



INTELLECTUAL
PROPERTY OFFICE

Updating the value of UK copyright investment*

Research commissioned by the Intellectual Property Office, and carried out by:

Peter Goodridge[†], Jonathan Haskel[‡] & Benjamin Mitra-Kahn[§]

June 2012

Intellectual Property Office is an operating name of the Patent Office

2012/12

* Contacts: Jonathan Haskel and Peter Goodridge, Imperial College Business School, Imperial College, London. SW7 2AZ. J.Haskel@ic.ac.uk and P.Goodridge10@ic.ac.uk; Benjamin Mitra-Kahn, Intellectual Property Office, 4 Abbey Orchard Street, London, SW1P 2HT. Benjamin.Mitra-Kahn@ipo.gov.uk. This report reflects on-going work with the Office for National Statistics (ONS). We are grateful for financial support from the Intellectual Property Office (IPO) and Economic and Social Research Council (ESRC, Reference ES/I035781/1). We also wish to thank all those that provided us with data or insights into the workings of industries studied. In particular we wish to thank: Rachel Soloveichik - Bureau of Economic Analysis (BEA); Shaun Day - British Broadcasting Corporation (BBC); Bruce Nash (the-numbers.com); Ben White (British Library), representatives of publishing houses and collecting societies led by Sarah Faulder - Performance Licensing Society - (PLS); and Will Page and Chris Carey - PRS for Music. This work contains statistical data from the ONS which is Crown copyright and reproduced with the permission of the controller of Her Majesty's Stationery Office (HMSO) and Queen's Printer for Scotland. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates. All errors are of course our own.

† Imperial College Business School and Ceriba

‡ Imperial College Business School, CEPR, Ceriba, IZA and UK-IRC

§ Intellectual Property Office

ISBN: 978-1-908908-31-5

Updating the value of UK copyright investment

Published by The Intellectual Property Office
7th June 2012

1 2 3 4 5 6 7 8 9 10

© Crown Copyright 2012

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/> or email: psi@nationalarchives.gsi.gov.uk

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to:

The Intellectual Property Office
Concept House
Cardiff Road
Newport
NP10 8QQ

Tel: 0300 300 2000
Minicom: 0300 0200 015
Fax: 01633 817 777

e-mail: information@ipo.gov.uk

This publication is available from our website at www.ipo.gov.uk

Summary

The role of intangible assets in the System of National Accounts (SNA) reflects the growing role of knowledge investment in firms and the economy. Software and copyright assets (artistic originals) were included in the SNA in 1992, and the UK fully reflected the software change in 2007¹. Research and Development will be included in the SNA, first as a satellite account, in the next three years, and ONS has already started work on the compilation².

This note reports on collaboration between Imperial College, the Office for National Statistics (ONS), the Intellectual Property Office (IPO), and industry sources to improve measurement of UK investment in artistic originals. We focus on creation of long-lived artistic original assets protected by copyright, as defined by the SNA. This includes new broadcast programmes, books, art, music and films.

Investment is part of final Gross Domestic Product (GDP) and copyright works are assets that contribute to economic growth, so we have developed the framework to account for copyright investment, as reported by Goodridge and Haskel in July 2011³.

This update to the work suggests that UK investment in copyright was approximately **£5.1bn in 2009, or £3.2bn higher (0.3% of Gross Value Added (GVA) higher⁴) than existing official data** recorded in the UK National Accounts, for the comparable series on pure copyright investment.

Table 1: UK investment in artistic originals, 2009, £m (nominal)

	Total	Film	TV/ Radio	Books	Music	Misc Art (2008)
National Accounts data for 2009 as estimated in the ONS Blue Book. (adjusted for comparability)	1,807	32	1,447	152	176	n/a
Estimates from new methodology and additional data	5,089	264	2,104	1,020	1,331	370

ONS will evaluate the methodology for artistic original estimates. Revisions to published data arising from methodological improvements will be fed into national accounts once changes have been approved and quality assured.

- 1 Graeme Chamberlin, Tony Clayton, Shikeb Farooqui, New Measures of UK Private Sector Software Investment, ONS 2007, www.ons.gov.uk/ons/.../new-measures-of-uk-private-sector-software-investment.pdf
- 2 Lars Wenzel, Khalid Khan, Peter Evans, Capitalising Research & Development; towards the new System of National Accounts, ONS 2009. <http://www.palgrave-journals.com/elmr/journal/v3/n9/abs/elmr2009156a.html>
- 3 Peter Goodridge and Jonathan Haskel. 2011. "Film, Television & Radio, Books, Music and Art: UK Investment in Artistic Originals." IPO economics report 3/2011, <http://www.ipo.gov.uk/ipresearch-copyinvest-full-201107.pdf>
- 4 This is a percentage of 2009 GVA (£1,2565,932m) from the ONS (data series ABML <http://www.ons.gov.uk/ons/rel/naa1-rd/united-kingdom-economic-accounts/q3-2011/tsd-united-kingdom-economic-accounts-q3-2011.html>.)

