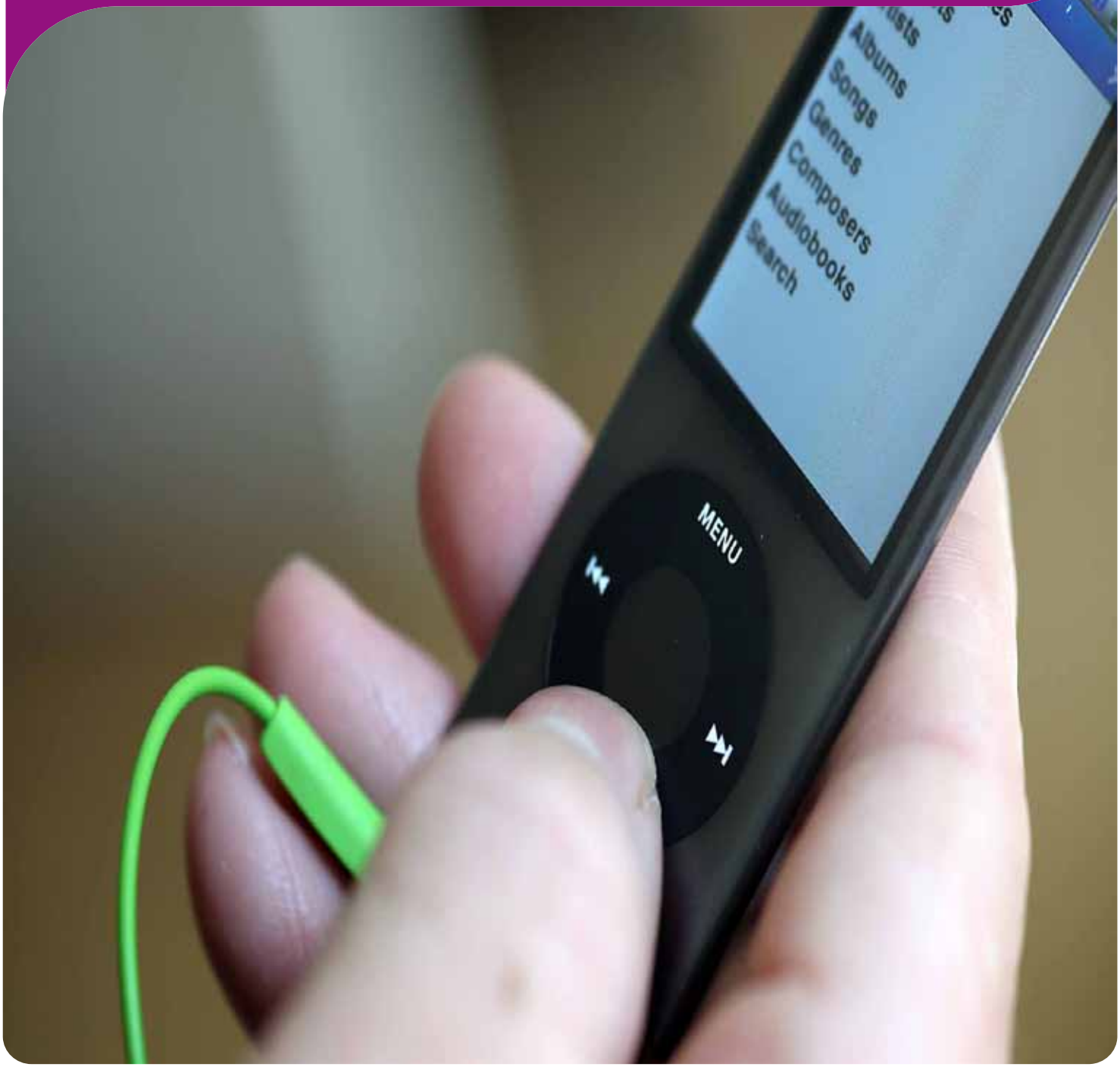
Consumer Focus
Campaigning for a fair deal

The economic impact of consumer copyright exceptions:

A literature review



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Foreword

Consumer Focus is the statutory consumer champion for England, Wales, Scotland and (for postal consumers) Northern Ireland. We operate across the whole of the economy, persuading businesses, public services and policy makers to put consumers at the heart of what they do.

We have been working on copyright related issues for many years through our predecessor organisation, the National Consumer Council. We want to see a digital economy characterised by competitive, dynamic and innovative markets to which consumers have meaningful access and in which they are empowered to make informed choices. We want to see a copyright system that supports this by striking a fair balance between creators, copyright owners and consumers.

We commissioned this independent review of the existing economic literature on the economic impact of consumer copyright exceptions. The review focused on copyright exceptions for consumers for activities such as time-shifting, format-shifting, back-up copies, user-generated content and 'private' or 'domestic' copying and sharing of copyrighted work.

The review did not consider illegal file-sharing or 'piracy' issues.

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The economic impact of consumer copyright exceptions: A literature review

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Mark Rogers, RIP

Mark Rogers died following a long illness in July 2011. Mark's research interests spanned intellectual property, economic growth, productivity and innovation. Mark in particular contributed to the study of copyright, which is a neglected area in intellectual property economics.

This literature review and Mark's economic analysis have substantially shaped Consumer Focus' policy position on copyright exceptions, and we are grateful to have had the opportunity to work with Mark.

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Executive summary

Advances in the technology available to consumers have fundamentally altered the relationship between authors, rights-holders and consumers with regard to copyrighted creative works. The copyright system in the UK is undergoing a gradual process of reform to reflect this new reality.

In 2006, Andrew Gowers, a former editor of the Financial Times, presented a report into the state of intellectual property in the UK. Among his policy recommendations were three proposed changes to the copyright exceptions system which alter the way in which consumers can interact with copyrighted works. Gowers proposed introducing copyright exceptions for:

- Format-shifting, for instance the transfer of a piece of music from a CD to an MP3 player.
- Parody, caricature and pastiche.
- Creative, transformative or derivative works. In our context, this definition includes user-generated content.

Our review examines the existing literature on the possible economic effects of these proposed changes to the copyright exceptions system, specifically whether the introduction of these proposed changes would cause economic damage to rights-holders. Whilst the economic issues surrounding copyright infringement via file-sharing and commercial 'mash-ups' are interesting and important, our review is focused solely on copyright exceptions as they relate to *non-commercial, consumer* activities.

Investigating potential economic damage to rights-holders requires an analysis of how consumer copyright exception could affect the demand for the original creative work. The processes via which consumer copyright exceptions influence the demand curve for original creative work can be complicated. This said, a standard analysis of the demand for creative works must assume that consumers incorporate the benefit of copyright exceptions into their demand. A consumer's decision to purchase is based on the benefits of the product, including – in the case of creative work – the value of any copyright exception. In this sense, it can be argued that a creator automatically extracts value from copyright exceptions, since these directly influence the demand for the original creative work.

