

Paper for DIME network *Dynamics and Institutions of Markets in Europe* (Work package 1.4) Intellectual Property Rights: The influence of rules, norms and standards on knowledge exchange Conference, London, 14-15 September 2006

EMPIRICAL EVIDENCE ON COPYRIGHT EARNINGS

Martin Kretschmer (mkretsch@bournemouth.ac.uk)¹

The available quantitative data on authors' and artists' earnings come from three different sources: (1) government statistics (census, labour market surveys, tax); (2) questionnaire surveys of specific professional groups; and (3) collecting society payments. For the purposes of assessing the possible contribution of copyright law to authors' and artists' earnings, two aspects are of particular interest. (a) The level and distribution of earnings for cultural workers, compared to other professions; (b) Earnings from the principal artistic activity compared to other sources of earnings.

In this paper, I primarily review data for the UK but draw on comparable studies in Germany and the US, two of the best researched cultural markets.

The distribution of earnings in the cultural professions

A simple tool for making comparable the distribution of income in a given population is the so-called **Lorenz Curve**.² To construct a Lorenz curve, the cumulative percentage income in the vertical y-axis is plotted against the cumulative percentage population in

¹ Professor of Information Jurisprudence, Centre for Intellectual Property Policy & Management, Bournemouth University, UK. This paper is part of an ongoing comparative study on authors' earnings funded by the UK collecting society ALCS. The results of our own survey of 25,000 writers' in Germany and the UK are available on the website of the Centre for Intellectual Property Policy & Management (www.cippm.org.uk). Many thanks to my colleagues on the project: Prof. Phil Hardwick, Dr Michael Guirguis and Dr Friedemann Kawohl.

² Lorenz, M.O. (1905), "Methods of Measuring the Concentration of Wealth", *Publications of the American Statistical Association* 9: pp. 209-219

the horizontal x-axis. Thus the Lorenz curve is a graphical representation of statements such as "the bottom 40% earn 20% of total income". The straight diagonal line is also known as the "perfect equality line", representing the scenario where every member of the population earns the same amount ("the bottom 20% earn 20% of total income"). In general, the more "sloped" the curve is, the more unequal is the distribution.

The degree of concentration (or inequality) can be represented in one number, the **Gini Coefficient**, calculating the deviation from the straight line. The Gini Coefficient ranges between 0, where there is no concentration (perfect equality: every member of the population earns the same income), and 1 where there is total concentration (perfect inequality: one member earns all the income).

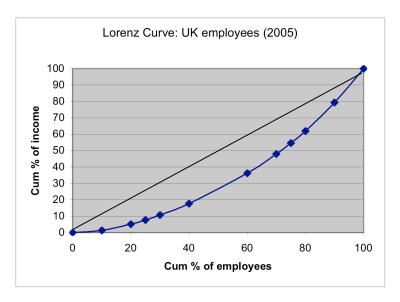
In order to provide a context, I also have given for each data set the **mean** ("average income"), and **median** ("income at mid-point of the sample"). In some sense, the median is the income of a "typical" member of the population, as the mean may be distorted by some very high or low earners.

Distribution of UK employee earnings

As a baseline example, consider the distribution of earnings (pay-gross) for all UK employees in 2005 derived from the Annual Survey of Hours and Earnings (ASHE). ASHE is run by the Office for National Statistics (ONS) and based on a 1% sample of employees on the Inland Revenue PAYE register, weighted to be representative of the whole population. The Survey provides information about the levels, distribution and make-up of earnings and hours worked for employees in all industries and occupations.³

³ The job-types that are under represented tend to be males, tend to be working in London and the South East and tend to be in Standard Occupational Classification (SOC) 2000 major groups 1 to 3 (1: Managers and Senior Officials; 2: Professional Occupations; 3: Associate Professional and Technical Occupations). Therefore these jobs receive larger weights (cf. Bird, 2004). ASHE data can be downloaded as Excel files from the website of the Office for National Statistics (http://www.statistics.gov.uk).

