

THE WIPO GUIDE ON SURVEYING THE ECONOMIC CONTRIBUTION OF THE COPYRIGHT INDUSTRIES

DIMITER GANTCHEV

ABSTRACT. In July of 2002, the World Intellectual Property Organisation organised a working group of economists to study the methodologies that are appropriate when attempts are made to measure the economic contribution of copyright to a national economy, with the final objective being to produce a guide-book that will enable future studies to be made, all within a common methodological framework. Dimiter Gantchev, a consultant with WIPO, was entrusted with the task of writing the resulting Guide-book.

1. INTRODUCTION

Recently the issue of copyright protection has attracted considerable attention in the public policy debate. Different arguments are brought into this debate, some of them questioning the very basic ideas underlying intellectual property. Those who argue that copyright protection should be significantly modified, if not abandoned all together, tend to neglect the fact that copyright today contributes to wealth creation in many different ways. The relationship between copyright as a legal mechanism for protecting the property rights in literary and artistic works, and economic life has not always been obvious.¹ For that matter a growing number of researchers have been involved in proving the link between copyright and the economic performance of nations. One of the possible paths for demonstrating the economic importance of copyright is through studying the multiple economic effects that it produces in terms of creating value-added, jobs and trade.

Surveying and measuring the economic contribution of copyright is not a new topic. Research in this field has been done in a number of countries such as the United States of America, the Netherlands, Sweden, Germany, Finland, United Kingdom, Australia, Japan, the MERCOSUR countries and many others. This research has provided impressive empirical evidence on the contribution of copyright-based economic activities. However, many issues surrounding these studies have made it difficult to compare their results and to use them as a basis for launching new research. Governments and civil society organizations have indicated the need for a tool that could assist them in carrying out similar research in the future.

Against this background the World Intellectual Property Organization (WIPO) launched the preparation of a set of recommendations on surveying the economic contribution of the copyright-based industries. In doing so WIPO invited a group

The views expressed in this article are personal and reflect the author's experience in his work on the WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries.

¹When referring to copyright it is understood that the notion of related rights is also included in the broader notion of copyright.

of well-known economists, experienced in this type of research, comprising of Antonio Buainain (Brazil), Ahmed Ghoneim (Egypt), Robert Picard (Finland), Stephen Siwek (United States of America), Jules Theeuwes (Netherlands), Jeremy Thorpe (Australia), Ruth Towse (Netherlands), and Richard Watt (Spain). The group met in Helsinki in July 2002 under the chairmanship of Jukka Liedes, Special Adviser to the Government of Finland. The deliberations of this session became the background of the WIPO *Guide on Surveying the Economic Contribution of the Copyright-based Industries* (The *Guide*).²

The primary objective of this effort was to analyze and compare existing experiences with the view of possible harmonization of this type of research in the future. The second goal was to suggest some guidelines of very practical nature on establishing the size and economic contribution of the copyright-based activities. Thirdly, the project aimed at providing a basis for comparability of similar surveys.

Were these goals achieved? What was excluded from the scope of the proposed research? What were some of the difficulties experienced? What are the future prospects for the application of the guidelines? These are some of the questions that will be discussed in this article.

2. THE VALUE ADDED OF THE WIPO GUIDE

In a nutshell, the *Guide* provides detailed recommendations on how to establish the share of copyright-based economic activities in the Gross Domestic Product (GDP), employment and foreign trade. To this end it describes various existing approaches to measuring GDP, considerations that need to be taken into account when establishing employment in the copyright-related sectors and their share in foreign trade. Existing studies offer, to a different extent, information and conclusions on these parameters. However, it was felt that the bulk of the research did not provide sufficient disclosure of the methods through which results were obtained. This made it difficult for others to follow and had even resulted in questioning some of the study conclusions in academic literature.³ What did the *Guide* add to the existing body of research in this field? Its value added could be seen in the following directions:

2.1. Clarifying the copyright link. The need to clearly define the subject matter of the study necessitates a good understanding of the basic notions of copyright and related rights. To a great extent a study reflects the understanding of the research team on the economic functions, consequences and exercise of copyright law. This understanding takes the form of a quantitative analysis. The creativity element, protected by copyright or related rights, has not always been evident and for that matter the number of copyright-related activities surveyed has been unreasonably reduced only to several core copyright-based industries. On the other extreme one would find including in surveys industries that are very remotely linked to copyright.⁴ Therefore clarifying the link between copyright and related economic activities and outlining the scope of the copyright industries is a central point of departure that would allow the interpretation of economic indicators in their proper context.