In our review, the two most commonly cited ‘economic’ studies into the effects of Private Copying Remuneration (PCR) systems – Econlaw (2007) and Nathan Associates (2006) – do not provide any useful evidence that consumer copyright exceptions cause economic damage to rights-holders, or that a copyright levy is justified on these grounds.

- The Econlaw study incorrectly equates economic damage with consumer value and does not contain a formal discussion of the demand for copyrighted works.

- The Nathan Associates study does not make a necessary distinction between ‘damage to consumers and producers’ and ‘damage to society as a whole’. It likely overstates the economic damage caused by PCR. It also uses estimates for demand elasticities that do not come from formal economic analysis.

The economic evidence that format-shifting, parody and user-generated content cause any kind of economic damage to rights-holders simply does not exist. Arguments that support tighter copyright law, or support PCR systems, tend to confuse economic damage with consumer value. Any future analysis on this issue needs to investigate the conditions under which the proposed consumer copyright exceptions would have any impact on demand for creative work.

1. Introduction

In recent years the interest in copyright has grown substantially as new technologies have changed the way creative work is produced, sold and consumed in our society. These changes have generated shock waves that have affected creators, firms, policymakers, the legal system and, last but not least, consumers. In particular, the new digital technologies have given rise to new opportunities and threats across the economic and social system. The copyright system, which has its origins in the Statute of Anne 1710 and was developed substantially in the 19th century, has come under intense pressure. The ability to copy and disseminate others' creative work at very low cost has given rise to the issues of illegal file sharing and 'piracy'. New consumer electronic devices have given consumers the ability to adapt and create new work, known as user-generated content.

All of these changes have given rise to new issues concerning policy. In the UK the Gowers Review in 2006 put forward 54 recommendations concerned with developing the existing legal and policy framework for intellectual property rights, with a strong focus on copyright. Some of these recommendations concerned copyright exceptions. Within these a small number are directly relevant to consumers: format-shifting, parody and user-generated content.

Consumer Focus commissioned us to provide an independent review of the existing economic literature on these issues. The review was to focus on copyright exceptions for consumers for activities such as time-shifting, format-shifting, back-up copies, user-generated content and 'private' or 'domestic' copying and sharing of copyrighted work. The review should not focus on file-sharing. The last sentence is very important. This review is not intended to consider illegal file-sharing or 'piracy' issues. It was also agreed that the review should focus on studies that were published after 2004 and also any UK evidence.

The structure of this report is as follows. The remainder of this section provides some background on why intellectual property generates difficult issues within economics.

Section 2 considers copyright exceptions, reviewing the legal issues and then linking these with the current debates and the Gowers report. A key issue in these debates is whether consumer-related copyright exceptions cause 'economic damage' to creators, or more specifically the firms that produce and distribute creative work.

Section 3 seeks to determine how one should think about 'economic damage' and the parallel issue of 'consumer value'.

Section 4 looks at the existing literature that provides formal empirical evidence on these issues, which we call the knowledge base. It turns out the knowledge base on these issues is unbelievably small: there is a void of any formal economic analysis. Section 5 clarifies the nature of this void and Section 6 concludes.

1.1. Intellectual property and non-rivalry

The key issue that distinguishes an analysis of copyright (and other forms of intellectual property) is that the products involved can be non-rival. This means that multiple consumers can consume, or use, the product at the same time. With a standard product – cars, food, clothes, etc – where a consumer gets sole use of the product, economic theory tells us that the price paid should reflect the marginal cost of producing the good. For non-rival goods, the price to an additional consumer should be low or zero, since the marginal cost is low or zero. Clearly, when a creator produces music, film, software or other copyrighted products, charging a low or zero price may not generate an economic return. Lack of an economic return may, in many cases, prevent the creation and distribution of the new work – a major loss to society.

Hence, copyright protection is designed to balance out the need for creators to receive a return, and have an incentive to be creative, against the desire to have a low or zero price on non-rival products. This tension is evident across the many debates in copyright.[1]

The balancing act is brought into sharp focus by the debate over making copies of copyrighted material. Making copies, especially in a digital age, can replicate the original work at very low cost. Copying can, therefore, allow greater access by consumers to the work at low cost (a benefit), but runs the risk of reducing returns to the creators (a direct loss to them and likely to reduce new creative work). The economic impact of copying has been of interest to economists for many years (see Liebowitz, 1985), but recent advances in technology have heightened concerns. There is a value to consumers in copying and trying to monetize all activities would create large transactions costs. Copyright therefore allows copying exceptions. These are part of a larger group of exceptions discussed in Section 2.

[1] For overviews of the economics of copyright see, for example, Towse et al (2008), Corrigan and Rogers (2005), Einhorn (2004) or Landes and Posner (2003). For discussions focussed on the economics of 'fair dealing' or 'fair use' see Boyer (2007) and Klein et al (2002).

2. Copyright exceptions

When regarding copyright exceptions of any kind the argument turns on whether the situation can be described as a 'copyright exception' or a 'copyright limitation'. This is a very important point to understand. On a legal reading of the term 'copyright exception', consumers or other agents can use copyrighted material in specified ways without violating copyright. The particular usages fall outside the scope of the copyright.

Copyright limitation works differently. The idea is that the natural scope of copyright includes *any* use of the copyrighted work. On this reading there are no legally permitted copyright exceptions for use of copyrighted material. Any of the acts we have termed copyright exceptions below (time-shifting, format-shifting etc) would be construed as violations of copyright. In this scenario, the authorisation by the rights-holder for any of these acts demands compensation, regardless of any notional economic harm that results from the act. This is the position taken by many collecting societies, this for example from British Music Rights' response to the 2006 EU Stakeholder consultation on Copyright Levies[2]:

> It is erroneous to consider the 'fair compensation' provided for in Article 5(2)(b) of the Copyright Directive as direct compensation for economic harm. It is compensation for the rights-holders' surrendering their exclusive right to authorise the act of private copying. Having said that, we would point out that whilst it is difficult to quantify the harm caused by private copying recent research shows that music on MP3 players mainly originates from private copying. (page 3)

In this report we focus on the issue of 'copyright exception' and an analysis of the economic harm or damage that these may cause. As indicated above, those that argue for 'copyright limitation' are largely uninterested in economic analysis as it pertains to measuring economic damage and they prefer to argue that they should be able to extract the benefit of all the value derived from a copyrighted work.

[2] BMR Response to 2008 EU Stakeholder Consultation on Copyright Levies - Available at: http://circa.europa.eu/Public/irc/markt/markt_consultations/library?l=/copyright_neighbouring/stakeholder_consultation/british_music_rights/_EN_1.0_&a=d

2.1. What are we considering when we refer to copyright exceptions?

Copyright itself exists to protect a work from being reproduced, distributed, communicated to the public, lent, rented out or publically performed without the permission of the owner. Without the permission of the rights-holder, such acts are illegal. There are a limited number of acts that fall under the umbrella of copyright exceptions (i.e. they may be performed without having to obtain the permission of the rights-holder).

