Issues and evidence on copyright, trademarks and geographical indications

Response to

Hazel V J Moir
Adjunct Associate Professor
Centre for European Studies
College of the Arts & Social Sciences
The Australian National University
Canberra, Australia

The views presented in this submission are my own and should not be taken to represent the views of any institution with which I am affiliated.

24 February 2016
Acronyms

ABS  Australian Bureau of Statistics
ACCC  Australian Competition and Consumer Commission
ACTA  Anti-Counterfeiting Trade Agreement
AUSFTA  Australia-United States Free Trade Agreement
CBP  Customs and Border Protection
CMI  Consumer Medicines Information
DFAT  Department of Foreign Affairs and Trade
EU  European Union
FBI  Federal Bureau of Investigation
FTC  Federal Trade Commission
GAO (US)  Government Accounting Office
"IP"  "intellectual property"
"IPRs"  "intellectual property rights"
IPAC  Industrial Property Advisory Committee
JSCOT (Parliamentary)  Joint Standing Committee on Treaties
GIs  geographical indications
NIA  National Interest Analysis
OECD  Organisation for Economic Co-operation and Development
PDO  Protected Designation of Origin
PGI  Protected Geographical Indications
TGA  Therapeutic Goods Administration
TRIPS  Agreement on Trade Related Intellectual Property Rights

Author information

I have an honours degree in economics from Cambridge University (1969) and a PhD from Brown University (USA) where I specialised in demography and development economics (1975). My early working experience included market research, private health insurance and development assistance. During my 19 years’ service in the Australian Public Service, I spent over 5 years in the Bureau of Industry Economics (BIE). In 2004 I embarked on a second PhD, in public policy at the ANU. The subject of my dissertation was an economic assessment of the patent system, using data on granted business method patents to assess the height of the inventive step and identify the principal rules which caused such a very low standard for the inventiveness test. Since then I have explored a number of aspects of patent policy, including secondary pharmaceutical patents, patent policy in trade agreements and the norms that would be required to implement Article 7 of TRIPS – the Article which calls for balance in patent policy. In addition to academic papers I have made submissions to a number of government and parliamentary enquiries. I hold the position of Adjunct Associate Professor at the Centre for European Studies, College of the Arts & Social Sciences, Australian National University, where I do research on patents, data protection and geographical indications.
Issues and evidence on copyright, trademarks and geographical indications: Response to the Productivity Commission's Issues Paper on Intellectual Property Arrangements

1. Introduction

This submission deals primarily with copyright, trademarks, geographical indications (GIs) and enforcement. It identifies some of the critical issues in assessing the efficiency and effectiveness of each of these regulatory interventions in the market. It also points to the very limited empirical evidence about how these systems work and their impacts. Unfortunately copyright and trademarks are two areas where there is largely an evidence-free zone.

In this submission I commence with some comments on "intellectual property" and then move on to consider the evidence available to the Commission to assess the effectiveness and efficiency of the copyright, trademark and GI systems. In the following three sections I discuss copyright, trademarks, and GIs. In Section 5 I discuss issues of copyright and trademark enforcement and conclude with a very short section on policy parameters for international negotiations.

As I remarked in my earlier submission on patents and data protection, the term "intellectual property" ("IP") covers so many things that its use creates confusion and can lead to logical errors. It is simply not conducive to rigorous analysis. To begin with, "IP" sometimes covers inventions, creations or brands. At other times it refers to "intellectual property rights" – a range of quite different instruments. Almost the sole feature these "rights" have in common is that they involve government intervention in markets.

Evidence based policy

As with the patent system, the requirement for evidence has been absent from changes to copyright and trademark policy. Surprisingly there has been much more empirical assessment of GIs, though again there are some key gaps in data available.

In respect of copyright, policy has been developed in the face of clear evidence that it is unbalanced and welfare-reducing. Indeed, simple arithmetic provides clear evidence that the copyright term is far too long. A straight-forward discounted cash flow analysis demonstrates this. Given its length, copyright policy is clearly unbalanced and inefficient. Nonetheless, as Lessig has pointed out, in the 39 years to 2001, the US Congress extended the term of copyright no less than 11 times (Lessig, 2001: 1065) and some of these extensions in term applied retrospectively. Despite the absence of direct data, Boldrine and Levine manage to piece together a fascinating alternative history of copyright and its effects (Boldrin and Levine, 2008: Chapter 2).

Trademarks are quite a different instrument from copyrights or patents. There is no goal of "incentivising innovation or creativity". The purpose of trademark policy it to protect consumers from fraudulent copies and to protect producers from unfair competition. However extensions in what can be used as a trademark and the accumulation of many different marks by a single producer raise issues as to whether trademark policy still achieves its objectives. There is very little empirical analysis of trademarks.

Geographical indications (GIs) are the newest form of "intellectual property" and they are highly contentious. Nonetheless there are various empirical studies relating to specific aspects

---

1 Giblin uses US data form the period before 1976 (when copyright renewals were not automatic) to demonstrate the exceedingly low rate of renewal of copyright, and that this varies over time and between classes, but in the period to 1991 never exceeded 22 percent (Giblin, 2015: 7).
of GI policy and how it operates. Not only are there case studies of both successful and less successful GIs, but there are also empirical data on consumer willingness to pay, and some studies trying to estimate the net welfare impact of GIs. Just what the objective of GI policy is, is rather unclear.

As regards enforcement of copy rights, the claims made by distributors to whom rights have been licensed do not withstand scrutiny. Likewise trademark enforcement appears to be a problem of very limited magnitude.

2. Copyright

Copyright law has been largely driven by the US legislature, in response to the needs of Hollywood. The 1998 statute which gave rise to the substantial extension in the length of US copyrights is widely known as the Mickey Mouse Protection Act (Lessig, 2001: 1065). It has then flowed to other jurisdiction through pressure from large publishing and distribution companies and the governments which represent their interests during trade negotiations. It arrived in Australia courtesy of the Australia-United States Free Trade Agreement (AUSFTA). While there has been substantial public interest in and discussion of aspects of copyrights, the lack of credible data means that this has focused on nuisance issues – such as time and format shifting – rather than on the basic policy parameters of exactly where there are market failures, and for whom.