²See WIPO (2003).

³See for example Jennifer Skilbeck (1988).

⁴For example artistic design is not protected under copyright law in some countries and consequently can not be included in the scope of the survey.

What is the subject matter protected under copyright, which specific rights do we most often refer to, and how do these rights relate to the market? Even if national copyright is always specific, the international regime today is so developed that practically on a global scale one would still find the major rights described in table 1 and their exercise and effects can be traced in the context of the markets of the protected goods and services.⁵

RIGHT	SCOPE OF THE MARKET
Right of reproduction	Reproduction of works in a material or non-material form. It might also cover the adaptation of works.
Right of distribution	Dissemination of physical copies; resale, sale and rental, and even lending of copies of such categories of works as musical works, included in phonograms, audiovisual works, and computer programs. It might also cover the importation on copies.
Right of communication to the public	Relaying of works by any distant communication or interactive communication means. It might embrace a broad field of activities including the relaying of a performance to members of the public outside the place where the performance is made, the transmission by cable and the making available of works in digital networks.
Right of public performance	Live performances of works in the presence of the public (including by means of recordings and phonograms).
Right of broadcasting	Transmission of works through wireless and non-interactive means intended for public reception. It embraces also satellite transmissions intended for public reception.

2.2. Defining the copyright-based industries. The *Guide* provides definitions of the copyright-based industries. Four groups of such industries are proposed – *core*, *interdependent*, *partial* and *non-dedicated support industries*. These definitions link the subject matter of copyright protection with the processes of creation, production, distribution and consumption of copyright goods and services. For example, the main group – the core copyright-based industries – is defined in the following manner:

The core copyright industries are industries that are wholly engaged in creation, production and manufacturing, performance, broadcast, communication and exhibition, or distribution and sales of works and other protected subject matter.⁷

In the core copyright industries are included such activities as press and literature, music, theatre and opera, motion picture and video, radio and television, photography, software and databases, visual and graphic arts, advertising services and copyright collective management societies.

The group of *interdependent copyright industries* refers to products that are jointly consumed with the products of the core group industries or deal with facilitation equipment. These products are identified when analyzing the backward

⁵Table 1 refers to the markets of the rights and not to the protected subject matter.

⁶Table taken from WIPO (2003), p.17.

⁷From WIPO (2003), p. 29.

linkages of the production process. The group includes such industries as the manufacture, wholesale and retail of TV sets, radio, CD recorders, computers and equipment, musical instruments, but also photographic and cinematographic instruments, photocopiers, blank recording material, etc.

The group of the *partial copyright industries* refers to situations where only a part of the production output or process is linked to copyright-protected material – such as in design, architecture, jewellery, furniture, other crafts, etc. A more significant part of the value added produced by this group can not be attributed to copyright components.

A fourth group comprises of the industries that remotely rely on copyright material but are still relevant as copyright generates some part of their business. The *non-dedicated support group* includes telephony, Internet, transportation, general wholesale, etc.

Do the definitions create new industries? The answer is “no”, because all of these industries, or economic activities, as they are statistically referred to, already exist. They are simply systematized in a different manner for the purposes of the analysis and this is not an unusual approach. The aim of the *Guide* was to provide an extensive list which would enable, through its almost sixty categories, the full analysis of the effects produced by copyright. It is understood that this exhaustive list will be possible to follow in countries with well developed statistics and research teams with sufficient budgets. For various reasons – paucity of data, methodological or other constraints – one will have different coverage in the various countries. Having a clear picture of what has been possible to cover in a country would assist in realizing also what may be missing in a particular survey.