Currently, UK law states that acts for which a copyright exception exists include:

- Non-commercial research and private study
- Criticism, review and reporting current events
- Teaching in education establishments
- Not for profit public playing of recorded music
- Helping visually impaired people
- Time-shifting

In addition, permission is not normally needed if a 'less than substantial' part of a copyrighted work is being used. What defines 'less than substantial' has been a matter for the courts to decide and has resulted in some decisions that may be regarded as not entirely consistent across different media. For instance, a US court ruled in 2005 that the sampling of 3 notes (less than 2 seconds) of a guitar solo was copyright infringement[3]. In comparison, whilst there is no set proportion in UK law that constitutes 'less than substantial' when it comes to photocopying a copyrighted book, the 'rule of thumb' is one chapter or 5% of the total (whichever is less).

The Gowers (2006) report lists two purposes for copyright exceptions. The first is the existence of transaction costs. For some usages of copyrighted material e.g. news reporting, it would be prohibitively expensive and time consuming to contact the rights-holder to clear the rights in each instance. The second is equity issues. Copying a text into Braille would be illegal without a copyright exception. Both of these reasons are dealt with under 'fair dealing' legislation. The UK-IPO website carries the following description of fair dealing:

[3] Bridgeport Music, Inc. v. Dimension Films, 410 F.3d 792 (6th Cir. 2005). See also James Boyle's discussion of the case in: Boyle (2008) pp. 149-150.

> In certain circumstances, some works may be used if that use is considered to be 'fair dealing'. There is no strict definition of what this means but it has been **interpreted by the courts** on a number of occasions by looking at the economic impact on the copyright owner of the use. Where the economic impact is not significant, the use may count as fair dealing.[4]

This is the crux of the issue we are addressing. Do the proposed additions to the list of copyright exceptions found in Gowers (format-shifting, parody and user-generated content), as applicable to consumers, have a significant or insignificant economic effect on rights-holders?

UK law on copyright exceptions is bounded by the EU Information Society Directive. Recital 35 of the Directive 2001/29/EC states:

> [I]n cases where right-holders have already received payment in some other form, for instance as part of a licence fee, no specific or separate payment may be due.... In certain situations where the prejudice to the right-holder would be minimal, no obligation for payment may arise.[5]

The argument put forward in the Gowers Report is that format-shifting is a reality, driven by changes in technology and consumer demand to be able to enjoy their music or other copyrighted material on a variety of different platforms. Further, by allowing a clearly defined and limited copyright exception for format-shifting, rights-holders could respond by including any economic cost of the right to copy could be included in the sale price.

2.2. Why this literature review and why now?

Amongst the many recommendations in the Gowers report, three are aimed at reforming UK and EU law with regard to consumer copyright exceptions. The recommendations cover format-shifting, parody and user-generated content. The following section states each of Gowers' recommendations and then discusses the economic issues concerning them.

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[4] http://www.ipo.gov.uk/types/copy/c-other/c-exception/c-exception-review/c-exception-fairdealing.htm

[5] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society – *Official Journal L 167, 22/06/2001 P.0010 – 0019*

Recommendation 8: Introduce a limited private copying exception by 2008 for format-shifting for works published after the date that the law comes into effect. There should be no accompanying levies for consumers. (Gowers, 2006)

Format-shifting is the migration of a piece of copyrighted material from one platform to another. The classic example is the transferring of music from a CD to a computer hard drive or to an MP3 player. Format-shifting has been technically possible (and a reality) since the introduction of blank audio cassettes. Its current relevance is heightened due to the technological advances that have driven the marginal price of making copies towards zero and improved their quality. Today it is possible to 'rip' a music track from a CD and create an MP3 copy that is aurally indistinguishable to the vast majority of music fans.

With the introduction of high-volume MP3 players, consumers can now play music anywhere and some have argued that the general trend of media use is shifting from being centred around particular mediums or platforms, to being centred around content, which can be viewed across platforms.[6]

Format-shifting is often erroneously confused with the issue of 'piracy' or 'copyright infringement' and it is important to make the distinction clear. Copyright infringement via peer-to-peer (P2P) networks is the act of posting copyrighted material online for others to download without permission from, or compensation to, the rights-holder. Much of the material that is available on P2P networks may have undergone an original format-shift from CD to an electronic format, but the illegality arises from the act of sharing with this private copy with other consumers, not from creating the copy in the first instance.[7]

Much of the economic analysis of 'piracy', 'copyright infringement' and file-sharing indicates that it can have both positive and negative impacts on sales of music. 'Pirated' music acts as an imperfect substitute for 'legal' music and reduces demand for CDs and legal digital music. However, research also indicates that file-sharing can act to increase the public exposure of some artists, particularly top-selling acts, increasing their record sales. Cause and effect, and the long-term impact of file-sharing on the incentives to produce artistic works are even harder to disentangle.

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[6] See, for example, Bates (2009).

[7] This last statement is true in the US and in European countries where there is a copyright levy on blank media. At present in the UK, there is no copyright exception for private copying so the original format-shift is illegal as well. (Gowers, 2006. p. 62)

Recommendation 11: Propose that Directive 2001/29/EC be amended to allow for an exception for creative, transformative or derivative works, within the parameters of the Berne Three Step Test. (Gowers, 2006)

The debate surrounding derivative or transformative works has been a lively one in recent years. Historically, an exception in US law allowed the Hip-Hop music genre to develop in the late 1970s and early 1980s via the sampling of older records, mainly soul and funk, to create whole new products and markets. The genre grew from being a local scene in New York in the 1970s to the biggest selling music genre worldwide by 1999. In the US, successive court cases have however have increased the restrictions on what can legally be sampled[8], to the extent that sampling has now faded from the genre, or is reserved for established artists who can afford to license their samples.

The current importance of the issue of user-generated content is due to advances in technology that have dramatically reduced the cost of artistic creation and the distribution of works. This has occurred to such an extent that work previously requiring a professional set-up can now be produced at home with computer equipment available to many households.

Tools such as Youtube.com, Wikipedia.org and Flickr.com allow for the distribution of user-generated content to a wide audience. A specific sub-genre of user-generated content can be regarded as derivative or transformative works.

Examples given by the 2009 The Way Ahead report include: wedding videos containing music and photographs, remixes of pieces of music or 'mash-ups' of music, images and lyrics.

The ease with which consumers can transform copyrighted works into new derivative or transformative works has given birth to a new genre of work referred to as the 'Remix Culture'. This has been accompanied by an explosion in the quantity of derivative works available through the internet.

[8] For example: Grand Upright Music, Ltd v. Warner Bros. Records Inc., 780 F.Supp. 182 (S.D.N.Y. 1991). Rapper Biz Markie was sanctioned by a judge for sampling a section of Gilbert O'Sullivan's song, 'Alone Again'.

The problem from the perspectives of rights-holders is that of receiving remuneration for the use of their works. In a manner similar to that of format-shifting, the argument runs that use of the original work in the derivative work harms the sales of the original, reduces the incentive for further creation or that rights-holders have an inherent claim on the consumer value derived from user-generated content.