Beyond the absence of data, the biggest problem in discussions of copyright policy is the failure to recognise the centrality of distributors to copyright policy design. Most copyright policy discussion is founded on the myth that copyright is designed to meet the needs of authors. Yet the history of copyright policy shows clearly that copyright was an exchange of censorship services for monopoly privileges for publishers. As Court demonstrates, it was only when publishers were unable to persuade the British parliament to re-institute a copyright act that the idea of vesting copyright in authors was advanced as a framing gambit – and a very successful one (Court, 2013: 100-102). The 1709 Statute of Anne was the first copyright legislation in which authors’ interests were mentioned.

Another problematic issue in discussing copyright policy is that copyrights cover many different markets, albeit with some differences in term. But even within the market for books there are radical differences in the economics of the markets for novels, textbooks, academic monographs and dictionaries. The argument that fast copying will prevent adequate creation or distribution varies between each of these markets depending on its characteristics. It also needs to be recognised that, unless and until an author is well known, s/he will be powerless in the face of publishing houses in negotiating other than minor aspects of the terms under which the copyright is licensed to the publisher.

For new entrants to the academic monograph market, it will be virtually impossible to negotiate a licensing term less than the full term of the copyright. The one condition that voids this lengthy license is if the book becomes out of print and stays out of print for longer than a specified period. Publishers hold their financial data very closely, but it appears that within this market a small number of sales (in the 100-200 range) of hardback copies to libraries will provide the publisher with a good return on their investment. The author, however, is unlikely to see any financial return unless sales are much higher. Indeed the author may well have to pay for certain publishing costs such as indexing. The publisher’s input is limited to editing and production costs. There are economies of scale in marketing across many related monographs. Within this field publishers are thus able to obtain a very good return on their investment, while authors receive little if any financial return. However the performance indicators for academics are such that there are other strong incentives to

---

2 Based on my own experience and discussions with other academics.
publish. Publishers are able to rely on this and very many academics are surprisingly uninformed about copyright even though publishing is critical to their academic success.

Over the past several decades there has been a substantial move from publishing academic journals through university publishing houses to publishing them through large private publishing houses, such as Sage and Elsevier. As a consequence the costs of academic journals have risen substantially, even though most of the work is undertaken by academics, without remuneration (see, for example, Gowers et al., 2012).

One of the problems of regulatory intervention in markets is that it can encourage a rent-seeking attitude. An example of this is Elsevier’s attempt to buy Congressional passage of a statute designed to force grant-giving agencies such as the US National Institutes of Health to cease requiring open publication as a condition of receiving research funds from the US taxpayer. The bill was introduced into Congress on 16 December 2011. The enormous public outcry, including the petition by Gowers and other mathematicians cited above, led Elsevier to withdraw their support for the bill in February 2012. The wording of the withdrawal indicates that Elsevier simply did not understand the basis for the protest.3

What is surprising is that universities have not banded together to oppose the high prices charged for the distribution of journals containing articles written largely by university staff. Harvard took some initial steps in this direction in 2012.4 Australian universities appear either not to have tackled this issue or to have been quite unsuccessful in tackling it. Clearly there is room for substantial efficiency improvements in this area, perhaps starting with legal publications which are notoriously expensive.

In regard to how copyright operates as an incentive to creators of films, David Court’s empirical work demonstrates that the way the film industry works is that all the power rests with the distribution companies, with the majority of films – even highly successful box office hits – making a negative return for their creators (Court, 2013). This feature of the film industry is noted by only a few commentators. Boldrine and Levine note that "the entire Hollywood movie industry has managed by creative accounting to avoid earning a profit during its entire history" (Boldrin and Levine, 2008: 25). An earlier incarnation of the Productivity Commission – the Tariff Board – enquired into the film and television industry in 1972. The Board found "an unhelpful level of monopoly" in cinema distribution and exhibition. As yet, this has not been tackled. Until it is, copyright policy is unlikely to achieve its intended effect of encouraging creativity in the film industry.

Court (2013) also turns his attention to book publishing and presents data on the incomes of authors. He provides a thorough history of the development of copyright policy in the UK and an in-depth analysis of the business model used by publishing houses, showing a radical difference in the interests of authors and publishers. His policy recommendations focus around separating out a short-duration period during which there is a strict monopoly, thus protecting first publishers, and a subsequent period when the copyright privilege translates into a royalties system. This would introduce a far greater degree of competition in the publishing industry as well as providing substantially greater returns for authors and benefitting consumers.

Other issues in relation to copyright are:

- Whether datasets need any form of market intervention given network and learning effects. I note that originally Australian courts granted copyright for simple data compilations such as yellow pages (Desktop Marketing Systems Pty Ltd v Telstra Corporation Limited [2002] FCAFC 112 (15 May 2002), leave to appeal to the High

3 See https://www.elsevier.com/about/company-information/policies/message-on-the-research-works-act
Court refused). However this was effectively overturned in 2009 by the High Court (*IceTV Pty Limited v Nine Network Australia Pty Limited* [2009] HCA 14) in a decision that is generally interpreted as requiring at least some degree of creativity for copyright to apply. As there are important network effects with databases, it is questionable whether any form of market intervention is needed.

- What is the market for emails? Why do these have copyright?
- Why do unpublished works have copyright?
- How balanced is it that publishers use the global copyright licensed to them by authors but then fail to provide global access to the material?
- What provisions are there for the equivalent of "compulsory licensing" where a copyrighted book is not made available in a country that is a signatory to the Berne Convention?
- How effective are layers on layers of copyright? For example new copyrights on new editions of books which may or may not be out of copyright in respect of the actual text?
- Just what is the loss to the copyright holder through procedures such as caching? Why do libraries have to destroy downloaded copies after a single use?
- Why does copyright policy act as such an impediment to the work of museums, galleries and archives in preserving cultural history? (Corbett, 2011).
- Why is encrypted material granted copyright? Surely the encryption already provides protection against copying, and having copyright too means double-dipping? Encrypted material also makes fair use harder thus voiding an essential element of copyright policy.
- Encryption also, of course, raises the whole issue of technological protection measures on devices needed to use copyrighted materials. Again the use of such procedures directly confronts the automatic grant of global copyright. Again there seems to be a substantial degree of imbalance between granting privileges to copyright owners or licensees compared to protecting the access rights of consumers.
- Why are copyright contracts allowed to over-ride the terms and conditions of copyright policy, particularly fair use provisions?
- Why do publishers show the copyright as belonging to the author, when their publishing contract gives the publishers full and exclusive control over the copyright leaving no control with the author, except for moral rights?
- Why, when I pay someone to take photographs for my wedding, does that person hold the copyright in the photographs of my wedding? Surely I have paid for these and should own what I have paid for? This policy element contrasts sharply with the policy that the copyright of materials produced by an employee is the property of their employer.
- In like vein, why, when a government has paid a surveyor to prepare plans for public use, should the courts subsequently determine that copyright license fees need to be paid in addition to the original payment for the work? (Bannister, 2008 re the 2008 High Court case, *Copyright Agency Ltd v New South Wales*).
- Why is the distributor interest group, the IP Awareness Foundation, permitted to place propaganda on the DVDs I buy? The IP Awareness Foundation consists almost entirely of Hollywood distributors and, in the minority, Australian distributors. It places its propaganda on DVDs sold in Australia, even where the content is entirely