It is essential to remember that all of the identified activities should not be added up mechanically as they have various degrees of dependence on copyright protection. The main criteria for delimitation between the industries is their level of dependence on copyright-protected material. Industry structure across countries may vary, copyright markets as well. Copyright protection also varies and this would lead to a different level of copyright intensity in countries, hence the level of dependence on copyright, or the so called “copyright factor” will be different as a result of a country-specific analysis.

Where do we stop in projecting the effects of copyright protection? Apparently, there are copyright effects produced on a very large scale such as the nation’s welfare, the quality of life, cultural identity or industrial competitiveness. The approach recommended is to focus on quantifiable and measurable direct and indirect impact. It is not suggested to study multiplier effects, tertiary or quaternary economic impact which are not tangible and often non-quantifiable.⁸

2.3. Linking copyright-based industries to statistical reporting. The suggested structure of the four groups of copyright-based industries is anchored in the organization of national statistics (the outlined categories correspond to statistical reporting), and takes into account the need to readjust some of the existing in the past functional distinctions. For example, proposing a separate category of distribution industries would have been rather tempting because a lot of the value added would be found exactly in this group of industries. However, it is difficult to support the analysis of distribution industries with statistical information, firstly, because production and distribution in many copyright-based industries are so closely linked

⁸This broader approach has been applied for example in Singapore (2003), p. 53.

that it is difficult to distinguish between them, and secondly, because statistics do not generally report under this structure.

Quantification implies links to statistical information that could support the survey.⁹ The approach taken in the *Guide* was to identify the International Standard Industrial Classification (ISIC) code according to the United Nations ISIC Rev. 3.1. Even if the ISIC has not yet been implemented in all countries it can serve as a good basis as there are national correspondence keys, which can allow adapting it to specific statistical standards and practices. The codes provide the link to existing statistical information. However, this information needs further analyses, adjustment and the copyright factor has to be applied to each of the industries that are surveyed.

A frequent criticism with regard to surveys of this kind is that they double-count the contribution of some industries. Two observations could be made in this regard. First of all, an aggregate statistical code of four digits or less often covers more than one economic activity. If no further disaggregation is available in official statistics it is suggested either to extract the proportion relevant to this particular industry through additional methods or, if not possible, the contribution under this code should not be counted more than once.¹⁰ The second element which is believed can reduce the risk of double-counting is the overall application of the value added approach, which is industry centered and is confined to establishing the value of output less the value of intermediate consumption. The value-added Input-Output tables which are available in many countries could be especially helpful if they are regularly updated.

2.4. Providing a set of research methods. The *Guide* discusses in some detail the research methodology. It is designed around a country with an average level of development of statistics. Therefore the methods for calculation of GDP and the relevant statistical categories are presented in detail, but in fact some countries may not need this. In certain cases GDP data is already available from the National Accounts or other publications of the Statistical office. The description of the different methods for calculation of GDP - notably the production and the income approach are first and foremost provided in order to assist countries where data on GDP will not be fully available. For the same reason a quite detailed description of what is reported under the various economic categories is provided on the basis of the universally agreed methodology, contained in the System of National Accounts as a conceptual basis. The *Guide* focuses on methods for calculation of GDP as these proportions are central to the research and could be further used in certain cases for the calculation of copyright-based shares of employment and foreign trade.

2.5. Designing the launch of the survey. There are four steps of the research that seem appropriate to recommend when designing the launch of the survey. These recommendations are aimed at helping a better planning of the research and mapping out the specific results that targeted at each stage. If linked to expected deliverables these steps can be presented in the following manner (table 2).

⁹In some of the research so far limited references have been given to relevant statistical codes, corresponding to the copyright-based industries. See for example Siwek and Furchtgott-Roth (1990), and The Allen Consulting Group (2001).

¹⁰The *Guide* provides a comprehensive list of relevant ISIC codes, which should be considered, but they can not be directly nor fully applied.

