to be imposed on consumers and only minor costs to government over current expenditure associated with the status quo.

In supermarkets, unit pricing of items represents a cost to retailers, which has implications for businesses and consumers. The cost of government intervention by regulating mandatory unit pricing in shops larger than 200 square metres was estimated (Queensland Government, 2008). Woolworths estimated the cost of an Australia-wide rollout of unit pricing would cost \$4 million, though this cost could be minimised if part of normal in-store changes to shelf labels and prices. Coles estimated this would cost \$10 million across all its stores.

The Centre for International Economics estimated the costs of the proposed extension of Country of Origin Labelling (CoOL) in 2006. The extension would require that all countries of origin be specified for each major component of packaged food products containing two (or fewer) fruits or vegetables. It found significant private costs to individuals, with cost increases estimated at around 1.4%, and up to 14% for small firms with small product lines. A 1.4% cost increase on the processing sector was estimated to reduce national income by at least \$80 million per year, including costs to consumers, reduced horticultural output and impacts on the trade balance.

4.3 Operating budgets of regulators

The operating budgets of relevant regulators can also be used to infer some of the cost of regulation to industry. In addition to some government appropriations, a significant proportion of operating costs are recovered from the industry through charges, fees and levies. These costs are in addition to the costs incurred by businesses in administration and compliance associated with regulations.

It is often assumed that where industry stands to commercially benefit from an approval given by a regulator, they are required to cover the cost of processing that approval. However, a 'commercial benefit' can be more difficult to determine in practice when the intended outcomes of some regulations benefit a wider range of stakeholders or achieve broader public health objectives. In those cases, the costs are not 'integral to the provision of products or services' as required in the AGCR Guidelines (2005), but are cost that arise due to wider public health policy objectives implemented through regulations, so are not integral to the safe provision of that product, so should be appropriation funded.

Table 4.2: Current operating budgets

Regulator	Operating budget	Source/year
FSANZ	\$22 million	2012-13
TGA	\$120 million	(approx.) 2012-13
APVMA	\$32.5 million	2012-13
NICNAS	\$11 million	
NMI	Not separately identified	

4.4 Costs as a share of revenue

There are a number of industry estimates of the cost of regulation. For the average farm business, the cost of bureaucratic red tape was estimated at \$22,542 per annum, or 14% of net farm profit (Holmes Sackett Pty Ltd, 2007).

In 2013, the Tasmanian Department of Economic Development, Tourism and the Arts found that the cost of red tape for the agriculture, fisheries and forestry sectors in Tasmania was \$321.4 million a year, or 16.2% of the gross value of production. This burden of regulation was greater than for other sectors, with agriculture, fisheries and forestry accounting for 10% of gross state product but 25% of the total bill for regulatory compliance. The Tasmanian Farmers and Graziers Association have indicated that this could be a conservative estimate.

A rough average of these estimates indicates that the total cost of regulation is around 15% of revenue for farm businesses. Some of these costs are associated with compliance to 'good' regulations, ones that support the industry and provide value to producers, or have a sound cost-benefit basis for existing. As such, the cost of regulation can never be driven down to zero.

4.5 Hidden costs of regulation

The Business Cost Calculator (BCC) of the Office of Best Practice Regulation (OBPR) provides cost categories for a range of red tape, such as time spent filling in forms, notifying, obtaining professional advice to help with applications, purchasing safety equipment, retraining staff, and so on.

In the case of food and grocery manufacturing costs also include labelling costs or changing ingredients or formulations due to changes in regulations.

However, a hidden cost that may not be captured in the BCC framework is the lost revenue for business and the reduction in product range and choice for consumers because Australian-specific regulations make it unviable for a product to be supplied in Australia.

The BCC needs to be expanded to include the impact of regulations on impeding trade or discouraging investment – these are lost business opportunities that are different to the typical compliance costs of regulations.

