

## **A NEW APPROACH TO COMPETITION POLICY: OPTIMISATION AS THE PRIMARY GOAL**

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### **INTRODUCTION**

The aim of this paper is transformation of competition policy.<sup>1</sup> It will show that current competition policy (as practiced in the Western World) has led to decline and losses that can never be measured. In some industries, the results have included higher prices and reduction in quality. Other problems like lack of investment in research, development and infrastructure are less obvious. This paper presents a new approach to prevent and solve these problems. It will provide a method to distinguish between industries where competition will create benefit and industries where competition will cause harm. It will show the importance of cooperation between competitors, government and research bodies and why some industries need to be managed as systems. Under this new approach, the aim of competition policy will switch from 'increasing competition wherever possible' to 'optimisation'. Consumers, industry, the environment and society will be the beneficiaries.

### **DR DEMING'S WORK**

This paper builds on the work of the late Dr W. Edwards Deming. Deming was an eminent scholar and teacher in American academia for more than half a century. He was a trusted consultant to influential business leaders, powerful corporations and governments around the world. Deming was scathing in his criticism towards governments that continually increased industry competition without understanding the implications on price, quality, and society:

How many years will pass before government regulatory agencies learn that the forces of competition for price do not solve the problems of quality and of service: that competition that destroys service may not be a desirable aim of regulation? Two decades? Three? Regulatory agencies, victims of mandates that are not clear, or are outdated, not knowing how to take into account the interest of the public, may meanwhile continue to make it difficult for industry to improve productivity. (Deming 1982, p.152)

Deming argued that a more intelligent approach to competition policy was required. He believed that competition policy should be based on optimisation and not adversarial competition. The transformation required to implement this new approach is not a job of reconstruction, nor is it revision. It requires a whole new structure from foundation upward. This paper supplies that structure.

Whilst Dr Deming expressed his views clearly, politicians and others who influence competition policy largely ignored his views. This paper provides the supporting argument to show why Deming's approach to competition and managing industries for optimisation must be adopted. It explains why the Western World's legalistic approach to competition policy needs to be replaced.

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<sup>1</sup> This paper is a revised and updated version of the author's earlier article, "Transforming competition policy: Optimization as the primary goal" in the *Korean Journal of International Studies*, Vol. 20, 2013, pp.81-118.

In addition, this paper provides a method to determine the optimal level of competition in each industry.

After using the method (located at Annex A), each industry (or component of an industry) can be placed into one of three categories:

Category one	Category two	Category three
Industries that would be suited to totally open, uncontrolled competition.	Industries that would be suited to a restricted number of competitors. These industries may need to be managed by an overseeing agency and/or a management plan.	Industries that would be suited to a single service provider e.g. natural monopolies.

## PART A. THE WESTERN WORLD'S CURRENT APPROACH TO COMPETITION POLICY

### COMPETITION POLICY IN THE WESTERN WORLD

In recent years, microeconomic reform has led to an increase in industry competition. This is based on the belief that competition is the best means of lowering prices, improving choices for consumers and providing an environment for more efficient and productive business.

This approach may be beneficial in some industries, but in others the results have caused immeasurable harm. Under the current approach, the goal of competition policy is not optimisation, but instead 'increasing competition wherever possible.'

An example of waste and inefficiency caused by competition was reported in the Wall Street Journal in 1990:

One of the established hospitals in Fort Wayne, Indiana, opened a new modern building at a cost of \$91 million. The two other hospitals in the town tried to keep up and remain 'competitive'. They remodelled and refurbished. Each attempted to increase its market share at the expense of the other. But the three hospitals already had enough capacity. The vacancy rates of the three range from 47 percent to 77 percent. Each hospital has excess capacity, which raises their average costs per patient. Patients, then, must pay higher fees than they would if the hospitals cooperated. Three hospitals offer high-technology medical services in an area where the community would be just as well served by one or two hospitals. By cooperating and avoiding duplicate services, the hospitals could lower patient costs, lower interest costs for new construction (Aguayo 1990, p.222) – *and operate their hospitals more efficiently.* [author's italics]

The drive to increase competition wherever possible has been driven by politicians and is not based on sound economic theory.

### THE DAMAGE CAUSED BY POLITICALLY DRIVEN COMPETITION POLICY

Politicians develop competition policy and competition legislation. What influences these politicians is not always clear. However, some of these politicians are driven by ideology rather than evidence and analysis. Ideologies like 'competition is good' or 'private sector organisations are more efficient than government enterprise' are commonly provided justifications for increasing competition. A better approach would be to ask, "What will increasing or decreasing the level of

competition mean for consumers? Will consumers get better service at the same (or reduced) cost?"

When politicians introduce competition, or privatise an industry, their motives must be carefully examined. This examination must determine if the politicians are acting in the long-term interests of consumers, the nation's and society's long-term interests or acting on other motives. For example, if one or more political parties propose that an industry should be opened to competition and the most likely beneficiaries of doing so are financial donors to those political parties.

#### **WHY COMPETITION LAWS RARELY PRODUCE OPTIMAL RESULTS**

Competition policy that is primarily based on competition laws will rarely produce optimal results. This is because competition laws are often geared towards increasing competition rather than what is best for consumers and society.

The broad principles established in competition laws may "not provide solutions to operational, technical and commercial problems specific to certain industries. Such issues may be left to the parties to resolve in the courts when more effective solutions might be produced by a specialist-overseeing agency." Another serious drawback in relying on competition laws "is that rulings only emerge, as cases happen to arise." Legal cases may develop sporadically, slowly, and may leave key issues untouched. In addition, such legal cases "may involve asking the courts to make decisions which would be best made by business people, governments or specialist overseeing agencies." (Baldwin, Cave, and Lodge 2012, p.115)

Industries like telecommunications, electricity and the air service are examples of industries that may benefit from a well-managed specialist overseeing or regulatory agency.

### **PART B. THE ADVANTAGES AND DISADVANTAGES OF ECONOMIC COMPETITION**

#### **THE ADVANTAGES OF COMPETITION**

Western governments, competition authorities and some economists often try to sell the benefits of competition. The arguments for competition include:

##### *a. Reducing prices*

In some industries, the introduction of competition has driven down purchase price, but 'price' is more complicated than purchase price. "Price has no meaning without a measure of the quality being purchased." (Deming 1982, p.32, quoting from Shewhart 1931) Consider two products as an example.

Household appliance A's purchase price is \$400 and appliance B's is \$550. Appliance A's purchase price is \$150 less but it may be plagued with mechanical difficulties, warranties returns and last only four years. Appliance B's price is \$150 more, but it may do a superior job, last eighteen years and have no mechanical difficulties. Appliance B is clearly the better value, even though its purchase price is higher.

Economic theory is unable to distinguish between purchase price and value.