Recommendation 12: Create an exception to copyright for the purpose of caricature, parody or pastiche by 2008. (Gowers, 2006)

There is currently no exception in UK law for the purpose of parody, caricature or pastiche. The economic issues involved with these types of transformative works are similar to those surrounding user-generated content. Three possible economic effects of a parody on an original work are:

1. Lost sales due to confusion with the original.

2. Increased sales due to new publicity and awareness of the original.

3. Increased / lost sales due to reputational effects on the original.

Given that parodical works self-consciously reference the original work, confusion is unlikely. This issue has been addressed in by the US Supreme Court in *Campbell v. Acuff – Rose Music, Inc*[9]*.* The court ruled that 2Live Crew's parody of Roy Orbison's 'Pretty Woman' did not impact the commercial success or viability of the original given its difference with original and its differing context and audience.

What is certainly true is that parodical works can increase the sales of original works. In 2002, the Tony Christie song 'Is This The Way to Amarillo' was sung in a comedic style by two characters in a popular TV series. When the 1971 recording was reissued in 2005 due to public demand, it was the biggest selling single of that year.

The creation of an exception to copyright for the purposes of parody would not have the effect of legitimising reputational damage to the rights-holders of original work. Their moral rights to be identified as owners of the work and to use defamation laws to prevent offensive or damaging works would be unaffected.

[9] http://supreme.justia.com/us/510/569/case.html

3. Consumer value vs. economic damage

The previous section outlined that a critical aspect in the legal debate surrounding copyright exceptions was whether the 'economic impact [on the rights-holder] is not significant' or the 'prejudice to the right-holder would be minimal'. These statements refer to the potential loss in revenue or profits to the creators or agents that own the copyright.[10] Empirical estimates of these potential losses are hard to come by, something which we consider in detail below. This section provides a conceptual overview of economic damage, as well as consumer value.

3.1. Economic damage to agents and creators

Existing economic analysis looking specifically at economic damage from consumer copyright exceptions is limited. As noted above, copyright exceptions include those for news reporting, research and education. Each of these raise different issues, hence any review of fair dealing or fair use rightly devotes time to them. Similarly, much economic analysis looks at various aspects of copyright together with fair dealing, often leading to a long and detailed treatment of the role of markets, transaction costs, transformative works and alike (see Boyer, 2007). Einhorn (2004, Chapter 2) looks solely at 'Fair Use, Markets and Economic Analysis' and does discuss the notion of 'market harm' (which is US copyright legislative term). Einhorn states 'the market harm test is very subjective' and 'a defendant must prove that there is no market for either unit sales or use-licensing of a particular work' (page 9). The remaining discussion then considers commercial cases where the defendant has tried to use the fair use defence. For our purposes this is not of direct relevance since we are dealing solely with the possible damage caused by consumers only. The importance of this is due to the fact that economists generally assume that consumers are – rather obviously – the final consumers of the products they buy.

Another part of the existing literature considers the economics of copying (see Towse, 2008, for a review). This is of relevance, since a consumer format-shifting can be considered copying. However, most of this literature is concerned with unauthorised, or illegal, copying or filesharing.

[10] In general it is important to distinguish between revenue and profits, since the latter is defined as revenue less costs. However, in the case of many copyrighted products the additional (or marginal) costs can be very low, hence changes in revenues and profits may be similar.

This is clearly a very important issue, but is not the focus here. Specifically, the main problem with 'filesharing' is that it implies sharing across different consumers, whereas legal format-shifting only involves one consumer. As we shall see this makes an important difference in the analysis.

Consider the case of the sale of a new work, whether music, film, software or other creative work. The economic damage to creators or agents that own the copyright from an increase in copyright exceptions must come from:

a) a reduction in revenue of the specific work, either now or in the future and, if this is positive,
b) a 'dynamic effect' whereby the lost sales now affect the ability to generate new work in the future and thereby revenues in the future.

It is clear that only if a) occurs that b) can have validity. Also, criterion a) is solely concerned with how current and future revenue is influenced by copyright exceptions.

Some commentators define an additional type of 'economic damage' that relates to previous sales of copyrighted goods (e.g. Econlaw, 2007). The argument here is that improvements in technology (e.g. the iPod) allow consumers to gain more value from their existing purchases of music, films, etc. In our view, labelling this as 'economic damage' is a shift away from normal economic analysis and the normal functioning of markets. Whilst retrospective compensation is commonplace in the copyright system, for example with retrospective term extensions, the market system does not generally provide for retrospective compensation based on how technology has enabled new uses.[11] Nevertheless, if it is agreed that the sale of a copyrighted product is fundamentally different from other products, this retrospective argument should be considered. Note, however, that the economic damage should relate to the loss of revenue in the past, and not the consumer value generated, since these are fundamentally different concepts (see below).

[11] One can think of many examples. The manufacturers of sofas do not claim a share of consumers' increased value, on past sofa purchases, derived from plasma TVs. The manufacturers of cutlery do not claim a share of consumers' increased value from microwavable dinners. Car manufacturers do not claim a share of consumers' increased value from satellite navigation devices.

Some commentators also note that increasing copyright exceptions may not have only detrimental effects. For example, it is sometimes suggested that format-shifting may allow others to hear, see or play the work. This may, in turn, generate more revenue either now or in the future. Similarly, the wider exposure that format-shifting, parody or user-generated content creates may also increase sales. Increased sales can come from either primary sales of the work, or so-called secondary sales (such as tickets for live concerns, merchandise, etc).[12] Lastly, a balanced view of improvements in technology must allow for the possibility that new technologies could increase current sales of creative work.

3.2. Consumer value

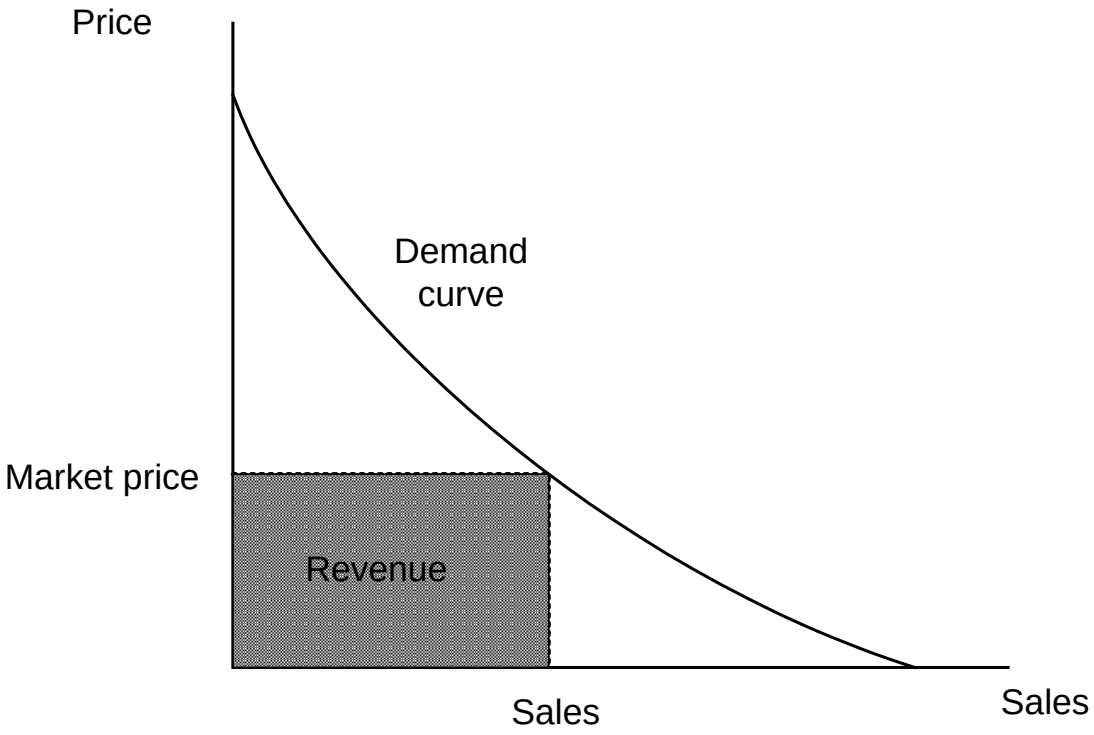
In general, when a consumer buys a CD, or any product, we assume they include in their valuation an estimate of the entire benefits derived from the CD. This includes listening to the CD now, next week and next year, as well as listening to it with friends and family, format-shifting (if legal) and benefits from new technologies in the future.