For example, applying the BCC to a regulation – such as NMI's front-of-pack measurement requirement – will not capture the variety of items not supplied to the Australian market because the cost of printing labels or doing a production run specifically for the Australian market (which is around 1.2% of the developed world) is not worth doing. Rather, there is simply a reduced choice of products offered for sale in Australia compared with other countries. Several AFGC members noted that some low-volume products are not able to justify the cost of production runs to meet Australian requirements.

4.6 An equivalent tax cut for the industry

In the current fiscally-constrained environment for the Commonwealth budget, there are short-term limitations on the ability of government to provide other forms of increased competitiveness for the food and grocery manufacturing industry, such as a cut in the company tax rate.

That noted, a reduction in regulatory burdens can have an equivalent impact on the profitability, sustainability and competitiveness of the industry as a cut in the company tax rate, without a direct fiscal impact on the government. Allowing for a more competitive food and grocery sector expanding its activities, and a reduction in bureaucracy in areas that are appropriation-funded, it is likely to generate an indirect improvement in the fiscal balance. The improvement would be both from increased overall tax receipts from higher levels of economic activity, as well as a possible reduction in outlays.

The next section examples these flow on economic impacts of reform.

5 CGE modelling

This chapter examines economy-wide impacts on Australia if there was a reduction in the regulatory burden on food and grocery manufacturing. The approach uses Computable General Equilibrium (CGE) modelling to estimate the long term behavioural impact of the Australian economy (that is, after allowing a few years of transition for impact of the regulatory reductions to take effect). The impacts are measured in terms of their deviation from a business as usual (BAU) case where the current regulatory burden on the industry remains the status quo. To conduct the modelling we constructed a customised ‘food and grocery’ sector in our CGE model to align with the ANZSIC codes in the tables in Appendix A in the AFGC State of the Industry report (2013).

To model the economy wide impacts of the estimated impact of lower food and grocery intermediate input costs, we have used Deloitte Access Economics’ in-house Regional General Equilibrium Model (DAE RGEM). Further detail on the model can be found in Appendix B. Additional methods for determining the economic impact of reducing specific/individual regulatory burdens and calculating the impact on productivity are in Appendix C.

5.1 Results

As discussed earlier in the report, regulatory burdens increase the cost structure of producing a given volume output in the food and groceries manufacturing sector. To model the economy wide benefits of a reduction in the regulatory burden to sector, we have reduced cost of intermediate inputs in the food and grocery manufacturing sector by \$100 million per annum in 2013-14 (in 2011-12 dollars). Our assessment of the costs being faced by the industry indicates that this level of cost reduction could be generated by implementing only some of the more readily achievable reforms.

A reduction of \$100 million per annum (in 2011-12 dollars) in regulatory burden is expected to have a positive impact on the national economy. The modelling estimates that Australia’s gross domestic product (GDP) is expected to increase by an estimated \$243 million per annum, compared to the BAU scenario (see Table 5.1).

Table 5.1: Economic Impact – reduction of \$100m in costs per annum

Australia-wide results	Deviations
Gross Domestic Product (\$M)	243
Exports (\$M)	35
Imports (\$M)	38
Employment (FTE)	231
Real Wages (%)	0.01
Household consumption (%)	0.02
Household price of food and groceries (%)	-0.02

Source: DAE RGEM

The expected increase in Australian GDP is largely driven by the benefits the reduction in the regulatory burden has as it flows through to a lower cost of living, with benefits for household consumption and exports. Imports and exports both increase, because the local industry becomes more competitive and there is a small exchange rate appreciation from the increased productivity of our economy. We would also expect a further modest increase in imports (products that regulations are currently preventing from being supplied to the Australian market), but have not attempted to quantify the benefits to consumers from increased choice / expanded product range.

The modelling estimates that Australia's exports are expected to increase by \$35 million (in 2011-12 dollars) compared to the BAU scenario. The estimated increase in Australia's exports is largely driven by an expected increase in manufactured food and grocery exports. The reduction in the regulatory burden on the food and grocery manufacturing sector is expected to reduce the prices of commodities in this sector, making them more competitive in international markets. Food and grocery manufacturing exports are estimated to increase by 0.14 per cent compared to the BAU scenario.