##### *b. Giving consumers greater choice*

A common claim once competition has been introduced or increased is, "Now we have choice." Having more than one supplier does allow consumers to compare and choose different prices and service qualities. However, these consumers rarely consider whether quality has declined or prices have risen as the result of increasing competition.

An example of this concept is the fire and natural damage insurance industry in Switzerland. In Switzerland nineteen of the twenty-six cantons have government owned cantonal insurance

monopolies, from which property owners have to buy this type of insurance. In the remaining seven cantons there are no public suppliers and insurance cover can be obtained only from private providers. (von Ungern-Sternberg 2004, p.108) The study found the Swiss cantonal insurance monopolies provided superior service and price compared to the private insurers.

Annex B shows the critical cost structure differences between the monopoly and private insurers in Switzerland. The monopoly insurers were found to be more than forty percent cheaper than the private insurers at the time the study was completed.

*c. Encouraging innovation*

It is commonly believed that competition promotes innovation. Whilst competition may force some organisations to search for innovative ideas, it is the quality of a company's management that is often the most important factor in determining if an organisation will pursue innovation. For example, Google's search engine is a quasi-monopoly and Google is continually innovating. Furthermore, many of Google's products are provided for free. For example, g-mail, you-tube, search engine, web browser, Google books, Google translate, Google Earth etc.

Innovation is often the result of investment in research and development. Because the well-managed monopoly supplier will generally generate reasonable profit, it often has the greatest potential to innovate from research and development or purchases of innovations.

## THE DISADVANTAGES OF COMPETITION

*a. Good suppliers can be driven out of business*

"Forever trying to drive down the price of anything purchased, with no regard to quality and service, can drive good vendors and good service out of business." (Deming 1982, p.32) Customers may be tempted to buy from the supplier with the lowest purchase price. If enough customers do this, it may drive the quality supplier out of business. The customer may not realise that what they have purchased is of poor quality until too late.

*b. The quality of product and service can decline*

In January 2010, flooding in Queensland, Australia caused death and widespread property damage. Some people who had homes destroyed or damaged, found they were not covered for this type of flooding by their property insurance policy. This occurred because the definition of flooding differed significantly between insurers. This situation would not have arisen under the Cantonal insurance monopolies that exist in Switzerland. The Swiss monopoly insurers described earlier would have provided coverage for these losses.

*c. Insufficient profit to allow for investment in research and development, and new technology*

Many companies have made important contributions to society by investing wisely in research, development and technology. In many cases, these advances were possible because the organisation made a reasonable profit. Competition can force a supplier to accept slim profits. This can lead to a supplier having little or no money to spend on research and development, new technology and equipment. The result – society loses out.

*d. An increase in wasteful bureaucracy associated with introducing and enforcing competition*

Introducing competition to an industry that was once a monopoly can involve complex rules and laws covering the sharing of infrastructure owned by the monopoly. An example was the Australian Competition and Consumer Commission's 165-page document, "A code of access to telecommunications transmission towers, sites of towers and underground towers". (ACCC 1999) This is an aspect of competition policy that the ACCC would have administered. People must be employed to write, monitor, enforce and administer these sorts of rules. The result – taxpayer funded waste.

*e. Lack of standardisation*

Standards have played a crucial role in the development of today's society. Examples include standardised sizes for most batteries, shipping containers, paper sizes, credit and bank withdrawal cards. Without standard battery sizes, customers might need to search tirelessly for a battery which fits their camera or flashlight. Without standard dimensions of shipping freight containers, international trade would be slower and more expensive. A lone or dominant supplier often has the best chance of adopting a single standard that benefits society, for example, Microsoft and the Microsoft Office suite.

Conversely, a lack of standardisation can be damaging to society. An example of an opportunity lost may be mobile phone chargers. If several major mobile phone companies had cooperated in setting a standard, we may have had one mobile phone charger that suits all phone brands. Many years after the introduction of mobile phones in Europe, the situation is now trying to be recovered:

In the past, mobile telephones were only compatible with specific mobile telephone chargers. An estimated 500 million mobile phones were in use in 2009 in all European Union countries. The chargers used often varied according to the manufacturer and model; and more than 30 different types of charger were on the market. Apart from causing inconvenience to the consumer, this created unnecessary electronic waste. (Risk & Policy Analysts Ltd 2014, p.1)

Mobile phone manufacturers have now developed a standard phone charger to be sold in the European Union member states. (European Commission 2011) Apple phone chargers are excluded.

*f. Waste because of duplicated infrastructure*

Competition can cause duplication of expensive infrastructure. In the mid-1990s:

Australia's competitive roll out of hybrid-fibre coaxial cable networks, in which two telecommunications providers competed to provide physical cable links to households and firms led to the densely populated areas having two cables running past most houses while poorer, less densely populated areas had none. A competitive approach has meant that far too much has been spent on providing Australia's telecommunication network, and telephone and internet access prices have been kept artificially high to finance this waste. (Keen 2001, p.107)

To try and address this problem, the Rudd Labor government commenced an expensive recovery program in 2009 called the National Broadband Network (NBN). This program resulted in the Federal government having to purchase Telstra infrastructure it would have owned had Telstra remained a government-owned natural monopoly.

*g. Cream-skimming*

The Australian telecommunications example also illustrates a serious problem called 'cream-skimming'. Cream-skimming is the practice of several private suppliers only supplying the most profitable customers or not supplying more geographically dispersed groupings of consumers. It can occur when a government owned monopoly industry is turned into a competitive market. It is an important reason why some industries need to remain government owned.

In 2015, another expensive Australian initiative called the 'mobile black spot program' was introduced to provide mobile phone coverage in some areas where mobile phone coverage was lacking. It is possible that this problem arose, or was exacerbated, as a result of cream-skimming by the three mobile phone infrastructure carriers. It is also possible that this program would never have been required if Telstra had remained a government owned, natural monopoly.

#### *h. Waste because of costs other than infrastructure*

Competition can also result in the creation of, or duplication of costs that are not infrastructure related. The Swiss fire and natural damage insurance industry discussed earlier is an example that illustrates this. The costs involved are clearly shown in the table at annex B.

Examples of costs that can be duplicated in other industries include management, human resources, administration, accounts payable, accounts receivable, payroll or building and grounds.

#### *i. Marketing costs*

Another potential disadvantage is duplication of marketing costs. In some industries companies spend large amounts of money on marketing to promote their product. A monopoly supplier can often keep marketing costs low, as they have no one to compete against.

#### *j. Predatory pricing*

Predatory pricing is where a firm prices their products or services below their production costs, in the hope of driving competitors from the market. Once the competitors are driven from the market the firm raises their prices to excessive levels at the expense of consumers. It is an illegal practice in some countries e.g. Australia.

#### *k. Re-nationalisation costs*

If competition and/or privatisation harm consumers or society, governments may need to consider reverting the industry to a natural monopoly. This may involve governments breaking contracts with private sector agencies and incurring costs as a result; costs which are almost certain to be borne by the taxpayer.