In re-formatting the earnings data into a Lorenz-curve, it is easy to see that the bottom 40% of employees earn about 20% of total income; and that the top 10% equally earn about 20% of total income. This deviation from the diagonal equal distribution line produces a Gini Coefficient of 0.33.⁴



Source: From data in Annual Survey of Hours and Earnings, UK Office for National Statistics (2005)

Average earnings/year (Mean): £23,400

Median earnings/year: £19,190

Gini Coefficent: 0.33

The Annual Survey of Hours and Earnings (ASHE) separates out earnings data for occupational class 34: Culture, Media and Sport Occupations (sample size: 204), a subclass of major class 3: Associate Professional and Technical Occupations (sample size:

⁴ For comparison, consider the distribution of income for all households as given by the United Nations Human Development Programme Report (2004, pp. 50-53): Germany: 0,274 (2003); France: 0,327 (1995); UK: 0,360 (1999); Japan: 0,249 (1993); USA 0,408 (2000). Within the UK, equal earnings professions include "skilled metal and electrical trades" (occupational class 52; Gini = 0.22) and "health and social welfare associate professionals" (occupational class 32; Gini = 0.25). Higher inequality professions include

"corporate managers" (occupational class 11; Gini = 0.39).

2785). Mean (£27,474) and median (£22,919) earnings for this group (class 34) are both above average, while the Gini Coefficient (0.34) is in line with all employees. However, the data is not broken down to a sufficient level of detail, covering a divers range of professions from designers (class 3422) and journalists (class 3431) to public relations (class 3433) and fitness instructors (class 3443). The sample for the core group of Artistic and Literary Occupations (class 341) is too small to draw reliable probabilistic inferences:

Artists (class 3411, no member in sample)

Authors, writers (class 3412, 14 members in sample)

Actors, entertainers (class 3413, no member in sample)

Dancers and choreographers (class 3414, no member in sample)

Musicians (class 3415, no member in sample)

Arts officers, producers and directors (class 3416, 9 members in sample)

In any case, ASHE data does not capture self-employed earnings (which copyright earnings would be almost by definition).

Artists' insurance data Germany

The most fine-grained large-scale data set on artists' earnings is available as part of a unique German policy experiment: a compulsory insurance for freelance authors and artists that was introduced with the 1982 *Künstlersozialversicherungsgesetz* ("social insurance law regarding artists"). Similarly to the structure for employees, self-employed artists in the four sectors 'Word authors', 'Visual arts/design', 'Music' and 'Performing arts' (actors, directors) become members of a subsidized national health and pension insurance scheme. The insured artist pays 50% of the contribution, while "exploiters of art" (e.g. publishers, galleries) contribute 30%, and 20% comes from the federal government (general taxation).

In order to set their individual contribution rate, artists have to declare their yearly income. In the aggregate, this insurance data has been published in a report by the

Federal Ministry of Employment.⁵ In 1999, 107,167 authors and artists were insured in the insurance scheme *Künstlersozialkasse*. Of those that could be allocated unambiguously to one professional group, there were 29,245 ('Word') authors, with an average annual income (mean) of DM 25,686 (€13,133); 45,486 visual artists, with an average annual income of DM 19,889 (€10,169); 29,720 musicians, with an average annual income of DM 17,392 (€8,892); 12,433 performing artists, with an average annual income of DM 18,920 (€9,674). Overall, mean earnings per annum for all insured artists were DM 21,868 (€11,181); median earnings were DM 15,753 (€8,054). This compares to an average (mean) German net income in 2000 of €31,157, and a median of €28,730.⁶ The typical (median) German self-employed artist earns about one third of the income of a typical (median) worker.

For each sector, the data can be narrowed down to the copyright professions, i.e. the groups that depend most clearly on a statutory right. For example, for the music sector the table below shows that the average annual earnings for a German composer in 1999 (total in *Künstlersozialkasse*: 3,670) were in the region of DM 22,000 (€11,225).

⁵ Bericht der Bundesregierung über die soziale Lage der Künstlerinnen und Künstler in Deutschland, Bundesministerium für Arbeit und Sozialordnung, 31. März 2000; cited in the following as Künstlersozialkasse (2000).