Australian households will also benefit from a reduction of regulatory burden to the food and grocery manufacturing industry. The modelling estimates that Australian household consumption is expected to increase by 0.02 per cent compared to the BAU scenario. The increase in household consumption is partially driven by an estimated reduction in the consumer prices of manufactured food and commodities and by an estimated increase in real wages. Australian employment is estimated to increase by 232 FTE for each \$100 million per annum of red tape relief for the food and grocery sector.

5.2 Sensitivity analysis

Two other scenarios were modelled to estimate the impacts on the economy of reducing regulation.

In one scenario, the total cost reduction attributable to a reduction in regulation is still \$100 million per annum in 2013-14 (in 2011-12 dollars), but in this case, half of the cost savings come from the reduced cost of intermediate inputs, with the other half attributable to cost savings derived from reduced government service inputs. The economic impact of this scenario, in terms of deviation from the BAU scenario, is shown in the following table.

Table 5.2: Economic Impact – reduction in inputs and government services

Australia-wide results	Deviations
Gross Domestic Product (\$M)	255
Exports (\$M)	40
Imports (\$M)	44
Employment (FTE)	214
Real Wages (%)	0.01
Household consumption (%)	0.02
Household price of food and groceries (%)	-0.02

Source: DAE RGEM

It can be seen that the economic impact of this scenario is similar to the results of the original scenario. There is a larger impact on GDP, with Australia's GDP expected to increase by an estimated \$255 million per annum, compared to the BAU scenario. This may be attributable to the different rates of productivity between government and business, with resources freed up from reduced government services potentially being diverted to other more productive operations.

Secondly, we estimate savings of \$200 million per annum, which could be achieved by negotiating some of the more complex reforms (where other jurisdictions are involved). The economic impact of this scenario is presented below. Broadly speaking, the savings are double those in the \$100 million scenario, suggesting a linear trend of cost savings associated with reductions in regulation.

Table 5.3: Economic Impact – reduction of \$200m in costs per annum

Australia-wide results	Deviations
Gross Domestic Product (\$M)	485
Exports (\$M)	70
Imports (\$M)	76
Employment (FTE)	462
Real Wages (%)	0.02
Household consumption (%)	0.03
Household price of food and groceries (%)	-0.03

Source: DAE RGEM

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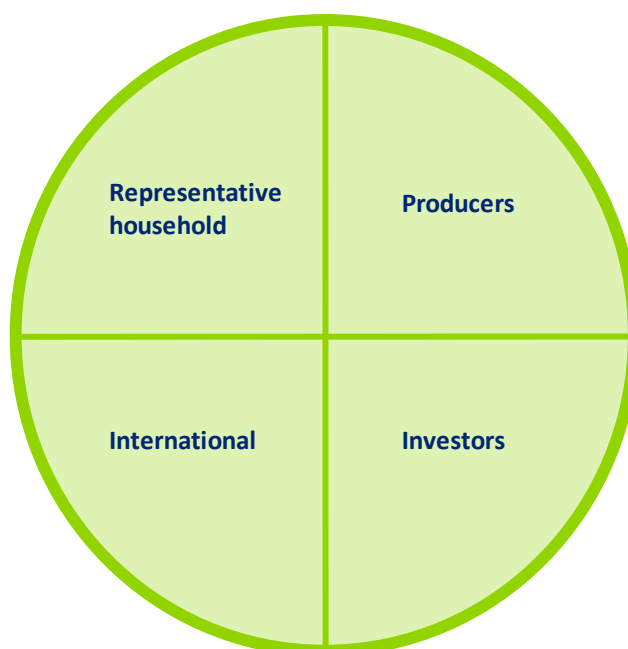
Appendix B: CGE Model

The Deloitte Access Economics – Regional General Equilibrium Model (DAE-RGEM) is a large scale, dynamic, multi-region, multi-commodity computable general equilibrium model of the world economy. The model allows policy analysis in a single, robust, integrated economic framework. This model projects changes in macroeconomic aggregates such as GDP, employment, export volumes, investment and private consumption. At the sectoral level, detailed results such as output, exports, imports and employment are also produced.

