österreichische internationales | kulturdokumentation. archiv für kulturanalysen.

WIFO

mediacult

SUMMARY

AN ANALYSIS OF THE ECONOMIC POTENTIAL OF THE CREATIVE INDUSTRIES IN VIENNA

Prepared by:

Kulturdokumentation	**Veronika Ratzenböck, Katharina Demel**
Mediacult	**Robert Harauer, Günther Landsteiner**
Wifo	**Rahel Falk, Hannes Leo, Gerhard Schwarz**
Translation:	**Michael Lyman**

On behalf of:

City of Vienna, MA 27 EU-Strategy and Economic Development

Chamber of Commerce Vienna

Filmfonds Wien

This study was co-financed by the European Fund for Regional Development

Vienna, February 2004

INDEX

I. SUMMARY

Creative industries (CIs) have become a buzzword within economic policy discussions. Apparently, aside from biotechnology and information technology, CIs are about to become the third most promising sector within economic policy.

The City of Vienna has undertaken considerable preparations toward a strategy for CIs and has already implemented the first measures. This includes the fact that CIs are indeed a focus of Viennese economic policy. In this context Kulturdokumentation, Mediacult and WIFO were appointed by the City of Vienna, MA 27 (EU strategies and economic development), the Filmfonds Wien and the Chamber of Commerce Vienna, to conduct an analysis of the market, innovation and job potential in the fields of architecture, the audiovisual field, fine arts and the art market, performing arts and entertainment, graphic arts, fashion, design, literature and publishing, multimedia and software, museums and libraries, music as well as advertising.

An Overview of Creative Industries

Creative industries are a conglomeration of very heterogeneous economic branches that require creativity as a relevant input for the creation of products and services. Enterprises in this field follow diverging orientations: While in some areas market-economic objectives are predominant, others operate on the cusp of art and economy, each having different objectives and value systems for their activities. Furthermore, new technologies – particularly those that were constitutive for the New Economy – have noticeably propagated the growth and positive perception of this sector. The relevance of creativity when market logic is combined with artistic objectives on one hand form an interesting starting point for new creative products and services; on the other hand this constellation also generates stimuli for public discourse and the desirability of the economic location. However, the intertwining of economy and culture may also result in apprehension: in ongoing discussions, the way in which such systems shall interact, and what effects can be expected as a result of the distinct modes of this interaction have been outlined.

In Vienna there are – depending on the data source – more than **100,000 people** (according to data from the Association of Social Security Institutions) or **120,000 people** (according to data based on the census of employment by Statistics Austria) currently employed in the CI-fields. This is actually **approximately 14 % of all individuals who are gainfully employed** in Vienna. At a **growth of 6 %** from 1998 and 2002, the Creative Industries surpassed the **employment growth of the national economy by 4 %.**

The highest employment rates within the CI-sectors can be found in the software, multimedia, Internet, games, graphic arts, fashion and design sectors as well as within the audiovisual field (film, video, television and radio) which is altogether more than half (55.9 %) of the total employment in the CI-sector as a whole. Whereas the fine arts, performing arts as well as museum and library sectors at 10.3 % have the lowest employment percentages.

Employment growth could be observed between 1998 and 2002 in the following sectors: museums and libraries (+218 %), advertising (+41.4 %), software, multimedia, the Internet, games (+32.2 %), fine arts and the art market (+19.2 %), performing arts and entertainment (+12.8 %), architecture (+1.6 %), literature & publishing as well as print media (+0.4 %).

Employment decline was observed between 1998 and 2002 in music (–11.4 %), graphic art, fashion, design (–8.6 %) and in the audiovisual field (film, video, television and radio) (–4.3 %).

The corporate structure of the Viennese CIs is primarily dominated by small enterprises. The average business size of the 17,948 Viennese CI-enterprises with their 120,014 employees (according to the census of employment conducted in 2001 by Statistics Austria) amounts to 6.7 individuals. Almost half (48.2 %) of the Viennese CI-businesses are so-called sole-proprietorships. The sectors of fine arts and the art market (74.2 %), performing arts and entertainment (57 %), advertising (56.5 %), music (55.2 %), museums and libraries (54.5 %) and architecture (54.3 %) show a particularly high percentage of sole-proprietorships.

Large enterprises with more than 100 employees are only found in the audiovisual field (2.3 %) and in the field of software, multimedia, the Internet and games (2.1 %) to a relevant extent. In all other sectors the percentage of large enterprises has a certain proportion between 0.1 % and 1 % respectively.

Strength in content origination and weaknesses in exchange are main characteristics of Vienna's creative industries.

Their strength comes from a high amount of artistic-creative potential, in the fields of education, science and research. Vienna has a very distinct urban artistic cultural environment, a high density of educational facilities and a well-established research landscape within universities and extramural research.

Another specific characteristic of creative industries in Vienna is to be found with the economic inter-dependence between sections of the creative industries-enterprises and public funding of art and culture. Public expenses for culture allocated to the enterprise of cultural venues, museums, festivals, cultural events or directly to the creation of art and culture form a significant economic aspect of CI-enterprises in relation to the total market volume. The publicly funded activities within art and culture are often relevant clients or partners of the Viennese CI-enterprises.

Weaknesses of the Viennese CIs lie in realisation, a low degree of implementation of the creative potential in the context of economic activities and within export. This can be explained by the corporate structure based on small-scale businesses, the weakness in capital and management deficits.

One of the basic characteristics of the art and culture oriented CI-fields is that there is rarely a lack of innovative and partly internationally marketable „products" but there is however a lack in capital strength and in marketing oriented realisation of know-how.