Steps	Step 1	Step 2	Step 3	Step 4
	Identification and classification of industries	Collection of data	Measurement of the contribution of the specific industries	Analysis and presentation of the results
Main elements	Set up the research team	Identify relevant official statistics by industry group	Decide on the method for each industry/indicator	Analyze main trends and tendencies
	Check copyright legislation	Identify blank areas	Establish outputs by industry	Prepare comparisons
	Analyze copyright chain	Collect additional specific statistics	Adjustment of data	Finalize spreadsheets and presentation tables and diagrams
	Verify ISIC codes correspondence	Questionnaires/Interviews/Surveys	Establish weights ¹¹	
		Complete data	Establish value added, share of employment and foreign sales	
Deliverables	Table of the industries to be studied. Industry codes references established	Reliable disaggregated data compiled	Contribution to value added, employment and foreign trade established	Survey on the economic contribution of copyright-based industries

3. LIMITATIONS OF SCOPE

There are at least three areas where one should not have expectations when reading the *Guide*. It does not discuss issues related to valuation of copyright, it does not focus on establishing the strict economic impact of copyright legislation, and it will not allow identifying the proportion of counterfeit products circulating on the market.

First and foremost the surveys are not looking at the direct value of copyright assets. What is really studied is the size of the contribution of these industries.

¹¹The term weighting is used as a synonym of the copyright factor, indicating the portion of a particular activity that can be attributed to copyright.

While the size basically illustrates the copyright effects in macroeconomic terms the direct value of copyright can be established only through the valuation of this intangible asset in each specific case.

The term ‘value’ is an objective one; the economic value of an intellectual property right is the representation, on a given date, of all the future benefits obtainable from such a right, expressed as a single sum of money.¹² The surveys on the economic contribution of the copyright industries will never be in a position to capture precisely the indirect effects produced by copyright because there will always be unpriced externalities linked to the public good characteristics of copyright.

The procedure of valuation of copyright has to do with accounting techniques and approaches adopted by various specialised entities. However, as yet, there are no reliable and widely accepted accounting standards for valuation of intangible assets in general. This has led to huge differences between companies’ book values and their market capitalization. A survey in the United Kingdom showed that the difference between market capitalization and balance sheet assets amounted to 72% at the end of the 1990s.¹³ The debate among statisticians still continues as to what should be the recommended approach into the future.

The *Guide* will not give answers to those interested in valuation of copyright assets, specific rights, or specific markets. Some of the readers and users of the *Guide* have inquired about this aspect but it will have to be dealt in another publication. The recommendations, as indicated earlier, are confined to identifying the overall quantifiable economic contribution of copyright-based activities.

Secondly, the impact of copyright law as such is not the subject of the proposed research. Studying the situation before and after the introduction of copyright protection, i.e. the impact, is a different task, which, requires different methods, such as modeling, but also suggests the availability of full information. By way of injecting changes in the model one can establish the exact impact that copyright protection has induced and link the legislative changes to specific economic performance indicators. In order to avoid dangers linked to the specific category “impact” the *Guide* is confined to the much more general category of “economic contribution”, as it is always specific and can be studied along the lines of selected parameters.

Thirdly, the research model has to be based on the assumption that copyright protection is enforced. Through the described methods it will not be possible to establish the level of pirated goods that are being produced and distributed. Only categories that are statistically accountable can be studied. The value-added approach has its limitations – it will inevitably leave out some activities with a copyright component. Of course one could argue that part of the pirated production will be taken into account because in some cases it enters the retail trade, but the result of the effort of adjusting this contribution may not match the effort itself and runs the risk of certain inaccuracy.

Among the other limitations of the value-added method one could mention its inability to differentiate between copyright-related and non copyright-related activities within a selected industry sector, the inevitable omission of some elements, related to copyright in industries which are not included in the study and the difficulty in identifying which part of the value is added to the product while creating

¹²See Smith and Parr (2000), p. 62.

¹³Taken from Idris (2003), p. 58.

and producing it and which part is added in the modification, distribution or consumption phases of the value chain. These methodological limitations have to be borne in mind when interpreting the survey results.