The model is based upon a set of key underlying relationships between the various *components* of the model, each which represent a different group of agents in the economy, with these relationships are solved simultaneously.

The figure below shows the key components of the model for an individual region. The components include a representative household, producers, investors and international (or linkages with the other regions in the model, including other Australian States and foreign regions). Below is a description of each component of the model and key linkages between components. Some additional, somewhat technical, detail is also provided.

Key components of DAE-RGEM



DAE-RGEM is based on a substantial body of accepted microeconomic theory. Key assumptions underpinning the model are:

- The model contains a 'regional consumer' that receives all income from factor payments (labour, capital, land and natural resources), taxes and net foreign income from borrowing (lending).
- Income is allocated across household consumption, government consumption and savings so as to maximise a Cobb-Douglas (C-D) utility function.

- Household consumption for composite goods is determined by minimising expenditure via a CDE (Constant Differences of Elasticities) expenditure function. For most regions, households can source consumption goods only from domestic and imported sources. In the Australian regions, households can also source goods from interstate. In all cases, the choice of commodities by source is determined by a CRESH (Constant Ratios of Elasticities Substitution, Homothetic) utility function.
- Government consumption for composite goods, and goods from different sources (domestic, imported and interstate), is determined by maximising utility via a C-D utility function.
- All savings generated in each region are used to purchase bonds whose price movements reflect movements in the price of creating capital.
- Producers supply goods by combining aggregate intermediate inputs and primary factors in fixed proportions (the Leontief assumption). Composite intermediate inputs are also combined in fixed proportions, whereas individual primary factors are combined using a CES production function.
- Producers are cost minimisers, and in doing so, choose between domestic, imported and interstate intermediate inputs via a CRESH production function.
 - The model contains a more detailed treatment of the electricity sector that is based on the ‘technology bundle’ approach for general equilibrium modelling developed by ABARE (1996).¹¹
- The supply of labour is positively influenced by movements in the real wage rate governed by an elasticity of supply.
- Investment takes place in a global market and allows for different regions to have different rates of return that reflect different risk profiles and policy impediments to investment. A global investor ranks countries as investment destinations based on two factors: global investment and rates of return in a given region compared with global rates of return. Once the aggregate investment has been determined for Australia, aggregate investment in each Australian sub-region is determined by an Australian investor based on: Australian investment and rates of return in a given sub-region compared with the national rate of return.
- Once aggregate investment is determined in each region, the regional investor constructs capital goods by combining composite investment goods in fixed proportions, and minimises costs by choosing between domestic, imported and interstate sources for these goods via a CRESH production function.
- Prices are determined via market-clearing conditions that require sectoral output (supply) to equal the amount sold (demand) to final users (households and government), intermediate users (firms and investors), foreigners (international exports), and other Australian regions (interstate exports).
- For internationally-traded goods (imports and exports), the Armington assumption is applied whereby the same goods produced in different countries are treated as imperfect substitutes. But, in relative terms, imported goods from different regions are treated as closer substitutes than domestically-produced goods and imported composites. Goods traded interstate within the Australian regions are assumed to be closer substitutes again.

¹¹ Australian Bureau of Agricultural and Resource Economics (ABARE), 1996, *MEGABARE: Interim Documentation*, Canberra.

- The model accounts for greenhouse gas emissions from fossil fuel combustion. Taxes can be applied to emissions, which are converted to good-specific sales taxes that impact on demand. Emission quotas can be set by region and these can be traded, at a value equal to the carbon tax avoided, where a region's emissions fall below or exceed their quota.

The representative household

Each region in the model has a so-called *representative household* that receives and spends all income. The *representative household* allocates income across three different *expenditure* areas: private household consumption; government consumption; and savings.