The United Kingdom formerly had many privately-owned railways. After coming under government control during World War two, the British railway network was fully nationalised in 1948. Between 1994 and 1997 British Rail was privatised. Ownership of the track and infrastructure passed to Railtrack, passenger operations were franchised to individual private sector operators and the freight services were sold.

As of May 2017, it was a policy of the British Labour Party to re-nationalise British rail operations if they are elected to government. It remains to be seen what costs will be incurred if this occurs.

Politicians cause some of the problems outlined above. This is because they are often behind the drive to increase competition and privatise large network industries like electricity and telecommunications.

Nearly all of these problems can be prevented by the use of a method to determine the optimal level of competition. The M-rock method at Annex A provides a method to study each industry and help make this determination. When using this method, the advantages and disadvantages of competition in a particular industry are weighed against each other. This helps determine if competition will benefit or harm consumers, industry and society.

## **PART C. THE NEW PROPOSED APPROACH TO COMPETITION POLICY**

The Western World's legalistic and political approach to competition policy has failed. Higher prices, waste and inefficiency have been the results in some industries.

### **A NEW APPROACH TO COMPETITION POLICY – OPTIMISATION AS THE PRIMARY GOAL**

Under the new approach proposed in this paper, prices are just one of several factors that need to be considered in a systematic and methodical approach to competition policy. This approach is represented in Figure 1 below.

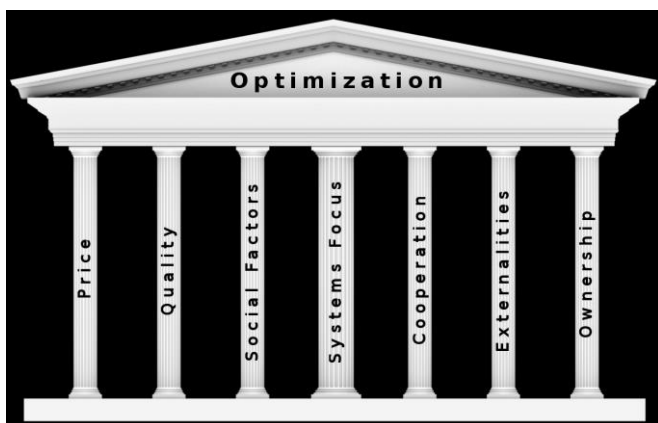


Figure 1: Competition policy as recommended in this paper (Diagram by Jesse Smith)

A critical component of the new approach is the previously mentioned method of study to determine the optimal level of competition for some industries. (Annex A)

As Figure 1 above implies, managing some industries as systems is one of the most important considerations of the new approach. This issue will be examined in detail.

Other important factors examined include the quality of the product or service being sold and externalities like environmental impact. In some industries, the need for cooperation between competitors, government, research institutions and other agencies is crucial. The new approach will also require that social factors be considered. For example, access to quality, affordable telecommunications in rural and remote areas.

Another critical factor that is closely related to industry competition is ownership. Whether an industry should be government owned or privatised is a critical issue. This issue is examined in this paper but further reading is suggested. Some good examples can be found in the book, *Privatisation: Sell off or Sell out?* (Walker and Walker 2000)

#### **EFFECTIVE COMPETITION POLICY IS BASED ON SOUND ECONOMIC POLICY**

An essential component of good economic policy involves being able to differentiate between industries:

- that can be opened to uncontrolled competition
- that should have a limited amount of competition and be managed or regulated by an overseeing agency (Oligopoly)
- where a single supplier can produce the product or service at the cheapest price and the best quality (Natural monopoly)

The key to good competition policy is having an understanding of the industry in question.

#### **KOLSEN'S 'INDUSTRY BY INDUSTRY' APPROACH**

Emeritus Professor Ted Kolsen was the head of the University of Queensland's Economics department. Kolsen recognised the importance of understanding specific industries. In 1996 Kolsen correctly predicted that some of Australia's proposed 'competition policy reforms' would ultimately prove unsuccessful: "The conclusion is that an industry by industry approach cannot be avoided." (Kolsen 1996, p.85) Also: "The various agreements and the Australian Competition and Consumer Commission legislation are almost totally devoid of appreciation of some of the fundamental problems in the application of simple principles to complex industry situations." (Kolsen 1996, p.84)

Kolsen also understood that in some industries, competition might need to be decreased, instead of increased: "There will be some industry conditions in which there is economic inefficiency because there is too much competition. Competition policy directed at economic efficiency thus must be able to provide mechanisms for reducing competition as well as for increasing it, depending on the nature of the constraints in particular industry sectors." (Kolsen 1996, p.85)

Open, uncontrolled competition may be the best approach in some industries. Examples may include coffee shops, hairdressers, car dealerships, laundromats, dry cleaners etc.

This paper will now examine industries that should be:

- managed (or regulated) by an overseeing agency
- best managed as a single supplier (Natural monopoly)

### **SOME INDUSTRIES SHOULD BE MANAGED AS SYSTEMS**

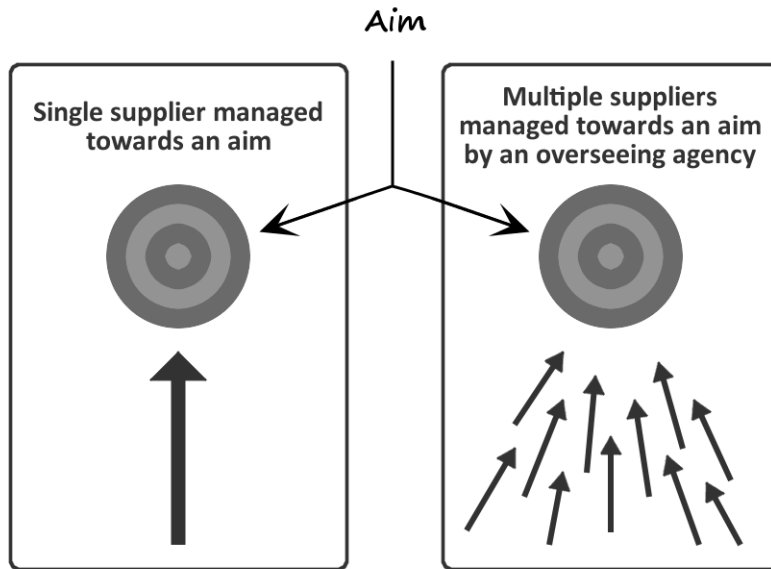
Dr Deming argued that for consumers, industry and society to gain maximum benefit, it is essential that some industries be managed as systems. A system is a network of interdependent components that are managed to accomplish the aim of the system.