The results of the business survey reflect a positive development within the creative industries in Vienna due to:

- **highly qualified employees** (every fourth employee is a university graduate, another 44 % are matriculation level),
- **well established cooperation and cluster structures,**
- **the fact that half of the businesses had only been founded during the past decade,**
- **the high innovation affinity of the enterprises** (the innovation rate is clearly higher in most areas – given comparable dimensional structures – than in other fields of the service sector),
- **the positive assessment of the trend of demand,**
- **the significance of digital products within CIs** (the e-content of CIs amounts to 23 % of the revenue within this sector and thus clearly surpasses that of the overall economy).

A negative effect on the economic development of CIs is exerted by:

- **hardly any international activities** (within all of the sectors only 17 % of the revenue originates from foreign markets. The export potential is not sufficiently realised, to where only 28 % of all businesses are willing to develop a new foreign market. The problems here are also based on the small enterprise size or insufficient (human)-resources),
- **below average access to funding** (only about 20 % of all enterprises have received economic funding),
- **the problems of financing business activities** (in respect to access to external funding sources).

However, the growth prospect of the sector is limited by the small size of the enterprises, the lack of financing possibilities and the small degree of internationalisation of the sector. The last two factors are in turn a consequence of the small enterprise size.

Therefore, the positive structural characteristics have to be developed further while the negative ones shall be attenuated. This particularly involves the establishment of a consistent funding system that secures the access to external sources of financing for businesses and enables the implementation of projects that involve risk and thus creates the conditions for corporate growth. At the same time the demand for CI-products shall also be intensified on the part of the public authorities.

For all economic policy measures it is important to acknowledge the fact that individuals employed within CIs rely on a high degree of motivation that sometimes emphasises subjective sensibility more so than purely commercial interests. Such an orientation may however lead to conflicting objectives within the enterprises as well as in the context of the interaction with economic policy. This position – that is adhered to in varying degrees within the different segments of CIs – has to be taken into consideration when formulating economic policy measures.

Supporting and developing CIs is a labour intensive process consisting of many small and very few large steps. Accordingly, success is not visible in the short-term but only medium-term. Although large and visible initiatives may contribute to the development of CIs limiting the focus only to such would not result into a sustainable strategy for improving Vienna as a CI-location.

In the following we will attempt to elaborate on the main directions of impact for the development of Vienna as a CI-location that are relevant for all sectors – even if not always to the same degree. The following four dimensions are proposed:

1. Growth Strategy

Many current problems can be attributed to the predominance of small-scale businesses within the sector. Many enterprises are too small in order to make investments independently. However, larger investments are necessary for completing the product and service offer and to move toward foreign markets. This calls for the creation of conditions that favour corporate growth. There is a wide range of activities targeted towards reaching this goal that involves measures of professionalising business activity, **securing improved access to external sources of financing, an extensive support of innovation, know-how transfer for copyright based realisation strategies and improved information concerning consultation and funding possibilities.**

2. Internationalising

The export percentage of CIs is remarkable considering the average enterprise size but is still after all clearly below the Austrian industry average. The low extent of export is partly due to the type of the produced goods and services (theatre performances, performances, print media, radio and television etc.). However, a large part of CIs would be able to export far more. The minor export success is also connected to a high need of resources and the high amount of uncertainty of such a decision. This situation may be counteracted by measures that **increase international presence, make information and support systems also accessible for CIs and that promote integration with international application systems.**

3. Cluster Orientation

CIs have established comprehensive patterns of communication within cluster-like structures. The necessity to cooperate is partly a result of the small enterprise size in order to complete the product range and also of the project oriented structure of many undertakings within CIs (such as in film production). Parallel to developing cluster specific strategies, **sector specific platforms should also be promoted which would intensify interaction between CIs and the economy, and bridge the still existing educational gaps.**

4. Developing Governance Structures

By governance we mean the organisation, implementation and evaluation of activities performed in the context of CIs. The reason for mentioning this point – that is certainly of importance for all public activities – is that many institutions and organisations pertaining to CIs are already involved or will likely get involved. In regard to the aforementioned strategies and measures tasks were not allocated to institutions because the implementation and the cooperation between institutions are still unsettled. It is clear that to enable coordinated efforts, a strategy, guidelines and the willing cooperation of all parties involved are necessary in order to guarantee cooperation toward a common objective. Hence **cooperation should be further developed between economic and cultural departments, by the CI-dimension should be added to Vienna's image, and a synchronised procedure with sector specific institutions should be developed. Furthermore, public commission procedure should be re-evaluated**.

II. FINDINGS ON VIENNA'S CREATIVE INDUSTRIES

1. STUDY DESIGN AND OBJECTIVES

Creative industries (CIs) have become a buzzword within economic policy discussions. Apparently, aside from biotechnology and information technology, CIs are about to become the third most promising sector in economic policy. The requirements and expectations, however, are much more difficult to define for this sector versus the two former ones.

Creative industries are a conglomeration of very heterogeneous economic branches where creativity is the essential input for creating products and services.

The corporations in this field follow various directions: In some areas, market-economic objectives are predominant, whereas others operate on the cusp of art and economy, with varying objectives and value systems for their respective activities. Furthermore, new technologies – particularly those that were constitutive for the New Economy – have noticeably propagated the growth and positive perception of this sector.

On the one hand, the relevance of creativity in connection with market logic and artistic objectives creates an interesting starting point for new creative products and services; on the other hand, this constellation also generates stimuli for public discourse and the desirability of the corporate location. However, the combination of economy and culture may also result in apprehension: in ongoing talks the question as to the mode in which such systems shall interact, and what effects can be expected as a result of this interaction, have been lengthily discussed.