Going clockwise around Figure B, the representative household interacts with producers in two ways. First, in allocating expenditure across household and government consumption, this sustains demand for production. Second, the representative household owns and receives all income from factor payments (labour, capital, land and natural resources) as well as net taxes. Factors of production are used by producers as *inputs into production* along with intermediate inputs. The level of production, as well as supply of factors, determines the amount of income generated in each region.

The *representative household's* relationship with investors is through the supply of investable funds – savings. The relationship between the *representative household* and the international sector is twofold. First, importers compete with domestic producers in consumption markets. Second, other regions in the model can lend (borrow) money from each other.

Some detail

- The representative household allocates income across three different expenditure areas – private household consumption; government consumption; and savings – to maximise a Cobb-Douglas utility function.
- Private household consumption on composite goods is determined by minimising a CDE (Constant Differences of Elasticities) expenditure function. Private household consumption on composite goods from different sources is determined by a CRESH (Constant Ratios of Elasticities Substitution, Homothetic) utility function.
- Government consumption on composite goods, and composite goods from different sources, is determined by maximising a Cobb-Douglas utility function.
- All savings generated in each region is used to purchase bonds whose price movements reflect movements in the price of generating capital.

Producers

Apart from selling goods and services to households and government, producers sell products to each other (intermediate usage) and to investors. Intermediate usage is where one producer supplies inputs to another's production. For example, coal producers supply inputs to the electricity sector.

Capital is an input into production. Investors react to the conditions facing producers in a region to determine the amount of investment. Generally, increases in production are

accompanied by increased investment. In addition, the production of machinery, construction of buildings and the like that forms the basis of a region's capital stock, is undertaken by producers. In other words, investment demand adds to household and government expenditure from the representative household, to determine the demand for goods and services in a region.

Producers interact with international markets in two main ways. First, they compete with producers in overseas regions for export markets, as well as in their own region. Second, they use inputs from overseas in their production.

Some detail

- Sectoral output equals the amount demanded by consumers (households and government) and intermediate users (firms and investors) as well as exports.
- Intermediate inputs are assumed to be combined in fixed proportions at the composite level. As mentioned above, the exception to this is the electricity sector that is able to substitute different technologies (brown coal, black coal, oil, gas, hydropower and other renewables) using the 'technology bundle' approach developed by ABARE (1996).
- To minimise costs, producers substitute between domestic and imported intermediate inputs is governed by the Armington assumption as well as between primary factors of production (through a CES aggregator). Substitution between skilled and unskilled labour is also allowed (again via a CES function).
- The supply of labour is positively influenced by movements in the wage rate governed by an elasticity of supply is (assumed to be 0.2). This implies that changes influencing the demand for labour, positively or negatively, will impact both the level of employment and the wage rate. This is a typical labour market specification for a dynamic model such as DAE-RGEM. There are other labour market 'settings' that can be used. First, the labour market could take on long-run characteristics with aggregate employment being fixed and any changes to labour demand changes being absorbed through movements in the wage rate. Second, the labour market could take on short-run characteristics with fixed wages and flexible employment levels.

Investors

Investment takes place in a global market and allows for different regions to have different rates of return that reflect different risk profiles and policy impediments to investment. The global investor ranks countries as investment destination based on two factors: current economic growth and rates of return in a given region compared with global rates of return.

Some detail

- Once aggregate investment is determined in each region, the regional investor constructs capital goods by combining composite investment goods in fixed proportions, and minimises costs by choosing between domestic, imported and interstate sources for these goods via a CRESH production function.

International

- Each of the components outlined above operate, simultaneously, in each region of the model. That is, for any simulation the model forecasts changes to trade and investment flows within, and between, regions subject to optimising behaviour by producers, consumers and investors. Of course, this implies some global conditions must be met such as global exports and global imports are the same and that global debt repayments equals global debt receipts each year.