4. SOME TYPICAL DIFFICULTIES

The availability of statistics is often quoted as a major obstacle to research in this field. While this may be true to some extent it does not necessarily mean that it is not possible at all to provide information about the copyright industries and their contribution. In fact in some cases the availability of statistics has been over-estimated as it does not provide for all the elements needed for a successful research. Existing experience, described in the *Guide*, shows that there are various ways of dealing with missing information. Those may include sending out questionnaires and surveying a credible sample of the industries where no official statistics are available. Another method used is making international comparisons and adjusting the data according to economically significant factors such as levels of production, industry structure, productivity, consumption, etc. A third possibility would be to make reliable estimates of proportions and ratios within the bigger industry group. All three methods address the same problem, namely the need to disaggregate the data, which is to be found in official statistics. The trouble with indirect methods is that they will always give an estimate and the more you rely on them the less precise is the result. Research in some countries with scarce statistics shows that interesting results can still be obtained, particularly on the conditions and modalities under which the copyright industries operate and this may represent a first step towards implementing a more comprehensive study.

A most delicate element in the phase of adjustment of data is the establishment of the copyright factor for each industry group. This has been a challenge for countries performing a comprehensive survey. Only the core copyright industries can be regarded as 100% copyright-based. For the other three groups of copyright industries a decision needs to be taken on the level of dependence on copyright protection. The factor is the result of an analysis of the production process and its various elements. For example use can be made of data on the number of people employed in a company that deal with creative activities, the share of sales or exports depending on copyright, proportions of working time devoted to creative activities, resources spent on copyright payments, royalties, fees, other services, etc. Inevitably there is a subjective element in these assumptions until sufficient empirical material is accumulated. Existing research does not offer in detail the assumptions underlying the established copyright factors, which creates difficulties in terms of benchmarking. With the development of research it will become possible to adjust these methods.

The mere fact that a study is launched often carries an expectation of certain positive results. It sometimes may not be the case. Even in the situation when big copyright industries operate in a country the value added that they produce may not stay in that particular country or not be accounted for in its national statistics. This relationship between results and expectations should be handled very carefully and one should focus on the interesting conclusions and policy options that stem from this situation. On the one hand, proving positive results serves to defend and promote the copyright-based industries. On the other hand, results under the level of expectations show that these industries need more attention and care so that

they can flourish like in other countries. Political sensitivities will always be there which may present an additional pressure for researchers performing a professional analysis.

A specific difficulty is linked to the measurement of the copyright goods and services that form the basis of electronic commerce. Particularly when physical copies are not the subject of the trade the place of the transaction will be the only way of establishing where this value added has been produced and recorded. Most of the studies only vaguely address the e-commerce aspect but with the increase of the relative importance of this group it may become indispensable to look more closely into the matter.¹⁴

5. FUTURE PROSPECTS

Every methodology can be tested only in practice. The WIPO methodology, as indicated in the introduction, does not suggest an entirely new type of research, as it is based to a large extent on best practices. Future empirical research, based on the full set of recommendations in the *Guide* is the only way to check their validity and applicability. A number of surveys undertaken in different regions in 2004 will contribute to testing the *Guide*. Ongoing research in North America (United States, Canada), Asia (Singapore) and Eastern Europe (Latvia, Hungary) will provide interesting results in this regard and hopefully a good basis for comparison.

There will be elements of the methodology, which will be subject to discussion and subsequent revision. One might question the precision of a certain measurement depending on the proportion and depth of the judgments made in the course of the research. The great merit of the exercise is to be seen in terms of offering an overview of the comprehensive contribution of copyright-based activities, in demonstrating their dynamics and in providing a basis for comparison. The vertical comparison (in the same country over the years) and the horizontal one (between countries), will be based on the same approach and therefore the conclusions will be valid. Even if there is an imperfection, provided the approach is applied in the same manner, the results will still be comparable, the dynamic indicators will still be valid and the magnitude of the creative sector will not be affected in any significant way. The adjustment and revision of the *Guide* will be an ongoing process.