An excellent example may be the greater Tokyo Transportation system. This system transports millions of people daily in an efficient, professional, clean and cost effective manner. It involves multiple forms of transport that includes four different rail systems. These rail systems include private railroads, Japan rail, Tokyo Metro and the Tokyo subway system. Many of these transport providers work together to ensure the aim of the system is achieved. Preliminary research has indicated that Japan's Ministry of Land, Infrastructure, Transport and Tourism have oversight of this system.

Dr Deming clearly understood the importance of competitors working together: "Efforts by competitors, acting jointly or together aimed at expanding the market and to meet needs not yet served, contributes to optimisation for all of them. When the focus of competitors is to provide better service to the customer (e.g. lower costs, protection of the environment) everyone comes out ahead." (Deming 1993, p.56)

William Ouchi provides the following Japanese example of competitors working together as a system: "200 companies, tiny and huge, working together as a system – working on design of products, export policy, tests of instruments, so that anybody's oscilloscope would agree with his customer's analyser. They worked from eight in the morning until nine at night, 13 hours a day, 5 days a week: reached consensus after some months of labor." (Ouchi 1984, p.32) These two Japanese examples illustrate the importance of competitors working together for the benefit of consumers and industry. The diagrams in Figure 2 below represent two possible approaches to managing industries towards an aim. The diagram on the left shows a single supplier (monopoly) being managed towards an aim. The diagram on the right shows multiple suppliers being managed towards an aim by an overseeing agency. Which of these two approaches is optimal will vary depending on the industry.



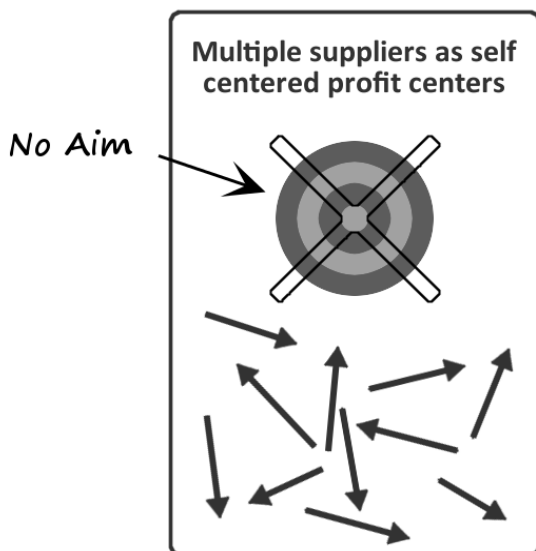


**\*These diagrams are an adaption of diagrams used by Brian L. Joiner in his book Fourth Generation Management (1994)**

Figure 2: Two examples of industries managed as systems (Diagram by Jesse Smith)

Dr Deming emphasised that a system must be managed; it will not manage itself: “Left to themselves in the Western World, components become selfish, competitive, independent profit centers and thus destroy the system. The secret is cooperation between components toward the aim.” (Deming 1993, p.50) It is management’s job to direct the efforts of all components toward the aim of the system.

A system that has been destroyed is illustrated in Figure 3 below. There is no aim, no overseeing or management agency, and all competitors are acting independently. There is limited or no cooperation between competitors or other components of the system.



**\*This diagram is an adaptation of a diagram used by Brian L. Joiner in his book Fourth Generation Management (1994)**

Figure 3: A system that has been destroyed (Diagram by Jesse Smith)

An example of a system that has been destroyed may be the air service in the United States, which was deregulated under the Airline Deregulation Act (1978). This resulted in a dramatic increase in competition, but it also caused a decline in the quality of the service. The former Chairman of American Airlines stated:

The consequences of deregulation have been very adverse. Our airlines, once world leaders are now laggards in every category, including fleet age, service quality and international reputation. Fewer and fewer flights are on time. Airport congestion has become a staple of late-night comedy shows. An even higher percentage of bags are lost or misplaced. Last-minute seats are harder and harder to find. Passenger complaints have skyrocketed. Airline service, by any standard, has become unacceptable. (McGee 2008, p.1)

Too much competition can result in aircraft overcapacity and airlines making losses or only slim profits. As airlines require massive capital expenditure to purchase new aircraft, update security and other related systems, excessive competition may result in a decline in quality of service. The result – air travellers and society lose.

### **NATURAL MONOPOLY**

Sometimes monopolies can provide cheaper and better quality service than a competitive market. These are called 'natural monopolies'. Any effective competition policy involves being able to identify these and then protect them from politicians who may be acting with ideological or ulterior motives.

Some examples of great government-owned (or government-led) monopolies are:

- Denmark has a government-led, monopoly pharmacy system. One of its goals is to have no one within Denmark more than fifteen minutes away from a pharmacy. Eleven pharmacies across Denmark are open twenty-four hours per day. In addition, there are approximately forty pharmacies that provide the public with an on-call service. This means the public have the possibility to call a pharmacist to get advice and medicine outside opening hours. Pharmacies are positioned in a way to ensure that most people in Denmark aren't too far away from a 24 hour per day service. From 1 January 2017 it is planned to have thirty-four pharmacies open from 0600hrs to 2400hrs. The Ministry of Health and the Danish Medicines Agency control and administer the pharmacy sector through a licensing system. At the same time, it is a liberal profession, and the proprietor pharmacist owns his or her pharmacy. This means that the proprietor pharmacist is economically responsible for the financing of the pharmacy and its operation.
- Cantonal insurance monopolies in Switzerland. In nineteen of the twenty-six Swiss cantons a homeowner can only insure his property with a single, government owned monopoly insurance provider. When a study was completed in 2004, it was found that the monopoly insurers were 42% cheaper than the competitive market that existed in the other seven Swiss cantons.
- The Liquor Control Board of Ontario (LCBO) is a government owned corporation in Ontario, Canada. The LCBO sells beer, wine, spirits and other alcohol to the public. LCBO stores are generally the only stores allowed to sell distilled spirits in Ontario. The LCBO is a quasi-monopoly that aims to prohibit the sale of alcohol to minors. Recently the LCBO transferred a \$1.805 billion annual dividend to the Ontario government (not including taxes). This revenue helped pay for health care, education, infrastructure and other important government services. The LCBO also contributes to a variety of charitable causes. The LCBO is an example of a social consideration being taken into consideration when determining competition levels.

- KORAIL (Korean Rail). Korea operates a single rail company. Ticket prices have been kept low due to lack of cost duplication.

The Australian telecommunications industry up until 1991 was another example of a great monopoly. Australia's telecommunication provider (Telstra) was built over many years and supplied high quality, reasonably priced telecommunication products over a massive, sparsely populated country. Since the nineties, competition, duplication of infrastructure costs, other costs and competitive marketing costs have destroyed that system.