Economic policy frameworks were the decisive factor for commissioning this study. Developing economic policy strategies requires knowledge of the structures of CIs. Due to this reason the City of Vienna (MA 27 EU-Strategy and Economic Development), Filmfonds Wien and the Chamber of Commerce Vienna commissioned a study that aims at investigating the innovation and employment potential within the following disciplines:

- Music
- Architecture
- Literature, publishing and print media
- Audiovisual field
- Fine arts and the art market
- Graphic arts, fashion and design
- Multimedia, software, games, and the Internet
- Performing arts and entertainment
- Museums and libraries
- Advertising

Three of these sectors, namely the audiovisual field, graphic art, fashion, design as well as multimedia and software were to be analysed in a more detailed fashion. Furthermore, a workshop was organised for exchanging information and knowledge with the Interreg-region of western Hungary.

First it shall be mentioned that extensive preparations have been undertaken in Vienna for developing a strategy for CIs and that the first measures have already been implemented. This includes the specification to emphasise CIs in the context of economic policy, to organise strategy workshops and open space discussions, to implement and evaluate supportive measures (Creative Industries Call 2002 (ZIT), Multimedia Call 2003 (ZIT), Sciences for Creative Industries (WWTF), as well as the establishment of a specific promoting institution for CIs („departure"). The present study shall supplement the existing level of information in consideration of the current situation. Furthermore, it shall establish a foundation for prioritisation of the different measures to be taken.

One of the first challenges that are encountered during the assessment of CIs is the demarcation of all areas that pertain to this sector. Previous studies have attempted different definitions respective to their object of research. The decisive starting point for definition in the present study is the redrawing of the value-creation chains within economic branches that require a very high amount of creative input. The most important suppliers and consumers of CIs are included in this broader definition of CIs.

The reason for attempting to meticulously elaborate a comprehensive definition of CIs, and to also supplement it with recent figures, is that a rough point of reference is needed for assessing the volume of these economic sectors in order to create an appreciation for the economic relevance of this sector. However, the analytical benefit as a result of an „improved" definition of CIs is still moderate as it is hardly of any assistance for formulating economic policy strategies but rather serves for characterising the initial situation and for creating the basis for well-founded analyses and broad discussions.

Aside from assessing the actual dimension of CIs, detailed knowledge of structures, trends, problems and desires on a corporate and sectoral level are also significant. In the context of this study, this was accomplished by interviewing more than fifty experts from each branch in the context of a detailed characterisation of the given sectors. The overall analysis will also include upstream and downstream areas such as the educational and research sectors or the interaction with public authorities. The Austrian Kulturdokumentation and Mediacult elaborated the results of the sector studies.

Furthermore, these business surveys also assessed areas that can be considered to represent the actual core of creative industries. The questionnaire included items concerning the following topics: Positioning of the enterprise, Vienna as a corporate location, funding and venture capital, e-content, permanent employees and freelancers and corporate development. 1,123 enterprises and individuals completed the questionnaire. This equates to a response rate of 35 %. This analysis was conducted by WIFO.

In a section conjointly compiled by all three institutes, detailed employment figures for each sector within the CIs and the most important results of previous analyses that illustrate future developmental opportunities but also existing deficits and flaws. These analyses provide the basis for economic policy recommendations.

2. DEFINITIONS OF THE CREATIVE INDUSTRIES

2.1 The History and Development of Creative Industries

The increasing significance of creative industries is not only visible in economic policy discussions but CIs are also often regarded as the engine of a modern economy. Creative industries may not only be seen in regard to their economic relevance but they also create further social value through their activities and increase the appeal of regions and cities.

What are creative industries and what does this term refer to that still has no generally binding definition despite of its worldwide usage in countless local and national studies? To which extent does it differ from terms such as „cultural industries," often used synonymously during the 1980s and 1990s? The difficulties in finding an explicit response and thus also a clear definition are connected to the history of origins of the concept of „creative industries".

The Beginnings: The Term „Cultural Industries"

The search for a definition for creative industries leads first to the term „Culture Industry" that was used by Adorno in „Dialectic of Enlightenment". He criticised the process of the economisation of art, which in turn led to scepticism and rejection of the connection of economy and art for a long time in the context of the culture critical European tradition. As a paradoxical consequence of an approach that is oriented by intrinsic aesthetic criteria, during the 1970s and the early 1980s cultural activities became the focus of cultural political attention and support precisely when they were not commercial or scarcely pragmatic.

This changed during the 1980s when the Greater London Council (GLC) began using the term „cultural industries" in order to highlight two significant developments: „Firstly, that those cultural activities which fell outside the public funding system (...) and operated commercially were important generators of wealth and employment. Secondly, a more direct cultural political point – that of the entire range of cultural goods and objects which people consumed, the vast majority (TV, radio, film, music, books, advertisements, and concerts) had nothing at all to do with the public funding system." (O'Connor 1998: 3). The usage of this term by the British Creative Industries Task Force has clear objectives, namely the furthering of the economic revival of certain regions and cities. While Adorno used the term Culture Industry in a polemic manner to mean the irreconcilable opposition of art/culture and economic activity, cultural industries here assume the function of connecting the pieces between art and economy.

After the break-up of the GLC the concept was taken up by other British cities but also by countries such as Germany and Australia. The focus is placed particularly on the economic and employment potential of all areas included in the definition of „cultural industries". From the early 1990s the first regional and national studies were published in England and Germany.

All these concepts have a pragmatic orientation in common. None of the used definitions originate from academic discourses but they are rather the result of economic policy and highly site-related concept formations. „The notion of cultural industries has been very much driven by those involved in framing policy. Academic writing on the subject, with a few exceptions, has tended to follow Adorno and to focus on the cultural and social implications of the mass consumption of cultural commodities. It has been 'knowledge intermediaries' outside academia working with city and other (usually arts) agencies who have promoted the notion. (…) However, it has been meant that the ‘definition’ for cities has often been understood in terms of its practical ability to guide planning linked to the need for statistical measurement.” (O’Connor 1999: 2).