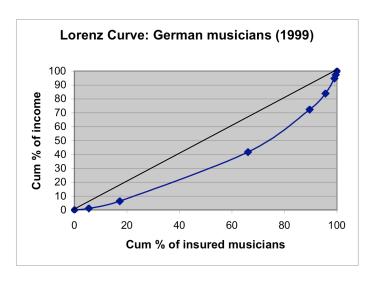
⁶ Ergebnisse des Mikrozensus 2000, Wiesbaden: Statistisches Bundesamt (cited as Mikrozensus 2000). Mikrozensus is an annual representative survey of 1% of the population. Three possible distortions of the Künstlersozialkasse insurance data should be noted. (i) Artists have an incentive to under-declare their income, as that reduces their annual contribution. For example, according to the 2000 Mikrozensus data, workers in the occupational group Publizistik (including writers, translators and editors) earned an average (mean) of DM 37,199 (€19,020) per annum, and a median of DM 35,160 (€17,977). This is about €5,000 per annum more than members of the insurance scheme in comparable self-employed professions declared. (ii) As a subsidised scheme, the insurance is attractive to many self-employed workers which are not primarily artists (such as music teachers, graphic designers or part-time journalists). (iii) Top-earners can opt out of the scheme in favour of private insurance.

Table 1: Künstlersozialkasse occupational group music (1999)

Activity	Number of	Total income in	Average annual
	artists	DM 1,000	income (DM)
Composer	3,670	80,570	21,954
Lyricist	215	5,770	26,837
Arranger	428	7,702	17,995
Conductor	265	6,916	26,098
Choirmaster	400	8,026	20,065
Instrumentalist Solo	1,618	24,971	15,433
Orchestra Player (E)	553	7,928	14,336
Singer (opera, musical)	492	8,400	17,073
Singer (concert)	398	5,963	14,982
Singer (choir)	50	746	14,920
Singer (popular)	1,632	32,412	19,860
Pop musician	2,661	42,508	15,974
Kurorchester	483	8,241	17,062
Jazz and Rock	2,899	42,084	14,517
Technical staff	506	10,260	20,277
Teacher	11,838	197,490	16,683
DJ	691	12,186	17,635
Others	921	14,708	15,970
Total	29,720	516,881	17,392

Source: German Federal Ministry of Employment Künstlersozialkasse (2000), p. 14

Figures for the distribution of earnings were only available for an aggregate of all musicians. About 90% of musicians earned below DM 30,000 (€15,339). 2,650 musicians earned above DM 30,000, with 125 musicians earning above DM 102,000 (approximately €52,152). The large number of teachers in the sample (who tend to earn similar amounts), as well as the absence of some top-earners may account for a relatively flat Lorenz curve, and a Gini Coefficient (0.31) that is similar to the total population. The distribution of income for the other three occupational groups is slightly less equal (Actors, Gini: 0.36; Authors, Gini: 0.38; Visual artists, Gini 0.39).



Source: From data in German Federal Ministry of Employment, Künstlersozialkasse (2000)

Average earnings/year (Mean): €8,892

Median earnings/year: €7,535

Gini Coefficent: 0.31

UK Society of Authors earnings survey 2000

For the UK, there exist a number of smaller questionnaire surveys of specific regional sub-groups conducted during the 1990s at the instigation of the Arts Councils in England, Wales and Scotland. These studies, reviewed in Towse (2001), are based on small samples but paint a similar picture to the German experience. Average earnings are low, and are typically supplemented by income from other, often non-artistic sources (see section 2.2 below). For example, Ruth Towse's study of 2000 artists in Devon (1989/90) gives mean annual earnings of £8,344, and median annual earnings of £6,900. Interestingly, the distribution of income from artistic activity alone (a sub-set of total earnings) is more skewed. According to Towse, mean arts earnings (net of expenses) is £5,881 per annum, while the median is only £2,100. In other words, the typical (median) artist living in Devon in 1989/90 earned £2,100/year from his/her artistic activity. The

⁷ Towse, R. (2001). *Creativity, Incentive and Reward: An Economic Analysis of Copyright and Culture in the Information Age*. Cheltenham: Edward Elgar; esp. Chapter 3 ("Economics of Artists' Labour Markets")

large gap between mean and median suggests the presence of many low and some very high earners in the sample.

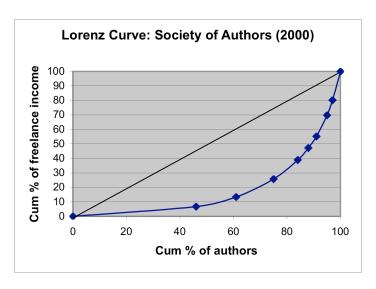
A larger scale study bearing this out clearly is the questionnaire survey of authors' earnings reported by the Society of Authors in 2000. The Society of Authors is the largest professional body of writers in the UK, with a membership in 1999 of 6,600. According to the Authors' Licensing and Collecting Society (ALCS) which can reasonably claim to have almost all professional UK authors on their database (about 32,000 in 2005), the profile of the Society of Authors membership (e.g. age, gender, genre) corresponds to the total population of UK writers.⁸ 1,711 authors responded to the questionnaire (statistically, this is a very high response rate), and according to the analysis published by Kate Pool⁹, the profile of respondents again mirrored the Society's membership as a whole.