Some may claim that the Australian people have benefitted from this competition, through the availability of new products or services. Arguably, these new products and services arose from worldwide technological innovation, and would have occurred anyway. (Walker and Walker 2000, p.225)

Natural monopolies can sometimes be cheaper or have advantages over competitive markets because they:

- Eliminate duplication of infrastructure.
- Eliminate duplication of other costs e.g. management, accounts payable, accounts receivable, payroll, human resources, head office, administration etc.
- Keep marketing costs low. A single supplier can keep marketing costs low because they have no one to compete against. In a competitive market, competitors may need to spend large amounts of money on trying to gain market share from competitors.
- Can close old, redundant infrastructure when new infrastructure is built. In a competitive market an existing provider may be tempted to sell the old infrastructure instead of closing it.
- Can afford to make large investments in future infrastructure and be secure in the knowledge that they will be collecting 100% of the future revenue.
- Are in a position to undertake long term planning, so risk can be reduced and employment made more stable. (Bultjens 2000, p.44)
- Eliminate 'exclusive discount deals'. An exclusive discount deal is where, in a competitive market, free or discounted services are only provided within one organisation. For example, a telecommunications provider only providing free calls to their own phones but not competitors' phones. This problem would not exist if there was only one phone provider.
- Can pay a healthy dividend to the government if the monopoly is government owned. The proceeds of these dividends can then be used for worthwhile purposes.

### **THE ISSUE OF OWNERSHIP**

The two issues of competition and ownership are often closely related. If a government sells a monopoly they may simultaneously open the industry to competition.

The issue of whether a natural monopoly should remain government owned is critical. One reason for this is that a government owned monopoly may behave very differently to a privately-owned monopoly. A government owned monopoly may keep prices down because it is not always trying to increase its profits.

A monopoly that is publicly listed on the stock exchange may strive to continually increase profits, dividends and earnings per share. One way they can do this is to continually raise prices to the detriment of consumers.

In 2002 Australia's Federal government sold Sydney's Kingsford Smith airport to the private sector. When the airport was sold, it went from being a government owned monopoly to a privately-owned monopoly.

The ACCC's chairman Rod Sims said Sydney Airport was sold without any restrictions on what it could charge users of the airport. The Howard government received \$5.6 billion for that sale. Mr. Sims said the conditions of sale back then had amounted to *carte blanche* for the company over what it charges users:

It has the highest profit margins on aeronautical services, and very high profit margins on car parking. But on the other hand, it has not invested as much as other airports and it has consistently had the lowest ratings on the quality of service. I think the taking off of any regulation on the airport charges was an attempt by the then government to maximise the proceeds from the sale, with I think insufficient regard to what the company buying the airport would then do. (quoted in Kozaki 2016)

Supporters of privatisation sometimes claim that competition amongst private firms means that services will be provided at the lowest cost. This reasoning is based on the assumption that multiple private providers are more efficient than a single government agency. This claim should be treated suspiciously; especially, if those making the claim are engaged to represent the interests of the private firms seeking more business. (Walker and Walker 2000, p.75)

Emeritus Professor Ted Kolsen summarised Australia's disastrous approach to privatisation: "The overall conclusion is that the advantages of public ownership and the risks associated with private ownership have been completely ignored. There are considerable problems in attempting to fix what is not broken without in-depth consideration. Otherwise, privatisation reflects ideology, not economics." (Kolsen 2014, p.5)

There are, however, advantages of private ownership over government ownership in some situations. A privately-owned firm may be able to issue shares, debentures or borrow money to raise funding to spend on new infrastructure or research and development. A government owned entity may spend many years dealing with government bureaucracy to raise the same amount of capital. Any competent approach to competition policy would balance the advantages and disadvantages of public versus private ownership.

#### **THE DRIVE TO DE-BUNDLE NATURAL MONOPOLIES**

Some of the problems caused by competition result from governments' decisions to 'de-bundle' (break-up) natural monopolies. For example, de-bundling of the nation's electricity industry may result in the industry being divided into components such as generation, high voltage transmission, regional distribution and retail. Consequently, it may be possible to introduce competition into some of these components.

Natural monopolies that have multiple levels of production and supply are referred to as vertically integrated organisations. Unfortunately, when governments de-bundle vertically integrated monopolies there is rarely sufficient (if any) study of the industry or its components to determine if this competition will benefit consumers, the industry or society.

The de-bundled retail electricity market in Brisbane, Australia has coincided with increased prices for consumers. Figure 7 in Annex C shows that electricity prices in Brisbane increased dramatically when competition was introduced in 2007. In the seven years following, electricity prices rose by an average of 12.4% per annum whereas in the preceding 10 years, prices increased by an average of only 3.4% per annum.

Since the introduction of competition, many Brisbane electricity consumers have received saturation marketing coverage from telemarketers and door-to-door salespeople trying to sell their product. Marketing costs could represent a significant portion of these price increases, as retailers must spend large amounts of money on acquiring and retaining customers. There may also be

duplication of other non-infrastructure costs. For example, administration, management, accounts receivable and human resources. Multiple retailers would operate at a higher cost than one of them operating alone as a natural monopoly.

### **THE INTERDEPENDENT NATURE OF SOME NATURAL MONOPOLIES**

In his book 'Modern Economic Regulation', Professor Christopher Decker from Oxford University explains that a vertically integrated firm can achieve a high level of coordination among the different stages of production because its components are often interdependent.

It is this critical, interdependent nature of some vertically integrated monopoly's components that is often overlooked or ignored. Governments may treat the components as independent when in fact there may be crucial relationships between the components.

For example, the retail component of an electricity retailer may supply the funds to maintain and upgrade the electricity generation, transmission and local distribution network. If the introduction of competition results in the revenue that was formerly collected from one electricity retailer now being split between ten or eleven retailers, consideration should be given to how this change will impact upon the other components, prices, quality of service and the industry as a whole. De-bundling an electricity industry with interdependent components may destroy the overall system and therefore result in higher electricity prices and reduced quality of service.

Decker also points out that separating the activities of a vertically integrated monopoly lead to the coordination of investment and operational decisions becoming more problematic. Some of these decisions must now occur through contracting arrangements. In this case, although contracting parties may have a common interest in the success of a service, they may have conflicting interests as to who should bear what costs and risks.

The incentives for investments under each structure are also related to these points. A vertically integrated firm that is involved in both production and supply activities can reinvest financial gains from one part of the organisation to another, enabling some of the risks of investments in specific production assets to be internalised.

Decker concludes that the advantages and disadvantages of managing a vertically integrated organisation as a whole versus separating the organisation into components need to be carefully considered. (Decker 2014, pp.184-185) The Western world's current approach to competition policy does not do this. The advantages and disadvantages of each approach are discussed on pages 176 to 185 of Professor Decker's abovementioned book.