With the development of research the exchange of information on best practices and problem-solving experiences will become a natural part of the refinement process. The magnitude of experiences could be put to service to ongoing and new research. Pooling of resources could become a way to move forward for countries with limited resources still willing to launch empirical surveys.

The topic of the copyright-based industries is particularly interesting for strengthening and creating partnerships. Cultural industries and enterprises, which are generally based on copyright, are subject to legitimate interest of industry associations, copyright federations, cultural administrations, but also of international governmental and non-governmental organizations. The specificity in the approach of each will result in a magnitude of aspects that can be covered in research, such as focus on a specific industry or a group of industries, focus on demand/supply factors or labour markets, consumer patterns, modes of production or dissemination (e.g. digital networks), regional specifics, cultural values and practices. Studies will

¹⁴An interesting experience in this regard can be seen in the White Paper by Copyright Research and Information Center (2001).

never be identical, as they will bear the trademark of their authors and the demand of the institution commissioning the study. We may not exclude a shift in the approach in some countries with a narrowed focus on specific subjects to be covered. As a consequence we may witness a sharpened focus on the copyright-industries and creative activities in general, which can only be welcomed.

Some researchers will be tempted to look in depth at value chain analysis. While value chain analysis can be useful for understanding the way the copyright-based industries operate it will be difficult to carry out empirical research on that level in the framework of the national economy. This can be a challenging task, time and resources permitting, but in the final analysis only time will show which is the most efficient way forward. New approaches and methods will inevitably be developed and offered and may provide even more interesting results.

6. A FINAL WORD

Today there are sufficiently developed instruments that allow launching research on the economic contributions of the copyright-based industries. The growing number of surveys proves that this is a field of considerable interest. Depending on the starting point one would make different use of the result of this research work. It can be helpful in situations when new copyright legislation is prepared, when important trade agreements affecting this sector are negotiated or when trying to understand the broad effects of copyright in economic life and prove it with quantitative results. It may help countries in establishing their competitiveness in certain areas. The results of this work would inevitably help realize the real contribution and the potential of the cultural and information sector and its impact on the national development in general. Thus it may assist in fighting trends that would result in cutting employment, production and trade. Last, but not least, a possible outcome of a survey can be an understanding of the inadequacy of statistics to deal with copyright-related activities. More appropriate statistical patterns could gradually be adopted, allowing for better dealing with copyright-related activities. Hopefully, the WIPO Guide could assist in realizing some of these goals.

REFERENCES

- Allen Consulting Group** (2001), *The Economic Contribution of Australia's Copyright Industries*, Australian Copyright Council and Centre for Copyright Studies.
- Copyright Research and Information Centre** (2001), *Copyright White Paper. A View From the Perspective of Copyright Industries*, JCI Series, Tokyo.
- Idris, K.** (2003), *Intellectual Property: A Power Tool for Economic Growth*, WIPO Publication No 888, Geneva.
- Heng, T. M., A. Choo and T. Ho** (2003), "Economic Contributions of Singapore's Creative Industries," in *Economic Survey of Singapore's First Quarter 2003*, Economics Division Ministry of Trade and Industry, Singapore.
- Siwek, S. and H. Furchtgott-Roth** (1990), *Copyright Industries in the US Economy*, Washington D.C., International Intellectual Property Alliance.
- Skilbeck, J.** (1988), *The Economic Importance of Copyright: An International Survey*, United Kingdom, International Publishers Association (reproduced in Copyright Research and Information Centre (2001), Appendix B).
- Smith, G. and R. Parr** (2000), *Valuation of Intellectual Property and Intangible Assets*, 2nd Edition, New York, John Wiley & Sons Inc..

World Intellectual Property Organisation (2003), *Guide on Surveying the Economic Contribution of the Copyright Based Industries*, WIPO publication No 893(E), Geneva.

MARCH 2004. DIMITER GANTCHEV, CONSULTANT, WORLD INTELLECTUAL PROPERTY ORGANISATION.