---

5 Indeed why is it allowed to call itself a foundation when it is an industry group?
6 See [http://www.ipawareness.com.au/about](http://www.ipawareness.com.au/about) for a list of the members of this "foundation".
foreign and indeed even where it has been funded by overseas taxpayers. Their statements that "burning" a DVD will reduce the incentives for the creators of films has no factual basis—as Court has shown the only party that will lose is film distributors.

And a major issue, of course, is **criminality**. Copyright policy is a form of economic policy insofar as the interests of publishers are protected, and a form of cultural policy insofar as the interests of creators and consumers are concerned. The re-framing of copyright privileges as rights by the French revolutionaries does not make the intangible tangible. While a copyright can be traded, it does not have the same nature as a genuine human right. The appropriate penalty for unauthorised use of copyrighted material is, surely, a financial penalty as any loss is financial.

**Criminalising** copyright offences appears to be an accident of history. The earliest copyright statutes pre-dated police forces. Given this radically different environment the 1557 Royal Charter granted to the Worshipful Company of Stationers the right of entry and search so that seditious materials could be seized. This right was carried through to later versions of copyright’s governing legislation and appears not to have been reviewed following the development of police forces. Boldringle and Levine (2008: 32) suggest that it was an accident of history that saw the search and entry right transferred to the police and (as a direct result) converted to a criminal offence. From there it has spread globally through international treaties. **It is more than time that the proportionality of this punishment was reviewed.** Unlike tangible property, unauthorised use removes nothing from the originator except a potential financial return. Regardless of scale, the appropriate penalty should also simply be financial.

The Commission also asks, with respect to copyright:

- **Is licensing copyright-protected works too difficult and/or costly? What role can/do copyright collecting agencies play in reducing transaction costs?** (20)

  There are many anecdotal stories about the complexity and cost of licensing. I have one author friend where over 50 percent of the time taken to prepare a book about a deceased author was negotiation on copyright, especially of photographs.

  The Berne Convention opposition to the registration of copyrights drastically impedes identifying copyright owners and negotiating licenses. Further, this restriction is a major cause of the problem of orphan works. It dates from a period when such registration was onerous. This is no longer the case. Registration processes can be made very straightforward and involve little cost to governments or copyright owners. **The issue should be listed for international negotiation as it creates significant and unnecessary problems.**

  Copyright collecting agencies are problematic. They layer monopoly on monopoly, their processes lack transparency and they do not appear to be accountable to copyright owners.

- **Are moral rights necessary, or do they duplicate protections already provided elsewhere (such as in prohibitions on misleading and deceptive conduct)? What is the economic impact of providing moral rights?**

  Because moral rights are inalienable and cannot be licensed they provide the sole form of protection that an author has.

---

7 Machlup and Penrose, 1950: 16-17.
3. Trademarks

While both patents and copyright (as well as plant variety rights, designs and circuit layouts) all fit within the framework of a market intervention to stimulate invention or creativity, this is not the case for trademarks or geographical indications. Trademarks historically performed a quite different function – protecting consumers from fraudulent producers and producers from unfair competition. When trademark registration was first introduced in the late nineteenth century, only "fancy" words could be registered. That is, only made-up words could be used as all ordinary words remained in the public domain for all to use. Despite these restrictions, trademark registration could be a very powerful business tool. Used carefully, and accompanied by effective advertising, it can assist a company to achieve and maintain market dominance. Kingston (2010) tells the story of how W. H. Lever – the founder of Unilever – was able to use his registered trademark name for Sunlight soap to eliminate some 90 per cent of competitors within a few years.

Thus while trademarks can provide essential protections for consumers and producers, when they are combined with large advertising budgets they can be a powerful anti-competitive force. This raises the issue of whether it is appropriate to allow trademarks for brands rather than for producers.

The TRIPS Agreement provides, in Section 2 on trademarks, that:

"Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark."

TRIPS Article 15(1), emphasis added

This clearly provides an obligation to allow companies ("undertakings") to register a trademark to identify their goods and/or services. But nowhere in TRIPS does it say that companies should be allowed endless marks for multiple different services. Indeed, a simple search for Nestle among currently registered Australian trademarks finds 1,606 results. If the class is limited to class 30, the number falls to 1,409. Surely such a proliferation of different marks for the one company is the antithesis of ensuring consumers are not confused.

In a useful discussion of this and other problems with trademark systems Greenhalgh and Webster ask whether the trademark system still fulfils the function for which it was designed (Greenhalgh and Webster, 2015). This is a very good question and one the Commission could usefully address. Greenhalgh and Webster put forward a number of policy options to restore balance to the trademarks system.

There are particular issues in regard to the trademarking of pharmaceutical products. While every new medicine has an International Non-proprietary Name (INN), pharmaceutical companies are allowed to acquire a trademark for each medicine. This ensures that once the patent ends, consumers will still ask for the product by the trademark name rather than the INN. Indeed the possible confusion resulting from such changes in names and packaging was one of two major reasons for grant of an injunction to prevent generic entry of the medicine venlafaxine in 2009. The patent involved in this injunction was subsequently determined to be invalid but the injunction delayed generic entry by 2½ years. The delayed savings to the

---

8 For an excellent discussion of the development of trademark policy see Kingston, 2010: 25-41. Registration, which overcame the need for the trademark owner to prove consumer confusion (which could be assumed for a registered mark), was first introduced in France and quickly copied in the UK.

9 Coffee, tea, cocoa and artificial coffee; rice; tapioca and sago; flour and preparations made from cereals; bread, pastry and confectionery; edible ices; sugar, honey, treacle; yeast, baking-powder; salt; mustard; vinegar, sauces (condiments); spices; ice.