### **COOPERATION IS THE SECRET**

For optimisation to occur, it is critical that components of the system (including competitors) cooperate towards the aim of the system:

Recently Toyota, Nissan, Honda and Mitsubishi jointly announced their agreement to work together to promote the installation of chargers for electric-powered vehicles and build a charging network service that offers more convenience to drivers in Japan. The move was in recognition of the critical need to swiftly develop charging infrastructure facilities to promote the use of electric-powered vehicles. Assisted by subsidies provided by the Japanese government, the four automakers will bear part of the cost to install the charging facilities. They will also work together to build a convenient and accessible charging network in collaboration with companies that are already providing charging services in which each of the four automakers already have a financial stake. (Toyota newsletter 2013)

This sort of cooperation is most likely to occur when governments cooperate with industry and research institutions as represented in Figure 4 below.

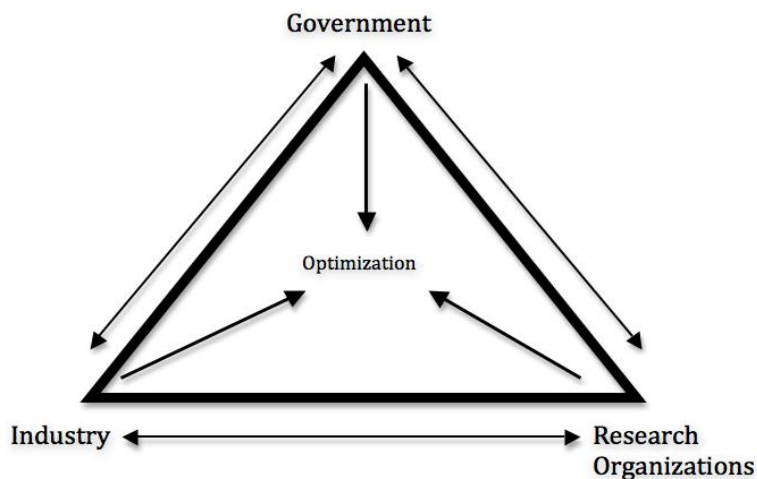


Figure 4: Cooperation between government, industry and research organisations

Unfortunately, competition laws do not normally provide incentives for this sort of cooperation and in some cases, may discourage it. The politicians who develop a nation's competition laws may not understand the importance of a triangular relationship between private industry, government and research institutions in some industries. This crucial relationship is further explained on page 220 of Walter Isaacson's book, *The Innovators*, and underlined by Joseph Kennedy:

The creation of a triangular relationship among government, industry and academia was, in its own way, one of the significant innovations that helped produce the technological revolution of the late twentieth century. The Defense Department and National Science Foundation soon became the prime funders of much of America's basic research, spending as much as private industry during the 1950s through the 1980s. The return on that investment was huge, leading not only to the internet but to many of the pillars of America's post-war innovation and economic boom. (Kennedy 2012, pp.220-221)

#### **GOVERNMENT POLICIES AND LAWS MUST ENCOURAGE COOPERATION**

For cooperation between competitors, government and other relevant organisations to flourish, it is critical that government policies and legislation are specifically designed to encourage it. The problem is that the competition laws that exist in many Western countries are not geared in this way. The overwhelming emphasis of these laws is on promoting competition. This does not provide an environment conducive to cooperation.

Researchers Steven Casper and Frans van Waarden pointed out that in an environment where competition is the dominating principle, "inter-firm cooperation becomes more suspect and is more liable to cause legal problems. If nothing else, that will make entrepreneurs more careful about entering into longer-term cooperation with competitors, suppliers or customers." (Casper and van Waarden 2005, p.285)

Politicians might say that they have included allowances for 'joint ventures' in competition laws and claim that they are encouraging cooperation. However encouraging cooperation between competitors requires more effort than simply legislating to allow for joint ventures. Governments can encourage cooperation between competitors and other relevant agencies by introducing incentives for doing so e.g. company tax concessions and subsidies. The collaborative venture between the four Japanese automakers, government agencies and charging facilities described

earlier in this paper, was encouraged by subsidies. Furthermore, terms like 'joint ventures' may not be defined under some competition laws. This can create doubt amongst businesses as to what sort of cooperation between competitors is legal.

An excellent example of cooperation between competitors comes from Rafael Aguayo's book on Dr Deming:

Americans and Europeans practice cooperation to some extent. But not enough. One example comes from Heathrow airport in London, where British Airways does all the airplane handling and is contracted by other airlines for the maintenance and servicing of their planes. If each airline had separate maintenance facilities, each would have to employ a crew and maintain docking space, spare parts inventory, and expensive diagnostic tools to service their planes. Much of this would lie idle, since no one airline has enough traffic to keep a crew constantly employed. By pooling resources and allowing one airline to handle all planes and provide maintenance services, there is minimal waste of time and money and no needless duplication. One airline can handle planes and provide maintenance at a lower price to everyone than if each maintained separate facilities. Everyone wins by such an arrangement. Valuable space isn't used up with duplicated facilities; the cost to each airline is less, quality is better, and the cost to the customer is also less. (Aguayo 1990, p.85)

Governments therefore must ensure that competition policy and other relevant policies like education, energy, innovation, infrastructure, science and technology encourage economic cooperation instead of inhibiting it.

#### **DIFFERENTIATING BETWEEN BENEFICIAL AND HARMFUL CARTELS**

Cartels are examples of cooperation between competitors. The Organisation for Economic Cooperation and Development (OECD) recognises the importance of differentiating between harmful and beneficial cartels. Its website explains the beneficial effects of cartel agreements related to research & development and production and marketing which can result in reduced costs for companies, or improved products, the benefits of which are passed on to consumers. (OECD 2017)

This presents challenges for competition policy based on competition laws. Politicians who endorse effective competition policy should encourage and provide incentives to beneficial cartels for the benefit of consumers, the national interests, the environment and society.

#### **NEW ROLES FOR POLITICAL LEADERS AND COMPETITION AUTHORITIES**

Campaigns to increase economic competition and privatise industries are often driven by politicians. Unfortunately, we cannot always rely on politicians to act in the long-term interests of consumers, industry, society and the environment.