Appendix C: Impacts of Burdens

Extract from Deloitte Access Economics (2011) *Reforming Australia's Regulatory Culture*

This appendix develops a simple model of a competitive market to illustrate how costly regulations can affect the average level of productivity in an industry. The model also illustrates how the incidence of the resulting reduction in the industry-wide level of productivity is shared between producers and consumers.

Regulatory Burdens and Aggregate Productivity

Consider an industry with a large number (formally, a continuum) of ex-ante identical potential producers. Suppose that there is a single factor of production, L . The production function for each firm is:

$$Y = AL^\alpha$$

where A is the firm's productivity parameter and $0 < \alpha < 1$.

The cost of employing the input is denoted by w , and the output price is denoted by p . There is a fixed production cost of f for each firm, which depends, amongst other things, on the cost of regulations.

Firms do not produce output unless profits are non-negative. In each period, each firm draws its productivity level $A \in [0,1]$ from the same cumulative distribution function, $F(A)$. If the productivity parameter is sufficiently high relative to f , then the firm's profits will be positive and it decides to produce.

This implies that there is some cutoff level of A , which we denote by \bar{A} , which has the following properties. For firms with $A > \bar{A}$ the profit maximising input choice is:

$$L^*(A) = \left(\frac{\alpha p A}{w} \right)^{\frac{1}{1-\alpha}}$$

and output and profit levels are:

$$Y^*(A) = A \left(\frac{\alpha p A}{w} \right)^{\frac{\alpha}{1-\alpha}} = A^{\frac{\alpha}{1-\alpha}} \left(\frac{\alpha p}{w} \right)^{\frac{\alpha}{1-\alpha}}$$

Firms with $A \leq \bar{A}$ do not produce. The expected aggregate supply is simply the sum of all the individual supplies:

$$\begin{aligned} Q_s &= \int_0^1 Y^*(A) dF(A) = \int_{\bar{A}}^1 Y^*(A) F(A) = \int_{\bar{A}}^1 A^{\frac{\alpha}{1-\alpha}} \left(\frac{\alpha p}{w} \right)^{\frac{\alpha}{1-\alpha}} dF(A) \\ &= B(\bar{A}) p^{\epsilon_s} \end{aligned}$$

where:

- $B(\bar{A}) = \left(\frac{\alpha}{w} \right)^{\frac{\alpha}{1-\alpha}} \int_{\bar{A}}^1 A^{\frac{\alpha}{1-\alpha}} dF(A)$ is a shift parameter, and

- $\varepsilon_s = \frac{\alpha}{1-\alpha}$ is the individual (and market) elasticity of supply.

Note by Leibniz' rule:

$$\text{sgn } B'(\bar{A}) = \text{sgn } \frac{d}{d\bar{A}} \int_{\bar{A}}^1 A^{\frac{\alpha}{1-\alpha}} dF(A) = -\bar{A}^{\frac{\alpha}{1-\alpha}} < 0$$

so that B falls (and aggregate supply falls) if the cutoff level \bar{A} rises.

The expected or long run average level of productivity in the industry is:

$$\Pr(A > \bar{A}) \times E(A_i | A_i > \bar{A}) = \int_{\bar{A}}^1 A dF(A)$$

This is falling in the cutoff level, \bar{A} . Intuitively, if the regulatory burden rises, then there is a smaller chance that each firm will draw a sufficiently high productivity level to be able to profitably produce. Conditional on a firm remaining in the industry, however, the expected productivity level of a firm rises. The expected or long run average productivity level is the product of these two terms, with the former effect dominating the latter. An increase in the regulatory burden reduces the expected level of productivity in the industry.