10 Sigma Pharmaceuticals (Australia) Pty Ltd v Wyeth [2009] FCA 595. See also Moir and Palombi, 2013.
Pharmaceutical Benefits Scheme cost taxpayers some $A85 million.\(^{11}\) The Commonwealth has had to go to court to seek compensation for this loss as the company concerned (Pfizer) disputed that it was legitimate for taxpayers to seek compensation for their losses.\(^{12}\)

From a viewpoint of minimising consumer confusion and maximising generic entry into a pharmaceutical market once a patent has expired, it would clearly be preferable that all medicines be sold only under their INN, with plain packaging but a company logo. Supporting the profit maximising strategies of companies by allowing brand trademarks may have few downsides when it comes to discretionary purchases such as fashion items. But when it relates to essential products, actively supporting such practices through government regulation seems a welfare-reducing proposition.

In regard to interaction between different forms of "IP", the IPAC review considered the question of whether patent documents should have copyright protection and concluded that uses of patent specifications should not constitute copyright infringement (IPAC, 1984: 55-56). This is reflected in S 226 of the Patent Act 1990. It is equally appropriate that the material which constitutes a product description leaflet for a medicine should also not constitute copyright infringement when used in a generic product. The Therapeutic Goods Administration (TGA) website states that a "Consumer Medicines Information (CMI) is a leaflet that contains information on the safe and effective use of a prescription or specified over-the-counter medicine.\(^{13}\) I have looked at S 44 of the Copyright Act 1968. This is written in such complex cross-referring language that it is impossible to determine if this provides full exemption from copyright infringement for CMI leaflets. If not, it should do so.

Some older protections for consumers seem also to have largely disappeared. Previously if a trademark ("fancy") word became the common word for a product type, then the trademark ceased to hold. Examples are vacuum, escalator and aspirin. While this may seem at first glance to be unfair to the originator of the product, such products likely also had patent protection (or the opportunity to acquire this) and thus had a guaranteed period with no competition. Once competitors were allowed in then it became essential that trademarks which had become common use names be revoked, in order to ensure fair competition. This no longer seems to happen – consider google. It should be re-instated.\(^{14}\)

One also has to question why phrases are now allowed to be used as trademarks. The UK case of "keep calm and carry on" allowed a private entity to trademark a phrase put into public use via government advertising and subsequent marketing by a different enterprise. In July 2013, the EU Trademark Office rejected applications to cancel the registration by Trade Mark Direct of "Keep Calm and Carry On". Although rejected by the UK Trademark Office, the decision made in European Office overrides the UK decision and the registered trademark will apply in the UK. The decision is disappointing for Stuart & Mary Manley of Barter Books who re-discovered the WWII poster "Keep Calm and Carry On" in 2001 and brought it to the attention of the general public.\(^{15}\)

The Commission asks whether trademarks are operating as an effective and efficient method for firms to protect their brand and reputation. I am not convinced that the protection of brands has any positive welfare outcome. Effectively brands are about market segmentation

---

\(^{11}\) See Attachment C to my submission on patents and data protection to this inquiry (http://www.pc.gov.au/__data/assets/pdf_file/0006/195792/sub130-intellectual-property-attachmentc.pdf).


\(^{13}\) https://www.tga.gov.au/consumer-medicines-information-cmi

\(^{14}\) This could be an alternative approach to dealing with branded medicines. If, by the end of the patent period, Efexor has become the common name for venlafaxine, then the Efexor trademark should be revoked in order to place all market participants on an equal footing.

and the use of advertising to change tastes. Where a company has deep pockets, it can saturate a market making it extremely difficult for smaller companies to survive. I am not sure that governments should be playing a role which encourages such behaviour. Protection of a company’s reputation is an entirely different matter.

For well-known marks the trademark privileges can extend beyond the class(es) for which the mark is registered. Greenhalgh and Webster consider that, from an economic viewpoint, such extended privileges are unjustified. The shift towards preferencing a range of producer interests in trademark policy, rather than simply ensuring that goals of fair trading and minimising consumer confusion are met, has led to a rent-seeking attitude. An example of such attitudes is:

"Well-known marks are critical business assets which can be used and traded just like any other assets. As such, these critical business assets deserve the fullest and widest possible protection in order that mark owners may fully exploit the value of such well-known marks."\(^{16}\)

There is simply no justification for government intervention to protect investments in advertising from competitive pressures.

The Commission could usefully address the issue of the appropriate role for government in registering marks which go beyond distinguishing one company from another. Particularly where this involves patented products, such branding carries the risk of extending the effective monopoly period beyond that approved by parliament.

4. Geographical indications

"The Commission welcomes submissions on how effective and efficient Geographical Indications are in terms of protecting IP, including on a firm’s branding and reputation. Submissions on how Geographical Indications may help or hinder competition and consumer outcomes are also welcomed." (Issues Paper, p.25)

The claim that GIs have anything to do with intellectual property rests on very slender foundations. GIs also have nothing to do with attributes of any firm. Unlike other forms of alleged "IP" they are not individually owned and cannot be traded. Issues of firm reputation and branding are simply not present within a GI.

To understand GIs it is necessary to look at their use in Europe. It is the European Union (EU) which insisted on the inclusion of GIs in TRIPS. GI policy is also most extensively developed in the EU, where it was first introduced in 1992 (Moir, 2015a).

The benefit conferred by an EU-registered GI is prevention of the use of the registered name, in all forms and for all products. Like registered trademarks, GIs benefit from a presumption that consumers are misled if the registered mark/name is wrongly used. But the presumption is much stronger for GIs where it extends to reputational harm if the registered name is used with reference to any product. This goes well beyond trademark privileges where protection is limited to designated product groups.\(^ {17}\) In the past Perrier successfully promoted its product in Germany as the champagne of mineral waters (Hughes, 2006: 437). This is no longer allowed.

A major and important difference between GIs and trademarks is that descriptive words – such as geographic names – cannot generally be used for trademarks. They must be left free for general use. But GIs allow the permanent appropriation of a geographical name for a


\(^{17}\) Except for well-known marks which have been granted special extended privileges.
designated product. GIs operate a little like trademarks, providing consumer information on origin and quality (Raustiala and Munzer, 2007). Reducing consumer confusion and search costs by labelling products such as "Roquefort-style Blue from Catalonia" provides consumers with useful information. This is the general GI standard in TRIPS (Article 22). It is referred to here as weak-form GIs. In the EU such qualifiers are not allowed in respect of any registered name. The EU's strong-form GIs presume that a label such as "Danish feta" misleads consumers. In TRIPS strong-form GIs are required only for wines and spirits (Article 23). But EU GI policy goes beyond TRIPS strong-form privileges, preventing any evocation of the registered name in any context.

