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Agenda

Advancing economics in business

Out of tune: is there an economic case for copyright levies?

Copyright levies, charged on sales of hardware and media that can be used for private copying, have been under scrutiny for some time. A recent Oxera report for Nokia explores the economic rationale for copyright levies and presents the main findings of a quantitative analysis of their economic effects. Are there other, economically more efficient ways to remunerate the creative community?

The way that people obtain and consume music has changed rapidly in recent years, and it is still evolving. One important development is that we now have the ability to listen to and transfer our music collections onto a variety of devices, ranging from PCs to portable MP3 players and mobile handsets.

There have been long-standing policy and theoretical debates on how rights holders can obtain commercial benefit when their music is acquired or consumed by others. One mechanism for transferring payments to rights holders (via collecting societies) has come under particular scrutiny in recent years: namely, copyright levies. Instead of being charged directly to end-consumers of the music (or, similarly, audiovisual or printed content), copyright levies are charged on the hardware and media that can be used for the private copying of music, including MP3 players, blank CDs, and mobile phones.

The copyright levy system has a material financial impact. Levies that represent as much as 5–10% of the retail price of an electronic device are not unusual in some countries. As well as the collected levies, there are several claims for levies, which are the subject of legal disputes. Indeed, there is also pressure from some collecting societies to apply copyright levies to newer devices with music-playing facilities, such as tablets (eg, Apple's iPad).

To contribute to the policy debate, Nokia, a hardware manufacturer also active in the distribution of digital music, commissioned Oxera to provide economic evidence on the impact of copyright levies. The report sheds light on the following central questions.

- What are the welfare effects of copyright levies on the relevant market participants in the EU, including consumers, device manufacturers and rights holders?
- How does the copyright levy system affect dynamic competition in terms of the impact on innovation and creative output?
- Are there other, economically more efficient, mechanisms available to remunerate rights holders?

The legal basis for copyright levies (as embedded in the EU Copyright Directive 2001/29/EC) is that rights holders may be 'compensated' for the 'harm' suffered as a result of 'private copying'—ie, copying unlicensed content, as permitted by national law. There is 'harm' to rights holders only if copying replaces a music purchase that would otherwise have been made. It could therefore be argued that a copyright levy could be warranted if the first purchase of a piece of copyright content does not provide sufficient compensation for the rights holder, due to the consumer not paying for any additional copies despite having some willingness to pay. An analogy could be that copying is a form of 'pollution', whose negative externalities can be addressed by a tax.[1]

From an economic perspective, the ability to make private (legal) copies enhances the value proposition of the offering to the consumer, and is thereby analogous to an improvement in the quality of the product. Thus, rather than causing 'harm', new platforms of music distribution provide scope for enhanced value propositions, and, as in any other

This article is based on Oxera (2011), 'Is there a Case for Copyright Levies? An Economic Impact Analysis', prepared for Nokia, April, available at www.oxera.com.

market, this could be exploited through the compensation (price) generated from music content and enhanced distribution.

While the legal 'harm'-based rationale for copyright levies may have been suitable in the analogue age (when music was copied onto analogue media such as cassettes), it is perhaps less prevalent in this digital age. These days, consumers can be licensed to transfer their collections onto multiple devices, and there are tools to manage the amount of private copying (through digital rights management, DRM).

Given the ongoing technological developments, there are reasons to suggest that copyright levies are a crude way of addressing any 'harm' caused by private copying, since they target the devices, not the private copying itself. Furthermore, levies target all devices, regardless of whether they are actually used for private copying, and regardless of whether the devices are used for licensed content—which, in effect, may result in multiple payments by the same consumers (ie, a licence fee plus a levy or levies).

Economic effects of copyright levies

Having established conceptual weaknesses in the framework underpinning the levy system, the next question for policy-makers to ask is: to what extent does the levy system result in distortions to stakeholders?

The relative merits of copyright levies depend on the private profit incentives of the content providers and device vendors, as well as the overall economic welfare, incorporating both static consumer surpluses (prices paid, quantity of content consumed, device take-up) and the dynamic benefits of further investment and innovation.

From an economic perspective, the copyright levy system would be expected to have a similar impact to taxation imposed on a particular group of products. In simple terms, the levy may have the effect of raising the prices of hardware and media above the optimal price level. As a result, the quantity sold falls below the optimal level, and some deadweight loss is created (ie, customers who would have bought the product at the optimal price are no longer willing to do so at the new price level).