At any point in time, any specific product will receive a wide range of 'valuations', as consumers are heterogeneous. Economists summarise these valuations into a demand curve, as shown in Figure 1, for a specific product. The market price is determined by a variety of factors, including the competition in the market for the specific product (e.g. the price of similar music or software). The revenue accruing to the agent is shaded and a proportion of this will be forwarded to the creator.

A key result of the standard analysis of demand is that the value of copyright exceptions will be embedded into a demand curve. Hence, there is an argument that agents and creators automatically extract value from copyright exceptions. Similarly, if the extent of copyright exceptions is changed then the demand curve will automatically shift to reflect these. It will shift outwards if copyright exceptions are increased (as consumers are assumed to gain, hence their valuations increase), and shift inwards if exceptions are reduced.

[12] Economists often refer to these effects as 'sampling' or 'exposure' (see Peitz and Waelbrock, 2004).

Figure 1 Demand curve

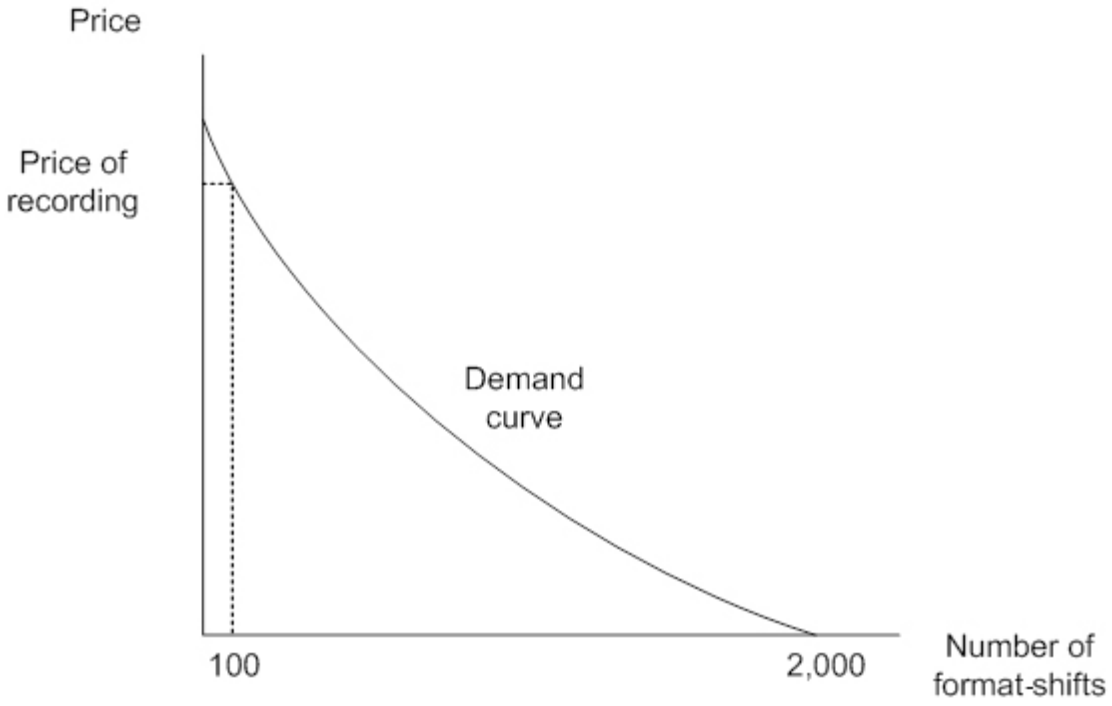


The basic idea that the initial purchase of copyrighted work will embody all the benefits is linked to, but is distinct from, the economic concept of 'indirect appropriability' with respect to intellectual property. In economic papers, such as Leibowitz (1985) and Boldrin and Levine (2002, 2004), there is an argument that the 'first sale' of a work (e.g. book, song, etc) can embody the entire subsequent flow of revenues from copying and re-selling that work. This is a much stronger argument, which can be used to argue against strong intellectual property rights. In short, the 'first sale' argument assumes that the initial buyer has a good ability to on-sell the work (hence the first sale price is high and generates a good return to agents and creators).

In the case of copyright exceptions all that is being assumed is that the consumer understands the benefits they will gain from the purchase. It may be that some of these benefits are uncertain – will their family like the film, or how future technology will expand benefits – but we assume that the consumer is best placed to make these valuations. It may be posited that the prevalence of private copying in the UK, despite its illegality, suggests that consumers assume that paying the first sale price allows them to format-shift.

To explore these issues consider a specific case of extending copyright exceptions to include format-shifting. Further, let us consider only the music market. Such a change may reduce the purchases of new music, as previously some consumers purchased multiple copies of the same music to play on different formats (e.g. CD player and iPod). The extent of any possible reductions in purchases is contested, but an economic evaluation should impartially assess these. Any such reductions can be referred to as economic impact, or damage, on the rights-holder leading to a) and b) above, i.e. a reduction in revenue and subsequent reduction in incentive to generate new work. It is also important to be clear that the economic benefit to consumers of the potential change is not equal to the economic damage. In general, the economic benefit to consumers will be greater than the economic damage.

To illustrate these issues consider the following thought experiment. Suppose there are 10,000 consumers of music who buy a recording per year. Let there be two formats and each recording costs £10 in either format. Currently, format shifting is prohibited hence a consumer has to buy two copies if they want to use both formats. This relatively high price of using both formats suggests relatively few consumers will buy an extra copy. Suppose only 100 consumers buy two copies of a recording. If a format-shifting exception is introduced, a first assessment of the economic damage is the loss of 100 sales (revenue loss = 100 x 10 = 1,000), although this needs further analysis. The gain to consumers is likely to be much more than this since many more will use format-shifting if there is a zero price. Let us assume 2,000 consumers now use format-shifting. The total benefit to consumers is the overall benefit to these consumers. This must be greater than the economic damage, since the original 100 consumers no longer pay and a further 1,900 customers now also benefit. Economists measure the overall benefit to consumers (consumer surplus) by the area under a demand curve. Figure 2 illustrates the potential gain in consumer surplus in this numerical example. The demand curve in Figure 2 relates to format-shifting not the original purchases of the music.