The difference between non-commercial art and „cultural industries” genuinely targeting economic success has still been maintained – it serves as the basis for most definitions of „cultural industries” dating back to the 1980s and 1990s. One example is the definition of the German cultural economy reports that claims one of the characteristics of the „cultural industry” is its commercial orientation and a resulting differentiation of cultural economy „in a narrower sense” and „in a broader sense” for the perspective of debatable areas such as creation, production and distribution or application.

From „Cultural” to „Creative Industries”

With the start of the New Media boom, at the latest in the mid-1990’s, the concept of „cultural industries” as based on a narrower definition of art and culture, proved to be insufficient. The new growth branches of the multimedia and software industries could not be classified with conventional categories, which resulted in the first disengagement of „cultural industries” from the field of art and culture. In 1983, Justin O’Connor, in his study on Manchester, defined “cultural industries” as a „…group of activities concerned with the production and distribution of symbolic goods – goods whose primary value derives from their function as carriers of meaning.” (O’Connor 1998: 5).

Terry Flew pinpoints the difficulty of determining the symbolic value of a product or its characteristics as „cultural”: “If cultural industries were defined in general terms as those sectors involved in the production of symbolic goods and services, was it then possible to exclude any activity of industrial production that has a symbolic dimension? Was the design and branding of a Coca-Cola can a part of the cultural industries, or the use of indigenous artwork on a Qantas jet…?” (Flew 2002: 184/85). The answer depends upon a given definition of culture that tends to equate ‘culture’ with the arts in terms of an aesthetic definition or, in the case of an anthropological approach, regards ‘culture’ as an all encompassing „way of life”.

In all likelihood, it was no coincidence that when the Creative Industries Task Force (CITF), founded in 1997, published its Mapping Document (probably the most influential document of its kind), the term „creative industries” was introduced, replacing the word „cultural,”. These include „…those activities which have their origin in individual creativity, skill and talent, and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.” (CITF 2001).

Other publications, particularly European ones, view the „creative industries” merely as an amplification of the „cultural industries” by affirmative technology sectors (multimedia, software, etc.). At the same time, it is often attempted to define the concept of creative industries by the content of a product or service. For such „content-related” definitions it is however unclear as to whether creative industries produce content, reproduce it or shape the outside form. A possibility to counteract this problem is to transfer it to the copyright or application law area by referring to „intellectual property” or „copyrights“. The broadest definition in this sense was formulated by Howkins and includes the four sectors of copyrights, patents, trademarks and design industries. By including patents and trademarks CIs expand by large into the technological area but on the other hand culture and art related fields are excluded.

A large number of recently published international studies perceive the concept of „creative industries” as a term generated by economic and regional policy, just as it has previously, in the case of the „cultural industries”. They are generally rather descriptive versus analytical and they build not so much on a theoretically funded and logically consistent differentiation of the term

„creative industries” but on a definition that may be operationalised in terms of economic or cultural policy. In the end, the aim is in other words to compile lists in which the question is „what is in” and „what is out”.

The theoretical science lags these developments by a few years. Only recently has an increasing number of papers been published that focus on the theoretical grounding of the concepts pertaining to CIs. They all face the problem that the amorphous character of the concept is hardly problematic in economic policy terms – it mainly requires the necessity of the restructuring of economic statistical categorisations – yet hardly allows for stringent scientific definitions because in most cases it sums up sectors and fields that do not match on an analytical basis nor are based on systematic considerations. The lesser-developed fundamental research concerning CIs could include research from the area of „cultural studies," whose expanded concept of culture as „culture as a complete way of life” provides theoretical basics in retrospect.

Creativity as a Production Factor

The concept of „creative industries” can also be understood in a different sense and thus – also from a cultural theoretical perspective – may be able to establish new perspectives as Stuart Cunningham from Creative Industries Research and Application Centre in Queensland, Australia points out: „Conceptually, ‘creative industries’ combine – but then radically transform – two existing terms: the creative arts and the cultural industries. (…) This change is important. By bringing the arts into direct contact with large-scale industries such as media entertainment, it allows us to get away from the elite/mass, art/entertainment, sponsored/commercial, high/trivial distinctions that bedevil thinking about creativity, not least in the old humanities and social sciences (…) ‘Art’ needs to be understood as something intrinsic, not opposed, to the productive capacities of contemporary global, mediated, and technology-supported economy.” (Cunningham/Hartley 2001: 2).

The concept of „creative industries” – if understood in this sense – is an expression of a synthesis, a circumvention of the dichotomy of art and economy, as well as between „high culture” and „popular culture” and thus also the symbol for an increasing degree of democratisation. Using the term „creativity," as a characteristic that is inherent to art and economy, would be a possibility of achieving this.

The different approaches to defining CIs demonstrate that there is neither a clear definition nor a set of clear and logical criteria for deducing those areas of economy that are subsumed by the umbrella term. If the smallest common denominator can be found in the term creativity, then all those areas that require an above average amount of creativity in order to produce and create their products and services can be included. In this case, creativity is seen as a production factor that – along the lines of expenditures for research and development – must be employed in order to generate innovation. Furthermore, creativity is this instance, is a production factor that – unlike traditional art and culture activities – is used to produce a marketable product or service. It is interesting that under these circumstances, the central role accorded to creativity establishes a connection to creative achievements within art and culture production and that these – even if to a varying degree – may be combined by means of new technological developments.

At the same time, a differentiation of whether the products and services of CIs would represent an input into the general economic system or a specific output, ceases to be a central concern. The overarching socio-economic developments that CIs are embedded in form an integral picture for the context of their career and development opportunities. The fact that culture has become increasingly important for consumer markets as well as for corporate strategies and that creative and knowledge-based production has become relevant for nearly all economic areas and areas of life, has also enabled the expansion of CIs to a significant economic factor.