The questionnaire only asks after the authors' earnings as a self-employed writer, excluding salaried writing, second job earnings, investment income, family or social security support. Thus it can be assumed that all reported figures derive from a copyright related sub-set of the author's principal artistic activity.

The survey revealed average (mean) earnings of £16,600 per annum, with median earnings of £6,333, again indicating the presence of many low earners and some very high earners in the sample. 75% earned under £20,000 per annum, 61% under £10,000 and 46% under £5,000. Writing was the sole source of income for only 230 people (13,5% of respondents). In the UK, the typical (median) writer earns about a third of the national median wage.

⁹ Pool, K. (2000), "Love, Not Money", *The Author* (summer 2000), pp. 58-66

⁸ Personal communication by Owen Atkinson, CEO of ALCS



From data in Society of Authors survey, reported in Pool (2000)

Average earnings/year (Mean): £16,600

Median earnings/year: £6,333

Gini Coefficent: 0.6

Performing Right Society (PRS) payments 1994

The emerging trend in the distribution of income is confirmed by the payments of copyright collecting societies. These data are privately held, and thus not easily accessible. A 1996 report by the UK Monopolies and Mergers Commission (now Competition Commission) on the UK Performing Rights Society (PRS) is the most reliable source.10

The figures show that in 1994, PRS paid a total of £20,350,000 to 15,500 entitled composers and songwriters, for the public performance and broadcasting of their works.

¹⁰ Performing Rights (1996), UK Monopolies and Mergers Commission, HMSO Cm 3147

Table 2: PRS distribution (1994)

Bands of net domestic	Number of writers	%	Cumulated % from top	£m	%	Cumulated % from top
distributed revenue* £						
Up to 24	4,812	31.0	100.0	0.04	0.19	100.0
25 - 49	1,624	10.5	69.0	0.06	0.29	99.8
50 - 74	1,001	6.5	58.5	0.06	0.30	99.5
75 – 99	800	5.2	52.0	0.07	0.34	99.2
100 - 149	920	5.9	46.9	0.11	0.56	98.9
150 – 199	632	4.1	40.9	0.11	0.54	98.3
200 - 249	460	3.0	36.8	0.10	0.50	97.8
250 – 499	1,481	9.6	33.9	0.53	2.6	97.3
500 - 749	750	4.8	24.3	0.46	2.2	94.7
750 – 999	452	2.9	19.5	0.39	1.9	92.4
1,000 - 2,499	1,130	7.3	16.6	1.79	8.8	90.5
2,500 - 4,999	590	3.8	9.3	2.11	10.4	81.7
5,000 - 9,999	389	2.5	5.5	2.75	13.5	71.4
10,000 - 19,999	255	1.6	3.0	3.50	17.2	57.9
20,000 - 49,999	164	1.1	1.3	4.98	24.5	40.7
50,000 - 99,999	30	0.19	0.26	2.04	10.0	16.2
100,000 and over	10	0.06	0.06	1.26	6.2	6.2
Total	15,500	100		20.35	100	

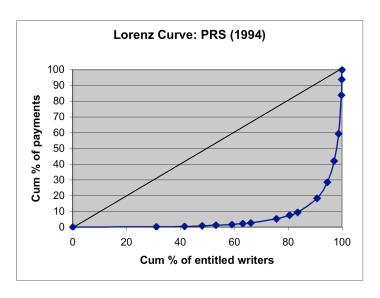
^{*}Note: Excluding earnings equalisation allowances, unlogged performance allocations, and revenue from performance of films.