We could assume that the revenue loss to agents is 10 x 100 = 1,000, but this is only an approximation since it implicitly assumes that the demand for recordings stays constant. In fact, the 100 customers who previously bought two copies now have additional money to spend and may increase demand for recordings. More importantly, there are now 2,000 purchasers of music that gain additional value from every recording they buy, which may increase their purchases.

The above thought experiment points to a number of key issues in assessing the impact of changes in copyright exceptions:

- A change in copyright exceptions will generate consumer benefits in the 'secondary market' (e.g. the market for format-shifting, or back-ups). The total benefits generated may be very large relative to any potential economic damage to agents and creators.
- The overall economic damage to agents and creators (e.g. their loss in revenue) depends on how the demand for their work changes. Since increasing copyright exceptions may increase demand (and decreasing copyright exceptions may decrease demand), conceptually it is not clear whether economic damage will be caused at all. However, how demand changes in specific cases should be the subject of empirical study.

4. The existing knowledge base

The existing knowledge base with regards to both existing and proposed consumer copyright exceptions is noticeably small. This is perhaps understandable given that many of the arguments against the expansion copyright exceptions, or against copyright exceptions without a compensation scheme, focus on either consumer value or on a legalistic conception of copyright limitation.[13]

As an example of the lack of economic evidence, the 2008 EU Stakeholder consultation asked the followed the question:

> 6) Are you aware of further economic studies on the topics discussed in the Document?

Of the 95 respondents who replied in English, 68 did not complete this question or answered in the negative. Those that did respond tended to point to the same two studies: EconLaw (2007) and Nathan Associates (2006). These are reviewed below. No respondent to the UK-IPO 2008 The Way Ahead Issues Paper cited any study in their response to the first two questions.

4.1. Format-shifting

The economic evidence on format-shifting tends to be associated with what are often called 'levy systems' or 'private copying remuneration' (PCR). Two recent studies are widely cited as providing empirical analyses.

The EconLaw study

The Econlaw (2007) study sets out to analyse 'the economic rationale and effects of the private copy remuneration (or PCR) system'. There is no specific reference in this statement to providing empirical evidence, but the report presents a large number of tables and charts, hence this can be inferred.

[13] MPA Response to 2006 EU Stakeholder Consultation on Copyright Levies – Available at: http://circa.europa.eu/Public/irc/markt/markt_consultations/library?l=/copyright_neighbouring/stakeholder_consultation/picture_association/_EN_1.0_&a=d

The reference to PCR implies that illegal copying is not part of the study.[14] The report focuses solely on the music industry, but claims that the conclusions are 'applicable to a significant extent' to all intellectual property rightsprotected works. (page 3)

Of particular interest here is any empirical evidence on the extent of economic damage to creators caused by copyright exceptions. An initial statement in the study is as follows:

> This private copying exception substantially increases consumers' freedom to use intellectual property rights protected goods. Nonetheless, this non-consented use of intellectual property rights protected works cannot remain uncompensated. (Econlaw, 2007, p.6)

This assumes that value is created and that the copyright (or intellectual property rights) holders must be compensated. As discussed in Section 3, this has the potential to confuse the value to consumers with economic damage. The Econlaw study develops this argument by stating:

> The private copying exception is a legal instrument that generates increased consumer value. This limit on the exclusivity of intellectual property rights increases consumers' freedom of use of the intellectual works. From an economic perspective, this increased freedom automatically translates into a higher valuation of the intellectual property rights protected goods – which gets expanded whenever technological or other developments allow new potential uses of the intellectual property rights protected goods. (Econlaw, 2007, page 7)

This again focuses on consumer value, not economic damage, but also introduces the idea that technological developments may increase the value of existing intellectual property rights protected goods. Again as discussed in Section 3, the argument that any such increased value should automatically generate a payment is non-standard. The claim that copyright owners should benefit from technological developments is made clear at a number of points in the Econlaw study. Specifically they state:

[14] This is made clearer on p.30 of the study where it states '[even if] the reduction of music industry revenues cannot be fully attributed to the intensification of private copying in the digital environment (but also to illegal copying or piracy) and, therefore, PCR collection should be lower than the reduction in music revenues'.

‘In sum, the digital environment justifies an enlargement of the PCR system’. (page 7)

The Econlaw study consistently assumes that any increased value to the consumer implies compensation to the copyright owner. For example, it states:

> ‘If the private copying exception was not accompanied by the corresponding PCR, users of intellectual property rights goods would be unfairly profiting at the expense of creators, who would be expropriated in the same proportion’. (page 21)

This not only assumes that the benefits of consumers is proportional to the losses of the creators, but also implies that consumers are ‘unfairly profiting’. It is important to recall that the discussion here concerns a private copying exception, not illegal copying, hence this is non-standard to say consumers are unfairly profiting.[15]

The Econlaw study has an extensive discussion of the decrease in revenues to the music industry in many major economies over the 2002 to 2005. They find that in Western Europe music revenues declined by 17% over this period (or €2bn). They also devote much attention to describing the rapid growth in the consumer electronics industry over the same period. The relevance of this is that they claim consumer electronic devices and copyrighted material are (economic) complements.[16]

The Econlaw study does make a statement relating to economic damage on page 30. This says:

> Given that PCR’s aim is to compensate right-holders for the reduction in revenues derived from private copying activities, a properly functioning PCR system ought to compensate for most of these losses of the music industry. (page 30)

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[15] For example, if someone buys a newspaper for £1, and manage to get £20 of ‘value’ or ‘benefit’ from it, we do not normally say they unfairly profited, since the ‘unfairness’ implied by such transactions in a market economy is to be expected and ‘profits’ implies the consumer is a firm.

[16] Economic complements are defined as the case when the demand for both goods is positively linked. A classic example is burgers and ‘burger buns’. It implies when the price of one declines, the demand for the other increases.

Although it is not entirely clear what ‘these losses’ refers to, the subsequent paragraphs imply that the reduction in sales of €2bn (2002 to 2005) is the amount lost. Hence the report assumes that the economic damage from private copying activities equals the fall in music sales.

The study does mention that other factors could have caused some of the reductions – they mention illegal activity, regulatory, legislative and evolutionary factors – but there is no attempt to quantify these. They then note that the increase in PCRs over 2002 to 2005 was 4% of the lost revenues. The major limitations with the Econlaw study are:

1) It assumes that the amount of compensation to creators should be proportional to the consumer value generated. This is simplistic. A more formal economic analysis of the changes in demand for creative work is required in order to ascertain ‘compensation’ or ‘economic damage’.
2) The study contains no formal economic analysis regarding changes in demand. The study simply assumes that the reduction in music sales over the 2002 to 2005 period is caused by private copying activities.
3) In a comparative section (6.1-6.4, pp. 55-71), the report compares the current PCR system with some alternatives on the fulfilment of four criteria:

    a) That remuneration should be a function of social value of works.
    b) Costs of the system should be minimised.
    c) Who copies more pays more.
    d) Spillovers on the economy should be minimised.