Adressing an area of growth, the specificities of its production modes and conditions also come to the forefront. Here it becomes visible that creativity-based and culture-based goods and services differ systematically from other economic areas and also amongst one another in terms of their production processes and the attitudes of their producers. A specific risk that Caves coined as the „nobody knows" principle is characteristic for them: „This property implies that the risk associated with any given creative product is high, and that ways of allocating or sharing it will be important for the organization of production." (Caves 2000: 3).

Fast changing markets with fluctuating trends and typically poor predictability of a product's opportunities play a crucial role and CI-producers will have to reflect them in terms of their organisational structures. The required flexibility, knowledge and know-how intensity have made-the connection between CIs and „knowledge economy" more than just a buzzword.

The cultural and creative producers are confronted with continuously changing conditions and frameworks regarding industrial and organisational changes in the industries concerned, the internationalisation of cultural production and distribution, and technological innovation that they have keep pace with. Hence, the concept of „cultural" or „creative industries" also includes the question of „strategies of cultural-industry companies in terms of how they manage and organise cultural production." (Hesmondhalgh 2002: 17).

The „creative industries" can be understood as overarching enquiries into the „management of creativity" not only by individual enterprises but also in regard to the entire local production and service sectors. Different European studies have increasingly cast the focus on the complex interactions between CI-enterprises in the private and the public sector, as well as the intermediary sector. The „capillary exchange-relations" (Hochschule für Gestaltung und Kunst Zurich 2003: 6) between them enrich and deepen the picture of cultural and economic activities, added value and occupations that are subsumed under the umbrella term of CIs to a significant degree. If we cast our attention onto these, the courses of action of those active within the culture and creativity fields as well as options for the fields of policy making that transgress the established demarcations between cultural, economic and regional policies become visible.

Both areas have gradually encountered Europeanization and Internationalisation. Pertinent processes do not only affect markets, cooperation possibilities and competition situations of producers but also find themselves in a regulatory framework that is not limited to the national level any longer. European regulations such as those on Public Sector Information or copyright in software-production, trans-national definitions of certain products as a cultural or economic good, regulations of cultural and economic funding of the individual European member states or the GATS-treaty have also an effect on national, regional and communal policy options toward the different CI-sectors.

2.2 The Significance of Creative Industries

Since there is neither a uniform definition nor a strategy for establishing definitions from the historical perspective of the concept, the creative industries can only be understood and interpreted in their specific local, regional and national context.

Vienna has become increasingly important as a site for creative industries. This is not only the result of an extensive discussion within economic policy but CIs have also become a relevant dimension in a real economic context.

In Vienna there are more than **100,000 people** (according to the Association of Social Security Institutions) or **120,000 people** (according to data based on the 2001 census of employment) currently employed in these sectors. This is actually **approximately 14 % of all individuals who are gainfully employed in Vienna**, meaning that **about 40 % of all individuals employed in CIs** within Austria **operate in Vienna.**

This economic sector has developed much more during the past few years than the overall economy. At a **growth rate of 6 %** between 1998 and 2002 the creative industries **surpassed the employment growth of the national economy by 4 %.**

Still, the significance of CIs is less a result of their actual size but rather of their functions and growth potential:

- Based on the overall perspective of the development of CIs the conclusion is permissible that this sector will continue to become increasingly important. This trend is supported by developments that attribute a central meaning to the creative potential of a region or a country in respect to economic growth. This argument is based on the transition into a knowledge/information society where new ideas and their creative implementation represent a central factor for competitiveness. Creativity is regarded as a production factor and its characteristics can most closely be compared to research and developmental tasks.

- Many observers also consort that goods and services that are closely connected to art and cultural production will encounter particularly favourable growth conditions. Art and culture will continue to become an increasingly important factor for corporations for the generation of individual images that allow them to distinguish themselves from other competitors.

- CIs have a large potential in terms of a positive emanation effect that goes beyond the purely economic development of this area. Artistic, cultural and creative achievements are locally generated to a large extent and also consumed locally. Thus they often develop an identity creating effect for cities and entire regions. Therefore, investing in CIs may increase the quality of life, the identification with the region or the city and the attractiveness to international tourism markets.

If we accept the hypothesis that making use of cultural goods and creativity will create relevant impulses for economic developments in the future, then this sector should obviously be systematically promoted.

However, creative industries have previously been promoted to varying degrees. In certain parts, CIs have been receiving much support from public authorities. This includes all those fields that are generally referred to as ‘high culture’. Other – largely economically oriented areas – have been the main focus of economic policy within the past few years.

This includes the software production and related economic fields that had become targeted areas of activities within economic policy in light of the hype concerning the New Economy. For the remaining fields, an increased amount of support means instituting economic policy measures that have already become established standard repertoire of other economic areas.

At any rate, the heterogeneity of CIs is significant. Though it is possible to establish some sector-comprehensive strategies and to improve the general conditions on a broad level, a majority of the activities still have to be synchronised with the needs of a given field in a sector-specific manner.