Source: Monopolies and Mergers Commission: Performing Rights (1996)

We see that, in 1994, 10 composers earned more than £100,000; 204 more than £20,000; 459 more than £10,000; 848 more than £5,000; 1,438 more than £2,500; and 8,237 under £100. The typical (median) composer earned £84 in performing right income. Despite dramatically increased turnover and a doubling of the membership to 30,000 by 2000, the distribution of earnings from PRS payments appears to have remained similar. In 2000, 200 composers and songwriters received more than £100,000; 700 more than £25,000; 1,500 more than £10,000; 2,300 more than £5,000; 16,000 under £100.¹¹

¹¹ PRS Annual Report 2000, cited in Bently, Lionel (2002), *Between a Rock and a Hard Place: The problems facing freelance creators in the UK media market-place*. London: Institute of Employment Rights

The distribution of earnings again can be plotted as a Lorenz curve, with startling results:



Source: From data in Monopolies and Mergers Commission: Performing Rights (1996)

Average earnings/year (Mean): £1,420

Median earnings/year: £84

realan earnings, year.

Gini Coefficent: 0.88

In addition to performing royalties, composers/songwriters can expect to earn a similar amount from mechanical royalties for the sale of sound recordings. The figures for 2000 suggest that in the UK, about 1500 (5%) composers/songwriters reach the average (mean) national wage from copyright earnings alone. According to the German collecting society GEMA (administering both performing and mechanical rights for musical works), about 1,200 German composers/songwriters (2,4%) can live from their creative output.¹²

¹² A. Dümling, *Musik hat ihren Wert: 100 Jahre musikalische Verwertungsgesellschaft in Deutschland* (Regensburg: ConBrio, 2003), 313; citing Wahren, 1995. "Creative output" in this quote may include income from commissions or grants that would not qualify as copyright income.

Summary 1: In this sub-section, I have narrowed the analysis of the distribution of earnings in the cultural professions, from the total self-declared income of authors and artists (Künstlersozialkasse insurance data), to income from self-employed artistic activity (Society of Authors), to collectively negotiated copyright income (PRS). It appears that the more copyright related the income stream, the more extreme is the distribution of income (reflected in very high Gini Coefficients). A small number of very high earners earn a disproportionate share of total income.

Earnings from principal artistic activity

How does the vast majority of authors and artists who cannot claim to make a living from copyright income balance their books? In order to make progress on this question, it needs to be defined more precisely who counts as a member of the population for which copyright earnings should matter.

- (i) Government statistics usually use a *self-definition* approach. For example, under the Annual Survey of Hours and Earnings (ASHE), an employee falls under class 3411 (artists) or class 3412 (authors, writers) if the employer says so.
- (ii) Questionnaire surveys often rely on the *membership of particular professional bodies*, such as the Society of Authors.
- (iii) On-line surveys typically are circulated within professional networks, and depend on the participation of respondents who *aspire to be artists*.
- (iv) Being a recipient of payments from a copyright collecting society is yet another criterion.

¹³ It may be possible to differentiate this picture further by contrasting the situation for literary authors, audio-visual authors, actors, visual artists, composers, performers etc. It appears that the greater the presence in global English speaking markets, and the less dependent on localised 'live' activity, the more tilted earnings will be towards winners. For example, an analysis of contemporary art sold at British auctions reveals a Gini Co-efficient of 0.72, the second highest Gini I found after music (own data, based on K. Graddy and S. Szymanski, "A study into the likely impact of the implementation of the Resale Right for the Benefit of the Author of an Original Work of Art", London: Intellectual Property Institute, 2005).

If, as it already has become clear, most cultural workers cannot live from their artistic earnings, perhaps the relevant population should be reduced to the 2-15% in each discipline who *can* live from their principal artistic activity (from the UK data reviewed, that would include about 4000 authors and 2000 composers). Perhaps, copyright law is only designed for best-sellers.

At the other end of the conceptual spectrum, the literature on the creative industries tends to overstate the size of cultural sector (including administrative, technical, managerial and retail workers). For example, the EU assumes from consolidated national data that about 4,164,300 workers (or 2,5% of the total workforce) are occupied in the cultural sector. In the UK alone, the relevant figures are 877,100 workers (or 3.2% of the total workforce).¹⁴

From a third perspective, the relevant population where copyright law should matter is constituted by all *potential* cultural workers from whose increased activity society would benefit. This is the definition that underlies the remainder of this paper.

There are only a small number of pioneering studies that have attempted to capture the professional earnings profile of specific groups of creators. The population of all the studies discussed rely on an element of sustained aspiration, typically expressed by membership of a professional organisation.

Austrian composers report (1993)

A questionnaire survey of 630 Austrian composers by a group of sociologists from the Vienna Hochschule für Musik und Darstellende Kunst (now Musikuniversität), arrived at the following income profiles.¹⁵

¹⁴ Eurostat, press release 68/2004 of 26/05/2004 (table 13 in M. Söndermann, 2004, *Kulturberufe*, Bonn: Beauftragter der Bundesregierung für Kultur und Medien).