In is not clear however that the PCR system meets the criteria set down by the Econlaw study.

a) As discussed in Section 3.2, the value of private copying is embedded in the demand for copyrighted work so a levy on consumer electronics is not necessary to equate price with demand.

b) It is incorrect to say, as the report does, that ‘the purchase of the devices and/or carriers subject to PCR triggers the payment of a certain amount. The rule is easy to apply and generates few information and transaction costs.’ (page 56). Copyright levies generate a significant deadweight loss in the transaction and administration costs associated with collecting societies, copyright tribunals and the like.

In addition if, as the report seems to support, the law is made more complex to differentiate levy levels by device or storage capacity these costs will only increase.[17]

c) It is not clear that there is a strong enough connection between the amount of storage on devices that allow for repeated copying and the incidence of copying to support a statement such as 'The PCR system also complies with the principle that who copies more pays more' (page 57). A consumer with a 1GB MP3 player may fill it with different set of music each week, while a consumer with a 40GB device may fill it up once only.

d) The spillovers from levies are significant in effect on both the intellectual property rights and consumer electronics (CE) industries (see following discussion of Nathan Associates study). They are also not minimised given the irrelevance of levies in securing criterion a).

Nathan Associates study

The Nathan Associates Study considers the effects of levies in the market for consumer electronic devices (e.g. MP3 players, mobile phones, PCs) and blank media (e.g. blank CDs, DVDs, flash memory). Although this is not directly related to the issue of damage to rights-holders, it is important in understanding the impacts of levies.

When a levy (or tax) is imposed, the price in that market rises, and hence the quantity sold falls. These changes imply that a) consumers are made worse off and b) the producers of electronic devices lose profits. The Nathan Associates study analyses what would happen to prices and quantities (of consumer products) if levies were removed. In order to do this one needs to be able to quantify how the quantity sold responds to a fall in prices. Economists use the concept of 'price elasticity of demand' to quantify such responses.[18] The study provides a table specifying the elasticities used in their study (their Table 5). Since the elasticities used can dramatically change the outcomes of their study it is better that these come from formal economic studies. They use elasticity data from three different sources, only one of which is an academic article, although this is unpublished (Brynjolfsson, 1994).

[17] Towse (2008)
[18] The price elasticity of demand is the percentage change in demand for a one percent change in price. Hence it is simply a measure of responsiveness, although expressed in percent.

The report presents a case study for sales of MP3 players in France. It finds that the French levy system reduces sales of MP3 players by 11.7%. They perform similar analysis on effects of levy system on market for online music and ringtones. This shows a fall in MP3 sales by 11.7% would result in €217 million of lost online music sales in Western Europe and America. This is based on the idea that music and consumer electronic devices are complements (something also noted in the Econlaw study). They also find that a fall in mobile phone sales by 3.7% (caused by levies) would result in €30 million of lost ringtone sales in Western Europe and America.

The calculations for changes in prices and quantities can then be used to perform a series of (relatively) standard consumer and producer surplus analyses on the effect of the levy system. For France, they estimate that the levy system on MP3 players imposes a 'cost' of €155.9 million (the implication is that this is each year).

The major limitations with the Nathan Associations study are:

1) The majority of demand elasticities that they use do not come from formal economic analysis. While this may be due to unavailability of such studies, especially for new consumer goods, it may introduce bias.
2) The report does not make clear that the 'losses to consumers and producers' are not the same as 'losses to society as a whole'. Part of the losses to consumers are a gain to creators (i.e. the levy transfers money from consumers to creators). From an economic viewpoint this is a net transfer and not a loss to society. Similarly, they report the losses to the producers of electronic devices without comment. From a wider societal perspective, as consumer electronics firms produce less, more resources are available to other producers. Hence, the losses to producers of consumer electronics are much greater than the losses to society. These two issues are likely to cause a substantial overestimate of the economic damage caused.

Other economic evidence on levies

These two studies discussed above are the most highly cited recent reports. There appear to be no journal publications that focus on levies and economic damage. While one might expect some economic evidence to have been accumulated by authorities in countries that impose levies, this appears to be confidential or unavailable.

To be clear, there are a great many 'statements' on the issue of the role of levies, and some of these may include 'numbers', but these are not considered economic analysis or evidence. For example, there were many responses to the EU 2006, EU 2008 and UK 2008 consultations, and some of these expressed opinions about, and some data related, to the role of levies. However, from our reading of these responses there are no serious attempts to quantify economic damage.

In our investigations into the levy systems in other countries, we contacted experts in intellectual property law including Rufus Pollock (UK), Kimberlee Weatherall[19] (Australia) and Jeremy de Beer[20] (Canada). They were able to provide us some useful information[21,22,23,24] into the levy regimes in their countries, but also confirmed our belief that levies worldwide are set mostly without any reference to economic analysis of harm or damage.

In addition, we investigated the websites of a number of European collecting societies. Representative are those of the Finnish collection agency (Hyvitysmaksu[25]) and the Dutch collection society (Stichting de Thuiskopie[26]). Hyvitysmaksu provides a link to the Econlaw study, statistics showing the volume of imported products subject to PCR, and another short piece of research detailing the prevalence of copying onto mobile phones. Stichting de Thuiskopie provides only an international survey[27] of the levels of various European country levies. Neither of these two, nor any others we investigated, gave URL links to, or provided directly, any data concerning economic damage.

To be clear, there are various papers related to levies which provide data and numbers such as CLRA (2006), which states that between 2001 and 2006, levy revenue increased from €11 million to €73 million, whilst over the same period, private copying fell by 30% (video) and 40% (music). However, our assessment is that none of these papers address the highly specific issue of *economic damage to rights-holders caused by current or proposed consumer format-shifting copyright exceptions*, nor to do they contain data that can be used for that purpose. Based on this, we are forced to conclude that no such assessment exists.

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[19] http://weatherall.blogspot.com/
[20] http://www.jeremydebeer.ca/
[21] Weatherall (2005)
[22] Australian Copyright Council (2001)
[23] Australian Mechanical Copyright Owners Society & Screenrights (2001)
[24] Copyright Board of Canada (1999)
[25] http://www.hyvitysmaksu.fi/fin/index_en.html
[26] http://www.thuiskopie.nl/nl?port=1053522455227455044
[27] http://bit.ly/ZlSYb5

4.2. Parody

The economic issues surrounding parody, as related to consumer copyright exceptions, are similar to those discussed in Section 3. Economic damage is caused if parody influences the demand curve for the rights-holder's work. In general, the existence of more parody could both decrease demand (e.g. by influencing consumers' views on the value of the original work) or increase demand (e.g. by increasing the awareness of consumers to the original work and hence acting as 'advertising'). The consumer benefits from parody can be thought of as being embodied in a 'demand curve for parody'. The total value of consumers' benefits (or consumer surplus) from parody may be very large and, in general, this will have no direct association with the possible economic damage.