Addressing consumer confusion is regularly used as a justification for GI policy. Most GI studies start by summarising the economic literature on information asymmetries, drawing on this to justify GIs (Bramley et al., 2009; OECD, 2000). But most foodstuffs are repeat purchase goods, falling into the category where experience quickly leads to new consumer knowledge, eliminating any information asymmetry (Teuber, 2011). Given this, the information asymmetry rationale for GIs reduces to that of credence goods – where even after consumption consumers are unable to determine the quality. This raises the question of whether the inability to taste the difference creates any detriment to the consumer.

The question as to whether GIs themselves mislead consumers is not frequently discussed. A GI directly implies that the product comes from the specified region, but in practice this is often not the case in Europe. The EU regulations allow some types of raw materials for a Protected Designation of Origin (PDO) to be drawn from a different, often quite large, geographic region, so the PDO descriptor may be misleading (Calboli, 2014: 57). In the case of Protected Geographical Indications (PGI) products, there are no minimum requirements for regional origin, and the bulk of ingredients could easily come from elsewhere. Such consumer concerns were raised in the 2008 evaluation of EU GI policy (London Economics, 2008: 86-91), but have not resulted in any improvements in the regulations.

The consumer confusion argument clearly lacks substance. As strong-form GIs presume consumer confusion even when it is not present, they raise competition issues. This is particularly concerning for EU GIs where there are no competition safeguards in the processes for registering a GI (Moir, 2015b). This contrasts with Australian processes for certified trademarks, where applications are reviewed by the Australian Competition and Consumer Commission (ACCC) to ensure there are no unnecessary anti-competitive effects.

Is there a producer reputation argument for GIs? As the GI refers to the output of a number of producers, this is an issue with respect to the group of regional producers. It may well confer a net benefit to ensure that the registered name is used only for conforming products. However it is unclear how the reputation of the regional producers is negatively affected by comparisons to other product groups – such as the champagne of mineral waters. The commercial interests of regional producers may be affected by weak-form GI labels – "Danish feta" may well attract consumers away from feta produced in Greece. But is this sufficient to justify the changed competition conditions in strong-form GI situations?

With wines, the conversion costs of re-educating consumers to ask for pinot noir instead of Burgundy were one-off. In Australia's case wine producers were compensated for such costs with easier access to EU wine markets.\(^\text{18}\) There has not, however, been any compensation to Danish or German producers for such costs. Apparently Danish feta is now called salad cheese. Feta is, of course, not a geographic name. It is Italian for slice.

\(^{18}\) Indeed there may be a further market advantage to New World producers as their customers now expect grape varietal information on wine labels. Old World GI wine labels rarely include such information, which may make them less attractive to New World customers.
The EU rationale for GIs is two-fold. As well as the claimed reduction in consumer confusion, it is also a plank in their new agricultural policy, designed to encourage farmers to move up the quality chain. But there are serious questions as to whether it works with respect to this goal.

For foodstuffs, as for most products, there is only a small segment of the market which is willing to pay a premium for higher quality. Much of the willingness to pay literature is summarised by Bramley and colleagues (2009). Despite the methodological challenges of these studies, the single resounding common finding is that only a small segment of consumers is willing to pay the premiums required for GI products. This finding is reflected in the 2008 evaluation of EU GIs – retailers report that GI products have little impact on their profitability as they form a very low proportion of goods sold (London Economics, 2008: 147-150).

Knowledge about the impact of GIs on agricultural and rural policy goals is even less than that for consumer impact. Does GI protection from competition add more to rural incomes than it takes from its negative impacts on competitors and at least some consumers? Callois (2004) found the potential of GIs to induce rural development to be highly qualified, with potential exclusionary effects. Case studies from the EU’s DOLPHIN project show ambiguous results about GI impact on rural development (Tregear et al., 2004).

There are few studies on the net effect of GIs – do they enhance welfare (improve overall national economic wellbeing)? In regard to the net impact of quality choices on producer and consumer welfare the challenge is the degree of control by producers over quality decisions and how they manage supply. Mérel (2009) demonstrates that input controls – e.g. over the supply of land – involve lower deadweight losses than output controls. The various models reviewed by Teuber show the net effect is highly dependent on market conditions and consumer preferences. But these are models, not studies of real world impacts. Using a case study approach van Caenegem and colleagues demonstrate that, under the right conditions, GIs can be used to establish regional benefits, giving the example of the Queensland Granite Belt (van Caenegem et al., 2015). But they question whether GIs are effective in achieving such outcomes except under particularly favourable conditions.

Other writers also warn that GIs are not always an effective solution for primary producers seeking higher returns and more stable markets (Rangnekar, 2004; Giovannucci et al., 2009; Grote, 2009; Evans, 2010). The costs of establishing a GI can be significant and careful analysis is needed before adopting a GI strategy. A number of case studies indicate that unless and until reputation has been established, a GI is not likely to produce increased returns. Indeed trademarks may be an essential step on the way to establishing a broader regional reputation.

Turning to the Commission's questions of effectiveness and efficiency, it is clear that GIs can be used to extract a price premium where the quality reputation of a regional product is already established. For the myriad small items registered in the EU – there were 1,205 registered GIs for foodstuffs (ie excluding wines and spirits) in the EU as at 6 July 2015 – this

---

19 These studies use a variety of methodological approaches and all face challenges in separating out different quality indicators, including the separate impact of GI labelling and trademarks. Some are restricted to consumers who are already aware of GI products, thus raising issues about bias.

20 Teuber (2011) notes that many consumer studies unrealistically assume a uniform preference distribution of consumers with respect to quality. This naturally raises questions as to their relevance and policy value.
is unlikely. But it is also unlikely that other producers will inadvertently trespass on these names. After all it is only rarely that geographic names are approved as trademarks.

But is the goal of reducing consumer confusion met? A detailed consideration of EU GIs suggests that, particularly in the strong-form they increase rather than reduce consumer confusion. What about the agricultural goals? The very limited evidence available suggests that agricultural outcomes are varied and contingent.