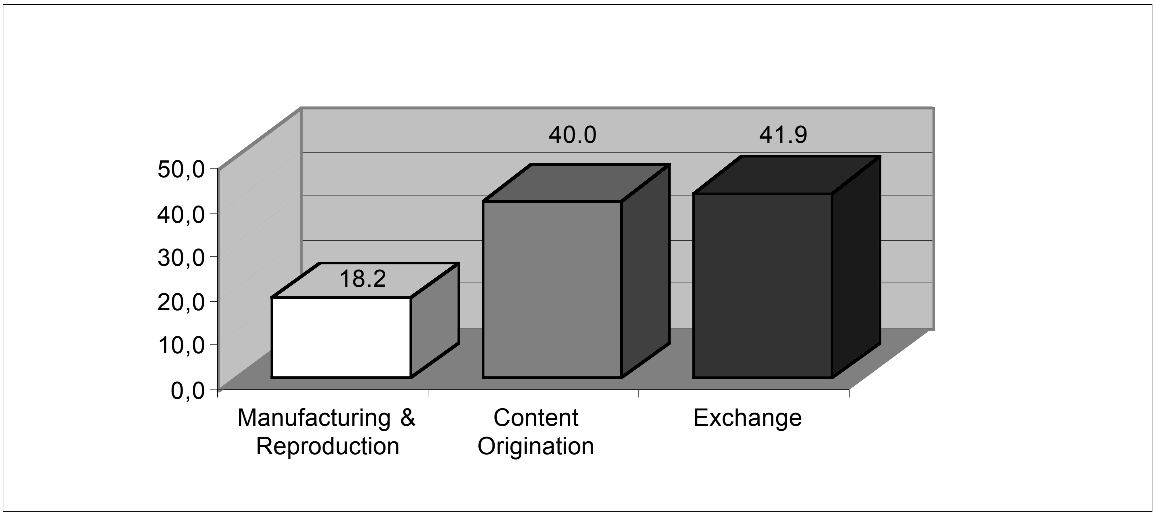
3. STATISTICAL OVERVIEW OF THE CREATIVE INDUSTRIES IN VIENNA

For the present study a definition in terms of NACE-classes was established based on international CI reports and methodological considerations for all 10 analysed sectors. In this context particularly the CI Production System by British economic geographer Andy Pratt (London School of Economics) was referenced who classifies the NACE-classes to the fields manufacturing, reproduction, content origination and exchange. The appendix of this study includes a detailed description of the methodological procedure used in this study, the table of the defined NACE-classes and the pattern for their complete classification or the classification based on percentages to the individual sectors.

3.1 Employment Structure of Viennese CIs

As illustrated by the following graphic Vienna clearly represents in respect to its employment volume within creative industries a location of content origination and exchange. This is not much of a surprise because creative industries do not contain corresponding production classes in certain sectors (such as fine arts, museums/libraries, architecture and advertising) and Vienna on the other hand can only conditionally be regarded as an international production location. This is reflected for instance by a lack of large pressing plants for CDs or DVDs that might be relevant for many sectors pertaining to CIs (such as the audiovisual field, music, multimedia and software).

Graph 1: Employment percentages along the value chain (based on the 2001 census of employment)



Source: Statistics Austria

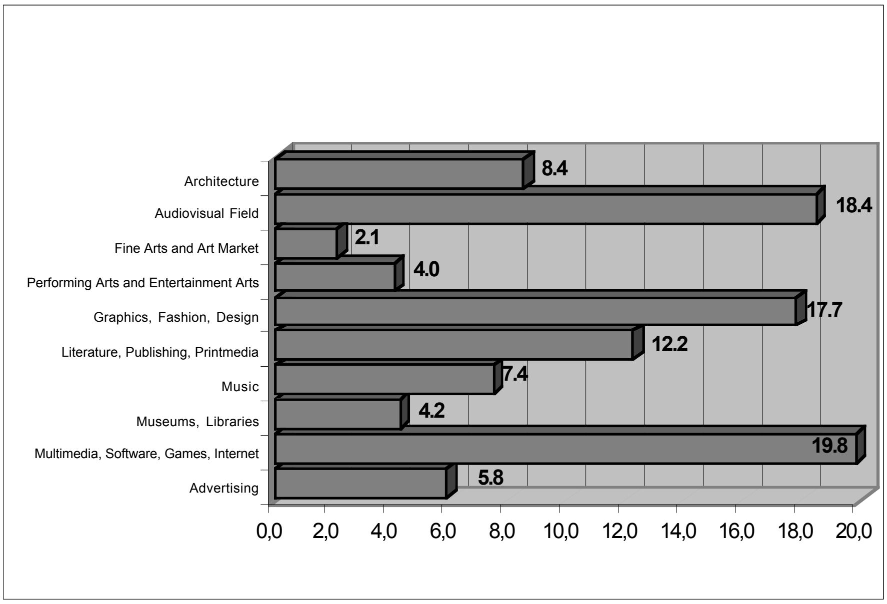
Looking at employment distribution between the individual CI-sectors, the following three sectors

- Software, multimedia, the Internet and games
- Audiovisual field (film, video, television and radio)
- Graphic arts, fashion and design

have by far the highest employment percentages and subsume more than half (55.9 %) of the entire employment volume.

On the other hand the sectors of fine arts, performing arts and museums/libraries have the lowest employment rates (altogether 10.3 % see the following graphic).

Graph 2: Employment distribution between CI-sectors in percentages (based on the 2001 census of employment)



Source: Statistics Austria

Depending on the data source (according to the Association of Social Security Institutions 2002, census of employment 2001 by Statistics Austria) the entire employment volume of Viennese CI-enterprises amounts to 101,050 or 120,014 individuals. The different results are based on different research instruments and classifications. For instance the Association of Social Security Institutions includes the new self-employed or independent contractors in the figures (54,497 individuals in Austria as of July 2003) but they are not included in the NACE-classes.

A time series is only available for data from the Association of Social Security Institutions. Between 1998 and 2002 the total employment rate increased by 6.2 % with varying employment trends within the individual sectors.

Sectors that had an increase in employment between 1998 and 2002:

- Museums, libraries (+218 %)
- Advertising (+41.4 %)
- Software, multimedia, the Internet and games (+32.2 %)
- Fine arts and the art market(+19.2 %)
- Performing Arts and entertainment (+12.8 %)
- Architecture (+1.6 %)
- Literature, publishing and print media (+0.4 %)

Sectors that had a decrease in employment between 1998 and 2002:

- Music (–11.4 %)
- Graphic arts, fashion and design (–8.6 %)
- Audiovisual field (film, video, television and radio) (–4.3 %)

The total amount of 17,948 Viennese CI-businesses has overall 120,014 employees (according to the census of employment 2001), which equates to an enterprise size of 6.7 individuals on average.