The cutoff level \bar{A} is defined implicitly by setting profits to zero and solving:

$$\bar{A} = A : p^{\frac{1}{1-\alpha}} A^{\frac{\alpha}{1-\alpha}} w^{\frac{\alpha}{\alpha-1}} \left[\alpha^{\frac{\alpha}{1-\alpha}} - \alpha^{\frac{1}{1-\alpha}} \right] - f = 0$$

Hence:

$$\bar{A} = \frac{w^{\alpha} f^{1-\alpha}}{p \left[\alpha^{\frac{\alpha}{1-\alpha}} - \alpha^{\frac{1}{1-\alpha}} \right]^{1-\alpha}}$$

For small changes, a 1 per cent increase in the cost of the regulatory burden leads to a $1-\alpha$ increase in \bar{A} . An increase in regulatory burden which increases f will cause firms to exit the industry, and the cutoff level of A will rise. The average level of productivity falls in response.

As an example, suppose that A is uniformly distributed on $[0, 1]$. Then the expected level of productivity in the industry is simply:

$$\int_{\bar{A}}^1 A dA = \frac{1}{2}(1 - \bar{A}^2)$$

and for small changes, a 1 per cent increase in the cutoff level leads to a $-2 \left(\frac{\bar{A}}{1 - \bar{A}} \right)^2$ per cent change in the expected productivity level in the industry. Putting these two together, we get that a 1 per cent increase in f leads to a $2(1-\alpha) \left(\frac{\bar{A}}{1 - \bar{A}} \right)^2$ fall in the expected productivity level in the industry.

The Welfare Effects of Poor Regulatory Outcomes, and the Distribution of Changes in Productivity

To illustrate the effects of an increase in regulatory burden on consumers, producers, and overall welfare, we use the above framework and assume that consumers have a constant elasticity of demand curve:

$$Q_D = p^{\varepsilon_D}$$

where $\varepsilon_D < 0$ is the constant elasticity of demand. Then the market clearing price solves:

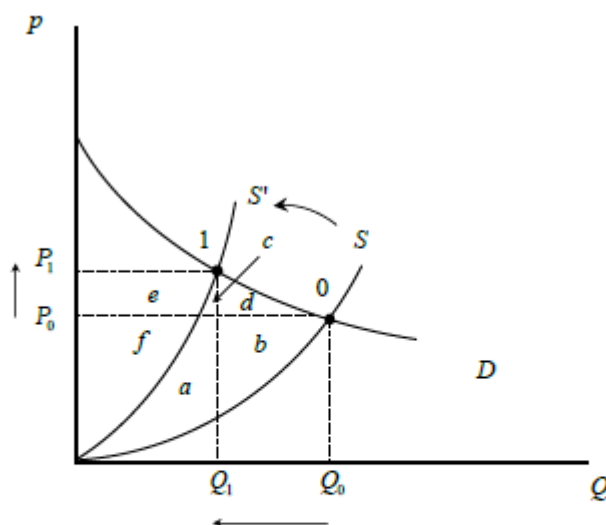
$$p^{\varepsilon_D} = Bp^{\varepsilon_S}$$

So:

$$p^* = B^{\frac{1}{\varepsilon_D - \varepsilon_S}}$$

If B falls due to an increase in the regulatory burden, then the aggregate supply curve shifts to the left, and the equilibrium price rises. Aggregate welfare falls. The incidence of the increase in the regulatory burden falls on both firms and consumers, with the incidence falling more heavily on the less elastic side of the market. This is shown in Figure C1 below.

Figure C1: The welfare effect of a fall in total factor productivity, induced by an increase in the regulatory burden



In Figure C1, the initial market clearing point is at 0. The increase in regulatory burden increases costs, and some firms exit the market. This shifts the market supply curve upwards from S to S' . The price rises from P_0 to P_1 . The new equilibrium is at point 1.

The overall reduction in welfare is $a+b+c+d$. As a result of the price rise, consumers lose $c+d+e$. Producers lose $a+b$ as a result of costs rising, but gain the area labelled "e".

If productivity improves, the shift in the supply curve is reversed. Consumers gain $c+d+e$, and producers gain $a+b-e$.¹⁴⁷

¹⁴⁷ See Freeman and Harrington (1990) for a complete analysis of the welfare effects of productivity improvements.

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