How could GI policy be improved? Clearly the framing of GIs as "intellectual property" protects GIs from the competition provisions of the European Treaty. As there are no sound "IP" justifications for the policy, this clearly raises the question of whether GIs should be removed from the "IP" basket and be re-labelled as agricultural policy. This would remove them from the blanket "commercial and industrial" property exemption from the competition goals that lie at the heart of the European Union project. It would also ensure that the design of administrative processes would include economic elements. By their nature most "IP" instruments avoid using any economic criteria and simply address procedural requirements. The EU GI registration processes are a perfect example of this process-oriented "IP" world. There are no competition checks on how regions are designated nor on the length of the protected production chain. In regard to PGIs there are no requirements for a minimum proportion of materials from the designated region.

For Australia the EU’s experience reinforces the importance of the current procedures for approving a certified trademark. I note that there is little demand, as yet, in Australia for geographical indications. Of the 474 certified trademarks registered as at 18 December 2015, 116 were exclusively for agricultural products and a further 47 covered both agricultural and non-agricultural classes of goods. Another 41 certified marks for agricultural products were pending. Twenty-one of the registered certification marks and three of the pending applications were for wines. Very few of the registered marks for foodstuffs indicate a geographical area, and all of these are foreign registrations. Thus there are 12 Italian geographic marks registered, two each from India, Jamaica and the USA and one from the UK. There are no Australian registered certification marks for foodstuffs, though there are two pending – one from the Mornington peninsula and one from Hinchinbrook shire.

Overall there is no sound basis for deeming GIs to be a form of "IP". There is no innovation or creativity – in fact what they protect from competition is tradition. They likely increase rather than reduce consumer confusion and producer reputation arguments do not withstand scrutiny for strong-form GIs. Australia would do well to keep its current approach of requiring assessment for potential anti-competitive impacts before any certified trademark is registered. The EU could also learn from Australia’s experience.

5. Enforcement

Enforcement issues differ by the type of "IPR". Patent enforcement is not discussed here. It is radically different in content than issues in enforcing copyright or trademarks. Because a suit for patent infringement is almost always countered by a cross-suit for invalidity, the extremely subtle issues involved in potential patent infringement cases need expert treatment. In my earlier submission on patents and data protection I warned against setting up a specialist patent court. Here I turn my attention to two other areas of enforcement – copyright and trademarks.

---

21 From applications filed by the end of 2012. This excluded 29 names registered from filings in 2013 or later. Restricting the numbers by filing year provides a 'cleaner' number as the regulations were changed in 2012.

22 This also suggests that there should be an absolute prohibition on the use of non-geographic names as GIs as this could lead to inadvertent trespass.
Copyright holders, particularly distributors who hold copyrights as a result of the licenses they have signed with authors, make loud complaints about unauthorized use of copyrighted material, which they refer to as "piracy". Trademark holders also complain about counterfeit copies.

In the context of consideration of the proposed Anti-Counterfeiting Trade Agreement (ACTA) by the Joint Standing Committee on Treaties (JSCOT) I did some research on the evidence concerning counterfeit trademarked goods or unauthorized copies of copyrighted goods.

The National Interest Analysis (NIA) provided to JSCOT by the Department of Foreign Affairs and Trade (DFAT)23 cited a major OECD study as indicating that international trade in "counterfeit and pirated [sic] materials" is growing and that the global value of this in 2007 was A$250 billion. This was not actually correct. The OECD update stated that:

"counterfeit and pirated goods in international trade grew steadily over the period 2000 – 2007 and could amount to up to USD250 billion in 2007… The share of counterfeit and pirated [sic] goods in world trade is also estimated to have increased from 1.85% in 2000 to 1.95% in 2007."

(OECD, 2009: 1, emphasis added)

Trademarked goods

The nature of the issues involved is quite different for counterfeit goods and for unauthorized use of copyright. I will discuss counterfeit trademarked goods first.

**Counterfeit goods** generally refers to use of a trademark without authorization *for goods in the same line of economic activity* as that for which the trademark is registered.

Data for the US economy suggest that the most substantial proportion of seized counterfeit goods relates to trademark infringement.24

There are two markets for counterfeit goods. There is a *primary market* with high quality close copies where the consumer purchases the product for the normal price believing it to be authentic. This market is quite limited in terms of volume and tends to focus on very high priced goods. Quite different from this is the *secondary market* where consumers are well aware that they are purchasing a counterfeit copy. The secondary market is very price sensitive and there is good reason to believe most consumers in this market would not purchase authentic goods as they are beyond their economic reach. Unlike the primary market the secondary market can have considerable volume: indeed it can exceed the size of the primary market (OECD, 2008: 48).

During the period 2000 to 2007 world trade more than doubled. The OECD estimated an upper limit of <2% of world trade being counterfeit goods based on a survey of 70 out of 169 customs organisations which provided estimates of seized counterfeit goods for any part of the seven-year period 1999-2005. These estimates were used to generate proportions of exported goods which are counterfeit, and to estimate the proportion of traded goods of different types which are counterfeit. This generated a product-country propensity for counterfeit goods which could then be applied to international trade statistics. Any change in estimated counterfeit goods was therefore *entirely attributable to increased volumes and values* of international trade in particular product lines and from particular countries and not

---

23 This was at [http://www.dfat.gov.au/trade/acta/](http://www.dfat.gov.au/trade/acta/) but DFAT has dismantled all information on this proposed treaty. A search of their site for "Anti-Counterfeiting Trade Agreement" provides only references to Annual Reports.

24 For 2004-08 58% of reported seized counterfeit goods were classified as footwear, wearing apparel or handbags/wallets/backpacks (GAO, 2010: 7).
to any changed propensity for counterfeit goods. The growth in the proportion of international trade estimated to be counterfeit goods was therefore due to above average growth in trade in the types of goods and/or exports from countries most likely to generate counterfeit goods. In presenting its 2007 update the OECD advises that "[f]urther assessments of the share of counterfeiting and piracy in international trade would therefore require a new detailed assessment of customs data on seizures" (OECD 2009: 2).

In respect of counterfeit goods in Australia, the OECD report shows that the range of counterfeit products has not changed over the past five years (OECD, 2008: 70). DFAT’s NIA advised that seized alleged counterfeit products were A$26m in 2009-10. No context was provided. In 2009-10 the value of merchandise imports was A$258,655m (or A$205,217m for imports of consumption goods). Using either of these measures as a base seized alleged counterfeit products are only 0.01% of Australian imports.25

**Copyrighted products**

Unauthorised copies (referred to throughout the proposed ACTA as "pirated copyright products") are copies that infringe copyright, i.e. are made without authorisation.