The following table provides an overview of the total employment, change rates and the number of enterprises.

Table 1: Employment rate of the Viennese CI-sectors (2002/2001)

	Data from the Association of Social Security Institutions 2002	Change 1998/2002 in %	Census of employment 2001	Number of enterprises
Architecture	**8468**	**1.60 %**	**10123**	**2733**
Content Origination	8468	1.60 %	10123	2733
Audiovisual field	**18696**	**–4.30 %**	**22089**	**795**
Manufacturing and Reproduction	13652	–7.50 %	13436	72
Content Origination	3225	1.40 %	5788	487
Exchange	1819	14.60 %	2865	236
Fine arts and the art market	**1272**	**19.20 %**	**2497**	**810**
Content Origination	290	–10.20 %	1235	379
Exchange	982	31.90 %	1262	431
Performing arts and entertainment	**3120**	**12.80 %**	**4832**	**965**
Content Origination	290	–10.20 %	2102	636
Exchange	2830	15.80 %	2729	329
Graphic arts/fashion/design	**19657**	**–8.60 %**	**21251**	**4520**
Manufacturing and Reproduction	2232	–23.33 %	1589	412
Content Origination	1860	–9.80 %	2448	657
Exchange	15565	–5.80 %	17214	3451
Literature/publishing/print media	**13802**	**0.40 %**	**14586**	**2315**
Manufacturing and Reproduction	4009	–13.11 %	4446	357
Content Origination	6460	6.50 %	6020	1046
Exchange	3334	8.80 %	4120	912
Music	**6795**	**–11.40 %**	**8894**	**1292**
Manufacturing and Reproduction	1964	–32.30 %	2323	73
Content Origination	1239	–8.90 %	1697	457
Exchange	3592	5.40 %	4875	762
Museums/libraries	**2897**	**218 %**	**5053**	**876**
Exchange	2897	218 %	5053	876
Software/multimedia/games/ Internet	**20744**	**32.20 %**	**23726**	**1949**
Manufacturing and Reproduction	24	–36.80 %	14	2
Content Origination	8130	75.60 %	11577	1215
Exchange	12590	14.20 %	12135	732
Advertising	**5599**	**41.40 %**	**6963**	**1693**
Content Origination	5599	41.40 %	6963	1693
CI-Sectors total	**101.050**	6.20 %	**120.014**	17.948

3.2 Corporate Structure of the Viennese CIs

As stated above, the average-size Viennese CI-business employs 6.7 individuals. This leads to the conclusion that the sector's structure is affected and shaped by this high proportion of small-scale business. A more detailed analysis of the data based on the census of employment in 2001 demonstrates that almost half (48.2 %) of the 17,949 CI-enterprises in Vienna are so-called sole-proprietorships. Another 47.9 % of the businesses employ 2-19 individuals.

Only 4 % of all enterprises are medium or large-scale businesses.

Graph 3: Overall structure of the Viennese CI-enterprises according to enterprise size classes in %

As it is illustrated by the table above the sectors

- Fine arts and the art market (74.2 %)
- Performing arts and entertainment (57 %)
- Advertising (56.5 %)
- Music (55.2 %)
- Museums, libraries (54.5 %)
- Architecture (54.3 %)

have a much larger percentage of sole-proprietorships while only the sector of graphic arts, fashion and design has a lower than average percentage of sole-proprietorships at 33.1 %.

Large enterprises with more than 100 employees can only be found in the audiovisual field (2.3 %) and in the sector software, multimedia, the Internet and games (2.1 %) to a relevant extent. The percentages of large enterprises in all other sectors range from 0.1 % and 1 % (see table below).

Table 2: Enterprise size in the CI-sector in Vienna in 2001 (based on the 2001 census of employment)						
	Total number of enter-prises	Percentage of sole-proprietorships	With a total of 1–19 employees (in %)	With a total of 20–99 employees (in %)	With a total of 100–249 employees (in %)	With a total of 250 or more employees (in %)
Architecture	**2733**	**54.3**	**43.3**	**2.2**	**0.2**	**0.0**
Content Origination	2733	54.3	43.3	2.2	0.2	0.0
Audiovisual field	**795**	**45.5**	**48.3**	**5.7**	**0.7**	**1.6**
Manufacturing and Reproduction	72	31.9	47.6	16.0	5.6	15.3
Content Origination	487	55.2	41.0	3.1	0.2	0.4
Exchange	236	29.7	63.6	7.9	0.3	0.0
Fine arts and the art market	**810**	**74.2**	**24.4**	**1.0**	**0.2**	**0.0**
Content Origination	379	87.1	12.1	0.3	0.3	0.1
Exchange	431	62.9	35.3	1.6	0.2	0.0
Performing arts and entertainment	**965**	**57.0**	**40.8**	**1.6**	**0.3**	**0.2**
Content Origination	636	67.5	31.6	0.7	0.2	0.1
Exchange	329	36.8	58.7	3.5	0.5	0.5
Graphic arts/fashion/design	**4520**	**33.1**	**64.1**	**2.2**	**0.4**	**0.1**
Manufacturing and Reproduction	412	46.6	50.5	2.4	0.5	0.0
Content Origination	657	53.3	44.9	1.3	0.6	0.0
Exchange	3451	27.7	69.4	2.4	0.4	0.1
Literature/publishing/print media	**2315**	**49.6**	**45.8**	**3.8**	**0.5**	**0.3**
Manufacturing and Reproduction	357	19.9	67.5	10.6	1.1	0.8
Content Origination	1046	70.8	25.9	2.4	0.7	0.2
Exchange	912	37.0	60.2	2.7	0.1	0.1
Music	**1292**	**55.2**	**41.2**	**2.9**	**0.4**	**0.3**
Manufacturing and Reproduction	73	54.8	35.6	4.8	1.4	2.7
Content Origination	457	80.5	17.9	1.4	0.3	0.1
Exchange	762	40.0	55.6	3.6	0.5	0.2
Museums/libraries	**876**	**54.5**	**40.6**	**3.8**	**0.9**	**0.2**
Exchange	876	54.5	40.6	3.8	0.9	0.2
Software/multimedia/games/Internet	**1949**	**44.1**	**47.0**	**6.7**	**1.3**	**0.9**
Manufacturing and Reproduction	2	50.0	50.0	0.0	0.0	0.0
Content Origination	1215	52.8	39.5	6.0	1.1	0.6
Exchange	732	29.5	59.4	8.0	1.7	1.4
Advertising	**1693**	**56.5**	**39.7**	**3.7**	**0.1**	**0.0**
Content Origination	1693	56.5	39.7	3.7	0.1	0.0
TOTAL	**17948**	**48.2**	**47.9**	**3.2**	**0.5**	**0.3**