¹⁵ The sample was taken from a professional body. 283 returns were received, with an average respondent age of 37 years: Smudits, A., I. Bontinck, D. Mark, E. Osterleitner (1993), *Komponistenreport*, Wien: WUV Universitätsverlag

Table 3: Income from compositions as percentage of total income

below 10%:	36.8%
10-20%:	31.2%
21-49%:	14.1%
50% and more:	17.8%

Table 4: Composers received also income from

other musical activity (performance & teaching):	82.0%
non-music professional activity:	25.6%
family members:	18.2%
social security benefits:	3.9%
investment income:	1.1%
other sources:	3.5%

Pew study American artists, musicians and the Internet (2004)

A study conducted in 2004 by the Pew Internet & American Life Project tried to capture 'how artists and musicians use the internet, what they think about copyright issues, and how they feel about online file-sharing'. The study focuses on artists' attitudes and does not provide systematic data on the relative weight of copyright and non-copyright earnings. However, among three instruments, the study includes a web survey of 2,755 self-declared musicians that divides the sample into four useful profile groups:

(1) Success Stories (musicians who spend 30 or more hours per week in music-related activities, drawing 80 per cent or more of their income);

¹⁶ Artists, Musicians and the Internet (researcher Mary Madden), Washington, DC, 2004 (p. ii)

- (2) Starving Musicians (also spending 30 or more hours per week but earning less than 20 per cent of their total income from music);
- (3) Part-timers (spending less than 30 hours per week but earning some income from music); and
- (4) Non-working Musicians (currently inactive, including aspiring and formerly active musicians not earning money from music).

The number of PEW respondents falling into these respective groups were: Success Stories: 296; Starving Musicans: 1,021; Part-timers: 578; Non-working Musicians: 851. 78% of respondents had a second job, while 41% earned less than 20% of their income from music-related activities.

Study of self-employed German authors and artists (2006)

A very recent study of self-employed artists in Germany uses a conceptual approach developed in the entrepreneurship literature. Artists are treated as micro-entrepreneurs who, typically, do not separate business and household finances.

Three categories of self-employment are distinguished: (i) main self-employed occupation – defined as the activity with the highest income; (ii) additional self-employed occupation – defined as the only activity of artists who are not otherwise part of the workforce (e.g. students, pensioners, housewives/husbands); (iii) part-time additional self-employment (i.e. as a second job).

A questionnaire survey of 5,745 self-employed workers on the database of the media union (ver.di – sector art and culture) finds that for 66%, artistic self-employment is the main occupation. The figures for respondents in four occupational groups are presented in the table below.¹⁷

¹⁷ Dangel, C., M.-B. Piorkowsky and Th. Stamm (2006), *Selbstständige Künstlerinnen und Künstler in Deutschland – zwischen brotloser Kunst and freiem Unternehmertum?*, Bonn: Deutscher Kulturrat, p. 17

Table 5: Artistic self-employment as main, additional or part-time occupation

	main occupation		additional occupation		part-time (2 nd job)	
Occupational group	number	%	Number	%	number	%
Music	70	70.7	14	14.1	15	15.2
Literature	92	65.2	20	14.2	29	10.6
Visual arts	79	65.3	18	14.9	24	19.8
Performing arts	36	64.3	11	19.6	9	16.1
Total	277	66.4	63	15.1	77	18.5

The contribution of self-employed artistic earnings to total household earnings from all sources (including partner's income) is given as 42% (literature), 42% (visual arts), 53% (music) and 67% (performing arts). Between 70% and 80% of respondents had previously been in employed occupations, and more than 50% of respondents had continued their employed and/or pre-artistic occupation at least for a time. For 40-60% of artists, there have been prolonged periods when self-employed creative activity had been interrupted (sometimes for years). Both figures can be explained to a large extent by a need to balance the household income.

Summary 2: The picture that emerges in this sub-section from the empirical study of artists' occupational profiles reveals risky, often stuttering careers. Earnings from non-copyright, and even non-artistic activities are an important source of income for most creators. Many more creators attempt to embark on artistic careers than are able to sustain them. The decision to "start-up" as an artistic enterprise appears to follow a deliberate process of risk-taking.

-

¹⁸ ibid. at 75