Under the new approach proposed in this paper, political leaders and competition authorities would have different roles. They would actively seek out opportunities to help organisations expand their markets and would encourage cooperation between competitors, government agencies and other relevant institutions. "Another role for competition authorities would be to educate the public on the beneficial nature of some monopolies and cartels." (Deming 1993, p.74)

On occasions, some organisations may practice short term, destructive, monopolistic behaviour. "Suppose the aim of a company were short-term profit. Set the price as high as the traffic will bear. Make a big profit in a hurry and get out. A useful function of the Antitrust Division would then be protection of society." (Deming 1993, p.74)

## CONCLUSIONS AND RECOMMENDATIONS

- In the Western World, increases in the level of competition in some industries have resulted in increased prices, reduced quality and damage to industry. In many of these cases the damage cannot be measured.
- Western governments need to switch the focus of competition policy from 'increasing competition wherever possible' to optimisation. This includes being aware of the advantages and disadvantages of economic competition. Some industries will need to be studied to determine the optimal approach. Leaving all industries to free market forces can result in higher prices, lower quality, a decline in innovation and harm to society.
- Competition policy based on competition laws will rarely produce optimal results. Courts may not have the operational, technical and commercial expertise to determine if consumers or society will benefit from a particular decision. In some industries, more effective solutions would be produced by specialist-overseeing agencies.
- A method should be used to determine if varying the level of industry competition will result in benefit or harm to consumers, industry and society. An example of such a method is given in Annex A.
- If the level of competition in an industry is varied there should be some means to evaluate if this variation has resulted in benefit or harm and make adjustments if necessary.
- Competition policy must include a means to raise, lower or maintain the level of competition depending on whether the changes will benefit consumers, industry or society.
- When politicians and other groups propose changes in the level of industry competition, there should be an examination to determine who the real beneficiaries of such changes will be. For example, are the beneficiaries consumers, industry and society; or are the real beneficiaries donors to political parties?
- Under this paper's proposed new approach, some industries will need to be managed as systems by an overseeing agency. Some industries will benefit from a triangular, cooperative relationship between government, industry and competitors. The new approach will help industries expand their markets, lower prices and improve quality by minimising waste, inefficiencies and duplication. Consumers, industry, society and the environment will be the beneficiaries.



## **Annex A**

### **Issues to consider when determining the level of competition for an industry (M-ROCK [Monopolies, restrictions or open competition] model)**

#### **Criteria that relate to duplication of costs e.g. infrastructure**

- 1. To what degree would the introduction of competition result in the duplication of infrastructure, equipment or services, such that the total cost of the industry is likely to increase? Will these increased costs be passed on to the customer in the form of increased prices?*
- 2. To what degree would increasing competition in an industry potentially result in wasteful and costly bureaucracy that did not exist previously?*
- 3. Is the industry one where massive infrastructure costs are involved? A monopoly may be the only type of organisation capable of making the massive infrastructure expenditure required.*
- 4. Would the introduction of more competition mean that an entire network or system could not be shut down and replaced with a superior network or system? Would this result in society having to operate multiple systems when only one was required?*
- 5. What is the risk of increased competition causing wasteful overcapacity that causes prices to rise or quality to decline, e.g. oversupply of aircraft in the air service?*

#### **Criteria that relate to cooperation**

- 6. To what degree would cooperation between organisations be a better alternative to increasing competition?*

#### **Criteria that relate to social factors**

- 7. Could increasing competition mean that essential or desirable services are cut to less profitable areas or routes, thereby depriving the public of an essential or worthwhile service? Is there potential for new entrants to a market to engage in 'cream skimming'? E.g. Multiple private mobile phone providers placing mobile phone infrastructure in densely populated areas and providing no mobile phone infrastructure in less densely populated areas?*
- 8. What impact would an increase in competition have on health and safety and/or the environment?*

#### **Criteria that relate to industry health/survivability**

- 9. How many competitors could operate profitably within this industry? Consideration should be given to whether that industry has the potential to expand.*
- 10. Is the industry one that involves finite resources? e.g. the fishing industry. Could the sustainability of this industry and its resources be destroyed by increased competition? e.g. overfishing due to too many professional fishing licenses being issued to fishermen.*
- 11. Could the introduction of competition mean an industry is potentially exposed to hazards or diseases which would threaten the survivability of the industry? e.g. in 2016/2017 white spot disease was detected in some Australian prawn (shrimp) farms. This was blamed on cheap, imported prawns. To what degree do federal quarantine agencies need to be involved in providing advice regarding new market entrants?*

### **Criteria that relate to quality of service/product**

12. *To what degree would the quality of the product or service be diminished if competition is introduced or increased?*
13. *Is the industry one where a monopoly determines standards that benefit the country or society? If so, will these standards continue to exist if competition is introduced or increased?*
14. *If a decision is made to increase competition and prices increase or quality declines as a result, can this decision be reversed? How much will this reversal cost?*
15. *Is there a means to evaluate the success or failure of changes in the level of competition?*
16. *Does the country/economic region have a universal service obligation in a particular industry? e.g. the postal service or telecommunications. How will introducing competition or privatising an industry impact on the provision of this service?*
17. *To what degree would the introduction of competition destroy or damage a monopoly that is capable of producing superior service and/or a cheaper price?*
18. *Can the industry remain healthily sustainable if an increase in competition occurs? e.g. airlines. Would increasing competition mean that airline profitability declines to the extent that airlines have to eliminate less profitable routes or cancel orders for new aircraft to remain profitable?*

### **Criteria that relate to innovation**

19. *Is the industry one where research and development benefits the country, region or society? To what degree would the introduction of competition cause a reduction in profit margins that affect the organisation's capacity to conduct research and development? What impact could a reduction in research and development have on customers, the country, region or society?*
20. *Would it be beneficial for consumers or society, for an industry to have a restricted level of competition for an initial period, e.g. twenty years, and then be opened to more competition after that initial period?*

### **Criteria that relate to privatisation/ownership**

21. *To what degree is the industry an essential service where management with greedy or short-term profit motives may reduce or eliminate spending on things like maintenance and investment on infrastructure?*

### **Criteria that relate to other general factors**

22. *Does the monopoly currently play a role in "Prevention", e.g. the Swiss property insurance industry described in this paper? What will be the impact of increasing competition in such an industry?*
23. *Are there extraordinary security issues, where an extremely tight control needs to be kept on an industry, e.g. the currency printing industry?*
24. *Are there other factors where the introduction or an increase in competition may adversely affect customers or society? If so, what are they?*

### **Criteria that relate to managing industries as systems**

25. *What role (if any) do government agencies need to play in management oversight of the industry?*
26. *Is the industry a vertically integrated industry that has the potential to be de-bundled or separated? e.g. the electricity industry. How is the decision to de-bundle or manage the vertically integrated organisation as a whole made? Are the advantages and disadvantages of de-bundling and managing a vertically integrated organisation as a whole fully considered?*

### **Criteria that relate to political factors**

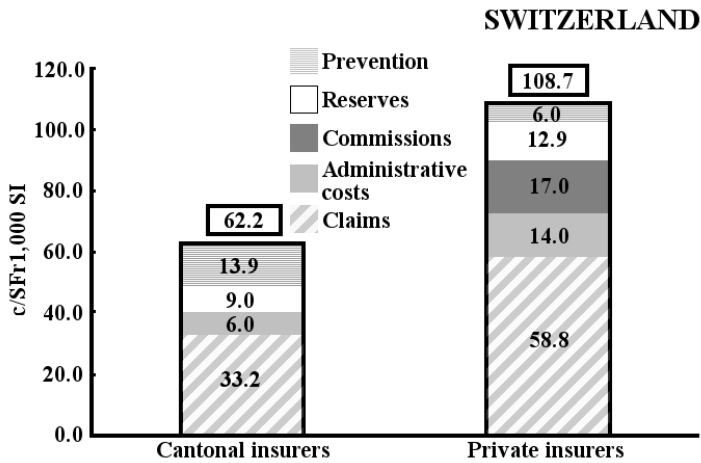
27. *If governments introduce or increase competition in an industry, who would the potential beneficiaries be e.g. Current donors to politicians?*
28. *Is a country's competition policy about optimisation (best possible results) or is it based on political ideology, e.g. open entry for all who want to participate?*
29. *Has a country's competition policy given greater importance to transparency than effectiveness and efficiency?*
30. *If a government is considering selling a natural monopoly to a private provider is there adequate management oversight or regulation in place to ensure consumers are not exploited by a greedy, profit centred private provider? Furthermore, is the government of the day selling the monopoly free of regulation simply to maximise its short-term sale price?*