One issue to settle before these new estimates can be used in compiling GDP is the treatment of margins. Broadly speaking, estimates of investment can be based on either cost or revenues data. Where investment is based on revenues, the estimates will implicitly include monopoly rents earned by the owner of the asset. Where investment is estimated by using cost figures, one option in copyright valuation is to add a mark-up over the costs to represent the monopoly rents available from copyright, making the result conceptually consistent with a revenues-based estimate. Our figures for Film, TV/Radio and Miscellaneous Art estimates are all cost based, and the ONS have traditionally marked up the total TV/Radio figures to represent the value of holding monopoly assets, as illustrated in *Table 2*:

Table 2: Investment Mark-up for monopoly returns, 2009, £m (nominal)

	Total	Film	TV/ Radio	Books	Music	Misc Art (2008)
National Accounts data for 2009	1,637	0	1,637	n/a	n/a	0

We have not used the mark-up approach in our estimate of copyright investment so this figure is in addition to the results from the new methodology. We do so for greater consistency with official methods for own-account software investment and R&D. It may be appropriate for the estimation of copyright protected assets, if the ONS so judges. Note too that our new estimate includes £370m as an estimate of miscellaneous art. This was uncounted before; our method of measuring this is still being refined and requires validation.

Data and method

The original report (Goodridge and Haskel, 2011)¹ set out in full the conceptual methods for estimating investment and the UK data that are available in practice. Without repeating all the details here, very broadly there are two primary methods for estimation of investment:

1. Counting the income received from copyright assets. This requires the standard economic assumption that copyright creators will not invest more in a work than they expect to get back. Eurostat recommends that this method is used where a work is created by individuals and input cost data are unavailable, which applies to much of Books and Music. We use this and track the income flows to creators through primary and secondary channels. Much of this work could not have been done without the collaboration of the many industry partners, particularly the Publishers Association, the Author's Licensing and Collecting Society, the Copyright Licensing Society and PRS for Music who have given generously of their data and time.
2. Counting the cost of creating long-lived copyright assets, by looking at firm accounts, annual reports and investment figures. This method is used to estimate the value of investment in Film and TV & Radio in both our estimates and those in the National Accounts. In our estimates we also use this method to estimate investment in other assets including photography, choreographed routines and artwork. Here we are particularly grateful to the Design and Artists Copyright Society and for input from other industry bodies.

There is a difference in interpretation between each of these methods, as revenues include rents extracted by the owners of originals if they have market power. These rents are implicit in the data for Books and Music in both the ONS estimates and our new figures. The ONS also make an explicit adjustment to account for this in investment carried out by private sector broadcasters, but not elsewhere. We have taken this value out of the current national account estimates (in *Table 2*) to aid comparability between the two series in *Table 1*. We discuss this further in the original report and it should be borne in mind when comparing data across sources/assets in the case of not only copyright but also other unique knowledge assets. The remainder of this note provides an outline of our data and methods compared to those currently used in the National Accounts, by the five broad asset types.

Measuring copyright investment

1) Film

For Film, the current position is to rely on input costs for a subset of production companies. Our estimates are also based on input costs of UK-owned productions. We use micro-data on the universe of UK productions and their budgets, sourced from the UK Film Council, British Film Institute and the-numbers.com. As ownership rights frequently span international borders we estimate ownership shares in the case of co-productions and UK productions where the UK owns a minority or majority share.

2) TV & Radio

For TV & Radio the current national accounts again rely on input costs, focusing on the production costs of long-lived programmes incurred by public service broadcasters. The total includes a mark-up on costs to represent the monopoly rents available from copyright assets which are not captured from counting only the costs.

Our estimates are also based on input costs, and are based on data published in the Annual OFCOM reports into UK Public Service Broadcasting. Since we have no independent information on mark-ups, we do not explicitly include it, consistent with ONS practice in other cost-based intangibles e.g. own-accounts software and R&D. We also include estimates for long-lived Radio stock programmes.

3) Books

Current official estimates aim to capture the annual capital income generated by the UK stock of original literature. Under certain conditions, as outlined in the original report, it can be used as a proxy for annual investment. Because it has been so hard to measure, it is currently based on an assumed fraction of annual UK book sales.