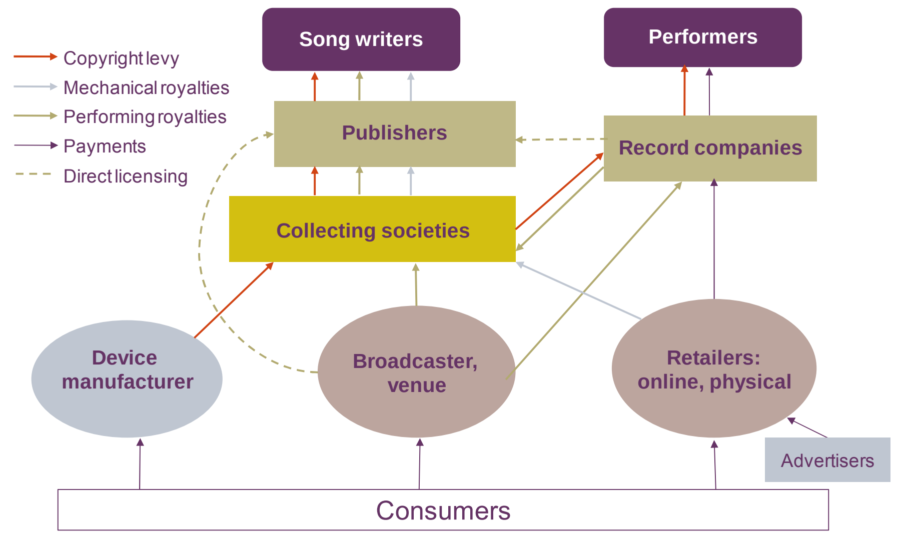
Furthermore, there are important side-effects ('externalities') inherent in the hardware and music markets, which exhibit characteristics of a two-sided market. This is because electronic devices operate effectively as a platform, and the pricing and take-up of devices (such as MP3 players and mobile handsets) are determined by the value that end-users place on the ability to play music with these devices. Similarly, content producers and providers value the enhanced take-up of devices with music-playing features, since it increases their potential exposure.[2]

Recognising these relationships, Oxera developed an economic model to assess the implications of copyright levies in terms of consumer and producer surpluses. The analysis was designed to reflect the music industry value chain, a simple illustration of which is given in Figure 1 below.

Copyright levies can have the following effects.

- Consumers are affected by copyright levies insofar as hardware vendors pass the levies on in the form of higher retail prices. This, in turn, is likely to reduce the sale of electronic devices, and hence, to some extent,

Figure 1 Relationships in the music industry value chain as captured in Oxera's model



Source: Oxera.

the demand for music downloads and other forms of digital content. (The extent of this effect depends on how responsive consumers are to changes in the prices of hardware, and how likely they are to consume digital content.)

- Device manufacturers are affected because they either absorb the levies as extra costs or pass them on in retail prices (and hence make fewer sales), again depending on the elasticity of demand and supply. Either way, by having a negative impact on companies' financial performance, the levies diminish the manufacturers' incentives to invest in, and introduce, new device models, and to launch new music distribution platforms. Further to the actual (prevailing) size of the levy, the unpredictability and fragmentation of the levy regimes across Europe may have unintended consequences for manufacturers' financial planning and hence investment incentives.

- Rights holders receive a direct financial benefit from copyright levies, to the extent that collecting societies distribute their revenues to principal rights holders (which is the subject of a separate debate). The higher device prices resulting from the copyright levies may, however, diminish sales of digital content to some extent, and therefore also the overall revenues of rights holders. Further to such 'static' effects, insofar as the copyright levy system impedes (and/or disincentivises) digital licensing, it may have unintended consequences for rights holders, as discussed below.

While the results are, to some extent, sensitive to underlying assumptions, for example regarding demand elasticities, the results from scenarios examined in the study conveyed a consistent message, in that the levies result in an inefficient outcome, especially from the perspective of consumers and hardware manufacturers.

Effects on creators of musical content

While the effects on consumers and hardware manufacturers are relatively straightforward—copyright levies lead to higher prices and/or lower margins than would otherwise prevail—the effects on the creative community are less clear-cut. It has been argued that removing copyright levies would significantly alter the incentives of creative artists, with the consequence of reducing the amount and diversity of available content.[3] Having recognised the societal importance of music, an important question assessed in the Oxera study is then whether the removal of copyright levies would affect the incentives of song writers to create music.

The effects on song writers (taking into account their diversity) were analysed. Specifically, Oxera's economic simulation-based modelling accounted for several factors that make the market for music creation highly idiosyncratic. For example, while the creation of artistic content requires time and effort (as is the case in the production of any goods or services), the link between the time and effort spent and the success of the resulting song is not clear: the distribution of creative talent is naturally skewed across the population, and any lack of talent cannot be fully compensated for through additional effort. In addition, by spending time writing music, creators are forgoing opportunities to earn income elsewhere (referred to, in economic terms, as 'opportunity costs'). Another important factor driving the modelling results is that, for the majority of song writers, copyright levies represent only a small proportion of their total income—the distribution of levy revenue appears to be uneven across authors. It is also recognised that a notable share of the revenues is retained by collecting societies, allocated to general cultural subsidies, and distributed to other rights holders such as producers.