Although the economic issues are sometimes discussed in the literature, there seems to be an absence of any economic evidence on the above effects. It also seems to be the case that this proposed exception is less controversial in the industry than format-shifting. None of the responses to the 2008 EU Stakeholder Consultation on Copyright Levies made any reference to parody. In the summary of responses to the 2008 UK-IPO consultation, 'Taking Forward the Gowers Review of Intellectual Property: Proposed Changes to Copyright Exceptions' the report notes that approximately half of the 63 respondents who commented on the proposed exception for parody objected to it, citing potential financial and reputational damage to creators and rights-holders. However, none of these responses were available so it is not possible to assess whether any economic assessment on the extent of any economic damage has in fact taken place. Though it seems unlikely given the general dearth of economic analysis relating to other areas of copyright.

4.3. User-generated content

There is a large amount of literature on the economic, social and legal consequences of the recent growth in user-generated content. To generalise, the majority of the literature focuses on the vast amount of potential economic value that is embodied within, or could be harnessed from, user-generated content. For an interesting discussion of the importance of the vast creativity possible from the open source software and mash-up music scenes see Lessig (2008, especially pp. 76-83). Boyle (2008) also deals with this issue which he terms 'failed sharing' – sharing that never takes place because the law prevents it. What is problematic from the point of view of this review is that the literature mostly takes for granted that the *creation* of user-generated content is synonymous with its *distribution* via internet tools such as Youtube.com or Flickr.com.

Gowers' Recommendation 11 is more modest in that it proposes that derivative or transformative works be excepted on the basis that they conform to the Berne Three-Step Test[28], which would exclude any commercial use, including posting on a website that generates advertising revenue. This point is reiterated in The Way Ahead (page 49) report which imagines what a personal, non-commercial copyright exception might look like:

> What might a personal, non-commercial use exception cover? The scope would be decided in Europe; possibilities include:
>
> - creating mash-ups of sound and/or images for personal use, such as sampled music or putting a sound-track to family photos;
> - format-shifting from CDs to MP3 on computer, phone or player
> - sharing mash-ups and photos with friends and family
>
> Commercial use not covered by the exception might include a DJ playing his or her mashed up tunes in the course of paid employment or someone obtaining advertising revenue through putting works on the web. 'Personal use' implies that public performance or extensive sharing of works would fall outside the exception, as would use by third sector organisations or businesses.

In this definitional clarification of scope, the economic aspects of non-commercial user-generated content are much like those of format-shifting and parody. If user-generated content negatively influences the demand curve for the rights-holder's work, by acting as a substitute good or via reputational effects, economic damage occurs. No evidence was brought forward in any of the EU or UK consultations to suggest that this effect is real or significant, neither do any academic articles seem to address this issue.

[28] The Berne Three-Step Test outlines the maximum extent of exceptions to copyright. Under Article 13 of TRIPS, signatories such as the UK agree to 'confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with the normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the rights-holder'.

5. Gap analysis

With regards to evidence of the economic effects of consumer copyright exceptions, there are not so much gaps in the literature as a complete void. This said, there are a number of basic comments about the literature:

1) In the case of economic damage caused by consumer-related copyright exceptions, economic theory suggests that the benefit consumers derive from any copyright exceptions will be incorporated automatically into the demand for the original creative work.
   Consumers will recognise that buying the original entitles them to use the product in various ways and hence their demand decision will reflect this. This is the best starting point for any economic analysis. It indicates that extending copyright exceptions may well increase demand for creative work. The implications of this are quite subtle. For example, if consumers already (wrongly) believe that they have the right to format-shift, the value they gain from this is already embedded in the demand for the original product. Altering the law to allow format-shifting will, therefore, have little effect. However, the fact that copyright exceptions are, in the above sense, already reflected in the demand for creative work does not mean there can be no economic damage (i.e. lost sales). For example in the case of format-shifting, when this is prohibited some consumers may buy multiple copies. When format-shifting is made legal these consumers do not buy multiple copies. However, legal format-shifting will cause many other consumers to increase their demand for creative work. The overall outcome in terms of sales depends on the net result of these two factors. More formally, changes in copyright exceptions will tend to alter the position and elasticity of the demand curve for original creative work. Conceptually, there is no reason to think this should cause economic damage.

2) The previous point suggests a need to understand the demand for creative work. While there is some analysis of demand elasticities, the economic analysis of this seems to be pitifully low. Understanding the economic effects – including possible economic damage – must be based on such analysis. Without this, any empirical 'evidence' is likely to be highly speculative, as indicated by the Econlaw (2007) study.

6. Conclusions

This review has examined the existing literature on the possible economic effects of changes to consumer copyright exceptions. The specific interest is whether the proposed changes in Gowers (2006) would cause economic damage to rights-holders. This review does not consider the economic issues surrounding *commercial* copyright infringement via file-sharing and commercial 'mash-ups'.

This review has attempted to assess the current evidence that format-shifting, parodies and user-generated content causes economic damage to rights-holders via lost sales from substitution effects (or in the case of parody via lost sales from substitution and reputational effects). We have failed to find any evidence to that effect. The two studies that we reviewed in depth, Econlaw (2007) and Nathan Associates (2006) only indirectly address this specific issue and do not constitute evidence of economic damage to rights-holders from the proposed consumer copyright exceptions.

Many countries have now introduced a levy on blank media and digital storage hardware. The main stated rationale behind this is to provide 'fair compensation'[29] to rights-holders for the activities of consumers. We are unable to find any evidence of economic analyses of damage to rights-holders being used to set the level of 'fair compensation' by bodies such as copyright tribunals (which set the levels of copyright levies) or collecting societies (which administer their collection and distribution).

As our discussion of economic damage and consumer value makes clear, these are separate concepts. It is not appropriate to claim that increased consumer value derived from the interaction of copyrighted works and new technology is damaging either to artists now, or decreases their incentive to supply creative works. Basic economic concepts suggest that copyright exceptions lead to an increase in consumer value which is significantly greater than the economic damage to rights-holders in the case of format-shifting.

[29] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society – *Official Journal L 167, 22/06/2001 P.0010 – 0019.* Recital (35) states that: 'In certain cases of exceptions or limitations, right-holders should receive **fair compensation** to compensate them adequately for the use made of their protected works or other subject-matter. When determining the form, **detailed arrangements and possible level of such fair compensation, account should be taken of the particular circumstances of each case**'. Emphasis added.

Finally, it is clear that there is a gaping void in the current literature on the economic damage caused by consumer copyright exceptions. Until such time as new evidence is produced concerning any of the possible effects mentioned in this review, our view is that the introduction of the three new consumer exceptions proposed by Gowers would cause a) little or no damage to rights-holders and hence would not alter incentives create and b) substantial would result in consumers deriving increased economic value from copyrighted works.

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