### **Criteria that relate to fair competition**

31. *What impact would cheap foreign labour have on 'fair competition'? For example, if a new foreign airline was allowed to enter a market, would that airline be allowed to employ cheap foreign labour? Thus, giving the foreign airline an unfair advantage over existing competitors.*

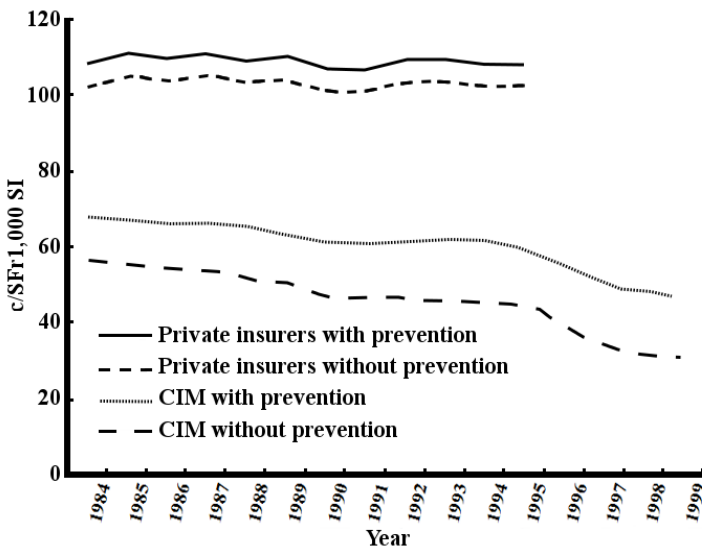
\*The M-ROCK model/procedure above remains the copyright of Murray B. Stanley.

**Annex B**  
**Figures 5 and 6: Swiss Property Insurers**



Comparison of cantonal and private premiums (fire and elemental damage), 1986-1995.

Source: VKF (various years), *Finanzstatistik*.



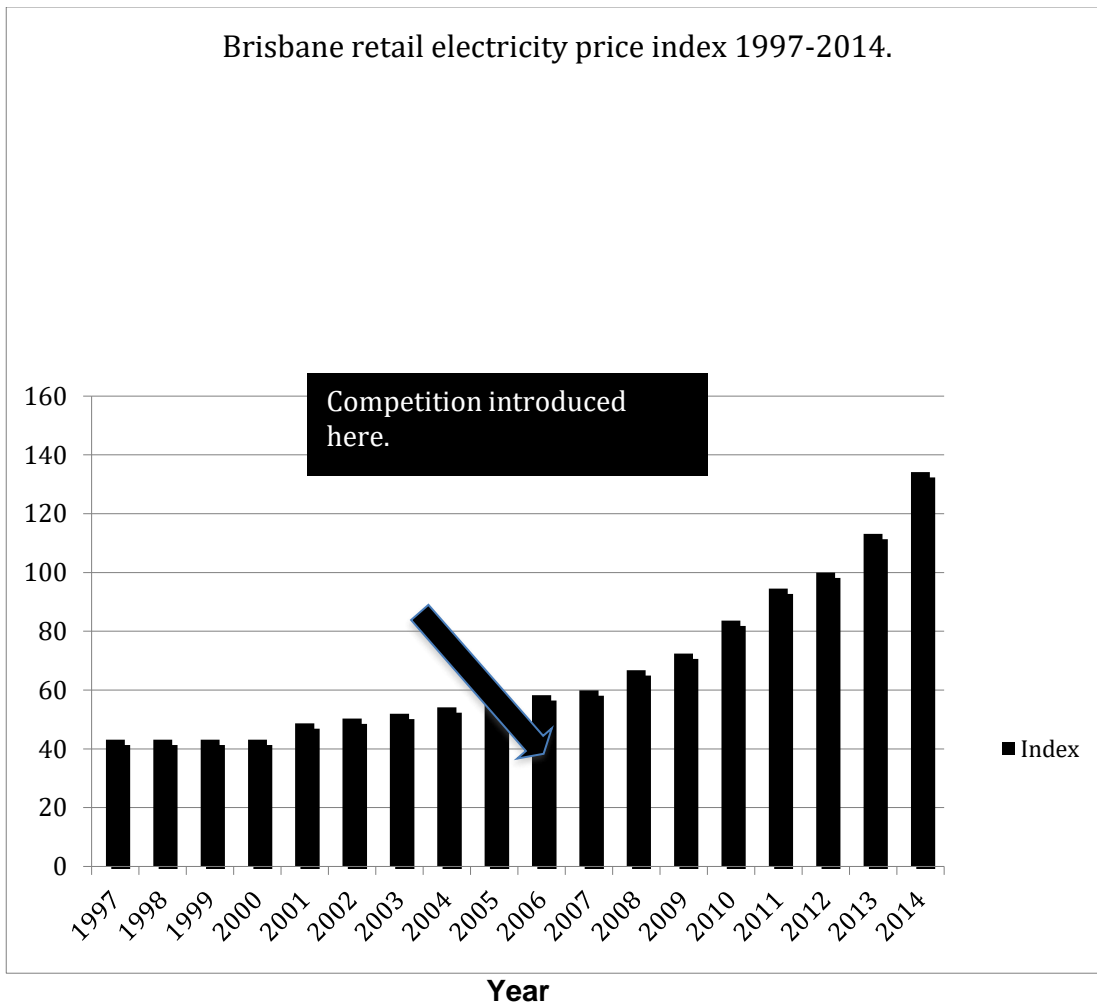
Evolution of premiums in the housing insurance market, 1984-1989.

Sources: For the CIM: VKF (various years), *Finanzstatistik*. For the private insurers: Bundesamt für Privatversicherungswesen (various years).

\*The figures above are from Thomas von Ungern-Sternberg's outstanding book, *Efficient monopolies: the limits of competition in the European property insurance market*.

**Annex C**

**Figure 7: Chart of Brisbane (Australia) electricity prices**



\*Source of data: Australian Bureau of Statistics (ABS 2015)

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