Our estimates are also income-based with refinements to the method used in estimation and underlying data. We use data on capital income that flows to the owners of rights (namely publishing houses and authors) to estimate the value of investment as a cross-sectional sum of royalties that accrue to assets of all vintages. In addition, investment into new works and editing by publishing houses has been used to account for the direct investment by firms. We currently have these data for half of the top 11 UK publishing houses and their subsidiary publishing firms, which is why we scale them up, by scaling according to reported turnover (approximately doubling), to represent the full top 11 publishing houses. There are some additional 120 publishing firms registered with the Publishers Association⁵ and we expect the presence of further small firms in the universe of publishing. Therefore we consider this figure a lower bound, since we currently cover the largest publishing houses and their assets. Whilst this may constitute the majority of investment, further work is required to account for the remainder of the industry.

5 http://www.publishers.org.uk/index.php?option=com_content&view=category&layout=blog&id=73&Itemid=1202

4) Music

Current estimates for Music, or recording originals, are produced on the same conceptual basis as Books, with a percentage of annual recording sales representing investment. The national accounts have applied an assumed royalty rate of 9.5%. That is investment is estimated as 9.5% of recording sales.

In principle our new method is similar, but we add to the data to focus on direct incomes and refine the methodology in numerous ways. First we note that the current method estimates the returns to artists via sales, but not to record labels and publishers who also hold asset rights after investing in artists. Based on discussions with the industry we better estimate the revenues that accrue to rights holders from recording sales by removing VAT, and margins for manufacturing and distributions, as well as an estimate of marketing costs, based on similar work conducted by the BEA⁶. Second, we also include the income returned to creators by music collecting societies, including royalties from the rights to lyrics; composition; direct live performance; physical re-production; public performance and synchronisation. Third we note that the sources of artist revenues have changed considerably in recent years, with a much greater proportion earned through live performance of own works. This is effectively a rental earned by an artist that performs his or her own songs. We obtain this by adjusting estimates of live revenues for: secondary ticket sales; at-event-spend; VAT; booking fees; promoter margins and venue costs. We further subtract direct live royalties meaning that we do not count the live revenues of a band in cases where they were effectively transferred to the owners of songs that they were covering. In addition we recognise that conceptually these revenues are in fact mixed income and represent a return to both labour and capital. Therefore we estimate the capital component as 33% of mixed income based on the long-standing ratio between Compensation of Employees and Gross operating Surplus.

5) Miscellaneous Artwork

At present the National Accounts include no estimates for any other form of artistic assets including photography/images, choreographed routines, theatrical productions, fine art greeting card designs or such like.

For our estimates we use the upstream input costs by considering the labour costs of the relevant professions from the Annual Survey of Hours and Earnings which at the moment are only available up to 2008. This is an extremely hard area to estimate. Our data might be an underestimate if the coverage of the survey is incomplete e.g. lack of coverage of the self-employed. It might be an overestimate if those reporting these professions are actually earning wages in some other occupation.

6 For a summary of these findings see Soloveichik, Rachel H. 2011. "Research Spotlight: Artistic originals as capital assets." Survey of Current Business June 2011: p. 43-51; http://www.bea.gov/scb/pdf/2011/06%20June/0611_artistic.pdf

Triangulating our results is not easy. Kretschmer et al.⁷ report on a survey of 5,500 visual artists earnings based on those registered in the Design and Artists Copyright Society (DACS)⁸. Most of the sample consisted of artists, illustrators and photographers, with some designers, 87% of whom worked at least 50% on visual creation, 35% of whom had a second job. For some of the detailed questions, the response rates were very small, but one figure stands out: in 2009, economy wide median wages were £21,000, but earnings from artistic endeavor were £12,000 (page 43). Even for those reporting themselves as professional artists, only 50% of their total income was from their professional activity (page 51). DACS median income was £264, i.e. around 1/45th of the individuals surveyed total median earnings. This would value incomes of this group at £272m.

Based on this information we assume that 50% of the earnings reported in the Annual Survey of Hours and Earnings (ASHE) are derived from the creation of long-lived artistic assets. We consider this a sensible approach but further work and triangulation is required.

7 Martin Kretschmer, Sukhpreet Singh, Lionel Bently, Elena Cooper, 2011 "Copyright contracts and earnings of visual creators: A survey of 5,800 British designers, fine artists, illustrators and photographers". Bournemouth and Cambridge Universities for DACS: <http://www.cippm.org.uk/publications/DACS-Report-Final.pdf>

8 DACS is a visual arts collecting society which, in 2009, distributed around £6.1 million of royalties to about 13,000 artists and their beneficiaries

Concept House
Cardiff Road
Newport
NP10 8QQ

Tel: 0300 300 2000
Minicom: 0300 0200 015
Fax: 01633 817 777

For copies in alternative formats please
contact our Information Centre.

**When you no longer need this booklet,
please recycle it.**

ISBN: 978-1-908908-31-5



INVESTOR IN PEOPLE



CUSTOMER
SERVICE
EXCELLENCE

The Government Standard