The majority of song writers are at the lower end of the music earnings distribution, and this group is less affected in relative terms by the removal of the levy. Overall, the modelling indicated that the share of song writers who would decide to cease producing music is very small. The greatest impact (which is still small) was identified on 'middle-income' song writers, the logic being that, for this group, the opportunity costs of spending time writing music are the highest of all the writers affected.

Recognising the uncertainties surrounding economic modelling, if removing levies puts at risk certain authors producing valuable content, alternative remuneration mechanisms could be considered. Indeed, economic theory suggests that when market mechanisms (in this case, licensing) alone do not produce a 'public good' (eg, the diverse provision of music content), a form of public funding from the general state budget could be warranted.

Improved digital licensing market as an alternative?

Considering only the static impact of removing the levies in effect assumes, perhaps unrealistically, that the creative community would not engage in alternative remuneration mechanisms. In particular, digital licensing would provide rights holders with significant opportunities—particularly in Europe, where the digital market appears to be lagging behind other countries where systems of copyright levies do not exist or are very low, and where the digital licensing environment is different (eg, the USA and Japan).

Oxera's study highlighted economic reasons to suggest that the reform of the copyright levy regime,

The relationship between copyright levies and digital licensing of music

- **Copyright levies 'crowd out' licensing—since copyright levies should not pertain to licensed content, collecting societies might perceive copyright levies as a more lucrative mechanism to generate revenues. As a result, they may have limited incentives to engage in innovative digital licensing models.**
- **The status of the private copying exception under EU law—Oxera was informed that some collecting societies wish to license digital services only in part (eg, limiting licences to the initial download from the service) in an attempt to benefit from the 'private copying exception'. The societies can then attempt to claim additional compensation for the same digital services by means of copyright levies, on the basis that they are not within the scope of the licence. This practice hinders digital licensing schemes covering private copying.**
- **Knock-on effect from the sub-optimal take-up of devices—insofar as new business models of music distribution are, as a result of the levy, not introduced or not successful, there is a knock-on effect on rights holders, given that licence-based revenues generated from advanced digital distribution platforms (eg, digital music services, including à la carte and streaming offerings) are lower than they could be.**
- **Consumer perception—insofar as consumers perceive that they are eligible to make copies, given the levy payment embedded in the price of the device, they may prefer private copying over alternative, digital models of music distribution.**
- **Licensing revenue—this is aligned with usage. If rights holders' revenue streams are linked directly to the sales of music, they have stronger incentives to distribute content to as wide an audience as possible. This contrasts with the current copyright levy system where (part of) the income is correlated with sales of hardware, rather than sales of music.**
- **Reducing piracy—even a small reduction in piracy achieved through the new business models would have a significant positive effect on overall remuneration to rights holders. The potential is vast, given the considerable size of the illegal 'market'.**

as currently implemented in a number of EU Member States, could further enable and incentivise the exploitation and development of new digital licensing models. These reasons include, notably, those set out in the box above.

Based on these conceptual reasons, Oxera modelled scenarios of digital growth. Overall, focusing on the music market and hardware with music-playing facilities, the removal of the levy system (and associated impediments to licensing) could result in overall gains between €975m and €1,880m per year in the EU, taking into account the effects on consumers, hardware manufacturers and music rights holders. These gains would depend on the extent of the expected growth in the sales of digital licensed music resulting from changes in the policy framework and business models. Those who would benefit most are consumers, who, without copyright levies, could buy more and cheaper devices and consume more legal digital music; and manufacturers, who could sell more devices and enhance their role in new business models for distributing music. The dynamic benefits from digital licensing could offset or exceed the rights holders' revenue losses associated with the removal of copyright levies, insofar as the growth in digital markets materialises.

Digital licensing and public funding for a public good?

An important conclusion of Oxera's study is that the licensing of digital music is an economically more efficient mechanism to remunerate the creative community, and that there is significant potential for the digital music market to grow. Oxera's findings thus suggest that it would seem advisable to aim the efforts of policy-makers at reviewing what might constrain the European digital single market in achieving its full potential, rather than maintaining, and extending, a regime that has been found to be problematic for a digital age.

Oxera's research did not identify economic reasons why hardware manufacturers should remunerate cultural initiatives. Nevertheless, should there be societal concerns that the removal of levies puts certain musicians at risk while their content would have a great value to society (if, for example, the expected additional revenues from the digital market do not suffice or reach certain authors), an alternative remuneration mechanism could be considered. Public funding from a general state budget might be an economically more efficient means of funding a public good such as music creation and diversity.

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[1] This theme is developed in Legros, P. and Ginsburgh, V. (2011), 'The Economics of Copyright Levies on Hardware', ECORE Discussion Paper, 2011/34.
[2] Device manufacturers are also acting increasingly as music service providers (for example, Apple's ITunes and Nokia Music Store).
[3] ECONLAW (2007), 'Economic Analysis of Private Copy Remuneration', September 26th.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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