In regard to unauthorised copies there is less evidence that there is both a primary and a secondary market. Apart from works of art, it is difficult to imagine what parts of any markets for the unauthorised use of copyright could be primary markets. As indicated above with respect to counterfeit goods, secondary markets rarely compete with authorised markets.

As regards secondary markets there is little evidence that consumers would purchase other than very occasionally in the authorised market, given the substantial price differences and income constraints. In some cases there is strong (anecdotal) evidence that consumers are forced into secondary markets because of the lack of access to authorised markets. Further there is reason to believe that use of unauthorised copies can operate to the advantage of sellers of copyrighted material. Such shifting from trial in secondary markets to occasional purchase in authorised markets is likely with software, music and books.

There are also very substantial differences in the characteristics of markets for physical products and markets for digital products. Much copyrighted material – particularly where unauthorised use is likely (music, software, movies) – is today distributed in digital form. There are many methods of protecting digitised material and the distributors of copyrighted movies and music have been successful in lobbying to achieve legislation to make it illegal to un-encrypt such material. In the case of e-books the distributors readily accept the global provisions of copyright, but then distribute material only on a country-by-country basis and steal back the goods they have sold by removing access to them should the innocent purchaser move countries.26

---

25 The $26 m alleged counterfeit goods seized is from para 10 of the NIA. The value of merchandise imports during 2009-10 was calculated from ABS 5368.0 - International Trade in Goods and Services, Australia, Nov 2011, using the download facility to obtain a time series for total goods imports. Total goods imports for 2009-10 were $258,655m. If only consumption goods are included the value was $205,217 but the proportion of alleged counterfeit goods seized remains constant at 0.01%.

26 Private correspondence with amazon.com. This information is not routinely provided to potential purchasers of Kindles. In September 2011 Amazon advised me "If you purchase a book while resident in the UK and then you are in Australia, the book does not disappear but you'll not be able to access the book. Regarding the information not being available on our website: I'll consider this as a feedback and pass the comments to our Kindle investigation team. Customer feedback like yours helps us continue to improve the service we provide, and we're glad you took time to write to us. The Kindle Team will carefully review your comments." As yet Amazon has not provided clearer advice to its customers on this issue of locking away the material they have purchased. Denying access to an e-book has the same effect as stealing it back.
Most unauthorised use of copyrighted digital material is in the secondary market with prices considerably below those in the authorised market. Industry estimates assume a 1-for-1 substitution rate between the authorised and secondary markets which is clearly wrong. The GAO advises a range of potential positive outcomes for digital copyright holders from unauthorised use including increased brand awareness and shifting between secondary and authorised markets as learning effects increase (GAO 2010: 14-15).

The OECD has separately studied unauthorised copies of digital material, but provides no estimates of the volume or value of this trade. For the US economy, the Government Accountability Office (GAO) indicates that, in the absence of reliable data, most estimates are based on assumptions. Industry sources, using very questionable assumptions, estimate substantial losses (e.g. 20% for software). The few available academic studies show that losses are much more modest (e.g. <6% for music). Indeed one study of music downloading showed increased consumer welfare, releasing income for expenditure on other goods and services (Rob and Waldfogel, 2006). The GAO cites one expert as considering that the main impact of counterfeiting is a redistribution of income not any overall economic loss to the nation (GAO, 2010: 28).

From a national interest viewpoint the available research suggests that any infringement problem is rather small and may well involve redistribution from rights-holders to consumers rather than any net economic loss. For Australia the data suggest that the "problem" of enforcement of trademarks and copyright is insignificant.

6. Policy parameters for international negotiations

The recent Senate inquiry into parliament’s role in Australia’s treaty-making processes provides strong evidence that Australia lacks any overall strategic approach to such negotiations. Rather it approaches each separate negotiation with a clean slate and often simply responds to what other parties request (Foreign Affairs Defence and Trade Committee, 2015). There does not appear to be any concern that sovereignty over domestic regulation is traded for very small benefits in GDP growth. A clear recommendation, from the viewpoint of protecting democracy, would be to prohibit any changes to "IPRs" in treaties unless these increase the rights of users of new technology and newly created materials.

The Commission asks "How does Australia formulate its position on IP policy in the context of international agreements?" (Issues Paper, p.27) Throughout the Trans-Pacific Partnership Agreement (TPPA) negotiations the Department of Foreign Affairs and Trade (DFAT) constantly reiterated that its position on "intellectual property" was quite straightforward. If a proposal was consistent with current Australian policy then it would be accepted. DFAT seemed unconcerned that this position could mean tying the hands of all future governments in respect of any proposed reform to any aspect of "IPRs". There was no evidence of any further analysis or information. Nor was any such analysis or evidence provided in respect to the negotiations of AUSFTA.

The Commission also asks "What principles should guide decision making for future international negotiations on IP rights?" (Issues Paper, p.30). The patent system is essentially

---

27 I provided an assessment of the measurement challenges in estimating counterfeit trade and unauthorised use in my submission to JSCOT’s ACTA inquiry, and reproduce that here as Attachment 1.
28 Recent World Bank estimates suggest that the net benefit of the proposed TPPA will be an increase of some one percent in GDP over a period of 15 years (World Bank, 2016).
29 I discuss these issues in more detail in my submission to the 2015 Senate treaty-making process inquiry, see http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Foreign_Affairs_Defence_and_Trade/Treaty-making_process/Submissions (submission 68).
anti-competitive as the benefit conferred on a rights-holder is a form of monopoly. The patent owner has the exclusive control of all commercial exploitation of the patented invention in the country granting the patent. The essence of trade agreements is – or should be – increased competition, as the benefits that flow from trade agreements flow from the increased competition. Patents in particular, but also other related trade restraints such as copyrights, plant variety rights etc. have no place in a treaty whose goal is to increase competition. The sole sound principle is that "IP rights" should not be in such treaties.

Another issue with respect to "IP rights" provisions in treaties is that they are written as old-fashioned heavy-handed regulation. A modern approach to regulation specifies desired outcomes that should be achieved and leaves it to the person or institution implementing the regulation to determine how best to achieve this. This allows for innovation in achieving goals. But the "IP" provisions in preferential "trade" agreements dot every i and cross every t – they even include footnotes dictating just how a particular aspect is to be implemented. While there are parts of TRIPS that have this heavy-handed approach, in general TRIPS operates at a much higher level. But the AUSFTA and the proposed Trans Pacific Partnership Agreement are extremely detailed, leaving no room for each signatory nation to frame the approach that will best achieve agreed goals, given their institutions, culture and laws.
Appendix 1  Issues in measuring counterfeit trade and unauthorised use

Actually measuring the extent of any counterfeiting problem is difficult, as is the case with estimating all illegal activities. The OECD report indicates that despite using a variety of sources the information they gathered falls far short of a robust overall estimate (OECD 2008: 71). While the OECD report is the major source of global estimates for counterfeit trade, it is useful to supplement this with the study of counterfeit markets in the USA published by the GAO. This latter study includes reference to an interesting range of academic studies and also provides clearer detail on the biases in industry estimates of counterfeit products. Most interestingly it discredits three widely-cited estimates of costs of counterfeiting in the USA, indicating that the government agencies to which these estimates are attributed are unable to find the sources for such estimates (GAO 2010: 17-19).

Some industry groups have published estimates of counterfeit trade but their methodologies are rarely clearly spelled out. Some, such as the Business Software Alliance, presume that volumes of goods sold in secondary markets equate with volumes lost in primary markets (GAO 2010: 21), a grossly untenable presumption. Industry lobby group estimates also ignore the benefits to legitimate producers of unauthorised use – in some fields, particularly software, this is considered to be a major means of developing brand loyalty and future upgrade to authorised versions (GAO 2010: 14-15).

The OECD’s estimates of counterfeit goods are based on customs seizures. In an effort to include non-traded consumption of counterfeit goods the OECD reviews estimates from consumer surveys in several economies. In the USA in 2004-05 13 to 14% of respondents acquired downloaded products that might have been unauthorised, the main types of goods being music, movies, software and clothing (OECD 2008: 74). In the UK in 2005 34% advised they had knowingly purchased counterfeit goods (OECD 2008: 75). When considering counterfeit software and digital products, the OECD notes that high levels of use of counterfeit products are found in most developing economies (OECD 2008: 81). This would be consistent with the culture of copying which prevailed before TRIPS and was then an entirely lawful activity, and with the low income levels in these countries. These high reports of illegal activity indicate the extent to which consumers consider these laws are unbalanced and undeserving of serious attention. They confirm academic analyses that copyright systems have become unbalanced, with continual extensions legislated not in the public interest but because of the power of corporate lobbying.

The OECD study is unusual for the OECD in that many of the statements are not well-referenced, including the frequent allegations that there is a positive association between "intellectual property" and economic growth. Throughout the study there is a clear "pro-intellectual property" attitude, exemplified for example in the constant use of the loaded word "pirate" for unauthorised use of copyright and flowing through to listing only negative economic impacts on consumers. It is a matter of simple economics that consumers selecting a more reasonably priced product, and happy with its quality are substantially better off than if they are locked out of high-price/high-quality markets. Under impact on innovation the innovative behaviour of copiers is not noted (despite this having been a major growth path in now rich countries and despite it also involving both process and product improvements and variations). Despite these biases the OECD estimates of "the problem" amount, at a maximum, to less than 2% of world trade.

---

30 In low income countries it is quite difficult to explain to the low income workers involved in making unauthorized copies of, for example music, why their own government should provide monopolies for foreign parties which prevent them from making an income and fulfilling consumer demand that exists only at that price.
The GAO report is more even-handed in the evidence it presents, noting a range of positive economic effects flowing from markets in counterfeit goods. While major benefits clearly flow to consumers, thus releasing disposable income for expenditure on other goods and services, there can also be benefits to the "rights-holding" companies, including increased brand awareness and future sales.

Both industry groups and US government agencies continue to refer to three major estimates of substantial counterfeit losses in the USA. The GAO approached the agencies allegedly responsible for these estimates and found none could be substantiated. One estimate is sourced to a 2002 Federal Bureau of Investigation (FBI) press release (losses of US$200-250b a year) but the FBI has no records of how this estimate was derived and is unable to corroborate the estimate (GAO 2010: 17). A 2002 Customs and Border Protection (CBP) press release has also estimated counterfeit losses at US$200b a year and 780,000 jobs, but the CBP has now advised all staff not to use this estimate and advised the GAO it is of "uncertain origin" (GAO 2010: 18). The Motor and Equipment Manufacturers Association advise an estimate of US$3b a year losses through counterfeit motor vehicle parts, attributed to the Federal Trade Commission (FTC). FTC officials advised the GAO they "were unable to locate any record or source of this estimate within its reports or archives, and officials could not recall the agency ever developing or using this estimate" (GAO 2010: 19).

Both due to the intrinsic difficulties of measuring unlawful activities, and the challenges of providing aggregate estimates when the incidence of counterfeiting appears to vary considerably between product lines, countries and over time, estimates of the size of any problem need to be treated with caution. This is particularly the case where the estimates are provided by interested parties, without clear disclosure of the underlying methodology. From a national interest viewpoint consideration needs to be given to the positive as well as the negative impacts of this counterfeit trade. It should be noted that one major motivator for counterfeit trade is the expectation of high profits. A clear response by "rights-holders" could be to moderate their profit margins, which can be very substantial. This would reduce the incentive for unauthorised use. In the case of digital products one motivation for unauthorised use is to acquire products in formats which can be readily transferred between different equipment (Boldrin and Levine 2008: 35). Again "rights-holders" could reduce the motivation for such unauthorised use by reconsidering their business models and better meeting the needs of their customers.
Bibliography


Court, D., 2013, Shakespeare's fortune: why copyright has failed authors and how it might be reformed, PhD, Crawford School, Australian National University. http://hdl.handle.net/1885/12432


London Economics, 2008, Evaluation of the CAP policy on protected designations of origin (PDO) and protected geographical indications (PGI) Final report


———, 2015b, "Geographic Indications: heritage or terroir?," Presented at 10th Annual Conference of the European Policy for Intellectual Property (EPIP) Association, Parallel Session 4B – Geographical Indications and Regions, 2-3 September 2015, University of Glasgow


World Bank, 2016, Potential Macroeconomic Implications of the Trans-Pacific Partnership.