Source: NACE-classes that pertain several analysed fields simultaneously are allocated in percentages according to the current census of employment in 2001 (ÖSTAT 2003), the Austrian sales tax statistics 1999 (ÖSTAT) and based on the current structure information provided by the Chamber of Commerce Vienna concerning the corporation and employment percentages in Vienna.

The total of 17,948 CI-enterprises in Vienna are distributed over the 10 individual CI-sectors as follows. There are more than 2,000 enterprises within the following sectors:

- Graphic arts, fashion and design
- Architecture
- Literature, publishing and print media

with the sector graphic arts, fashion and design having the highest number of enterprises with 4,520 businesses.

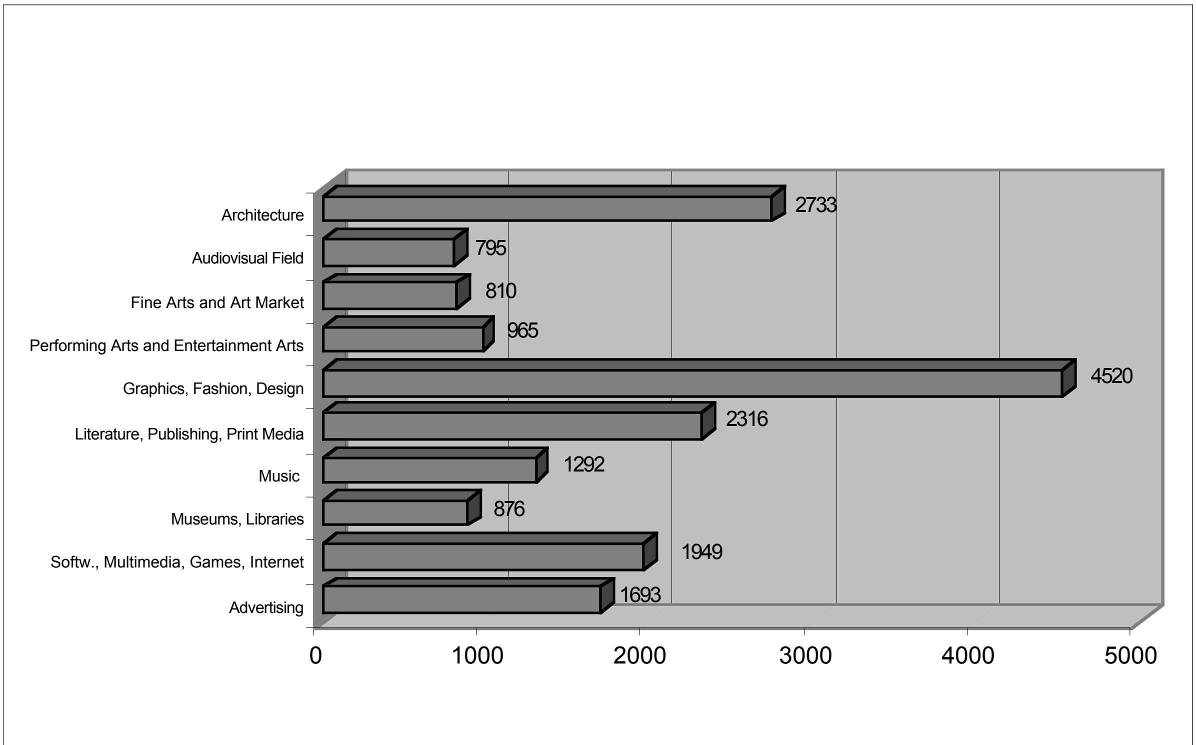
However, the following sectors comprise less than 1,000 enterprises

- Museums, libraries
- Performing arts and entertainment
- Fine arts and the art market
- Film, video, television and radio

Here it shall be noted that the number of enterprises does not correlate with the employment relevance of a given sector. For instance the audiovisual field has the lowest number of enterprises at 795 businesses but still has the second highest employment rate with 22,089 employees. The decisive factor for this is that this sector also has the highest number of large enterprises within its value chain.

On the other hand the sector of advertising comprises 1,693 businesses but its employment volume only amounts to nearly 5,600 individuals.

Graph 4: Number of enterprises per sector (based on the 2001 census of employment)



Source: Statistics Austria

4. THE SPECIFIC CHARACTERISTICS OF THE CREATIVE INDUSTRIES IN THE CULTURAL CITY OF VIENNA

The city of Vienna had been attested to have a large creative potential already in the past. Geldner (2000) estimates the number of creative workers within the art, culture and entertainment sector in Vienna at 60,000. Another factor is the existing and well-established infrastructure (museums, theatres, etc.) and the international reputation of being a cultural capital. However, the low degree of implementation of this creative potential in economic activities is perceived as a weakness. Furthermore, there is a lack of large media corporations, pressing plants and international distribution societies. As a result, there are gaps in the value chain and the dependency upon public funding in some parts of art and culture production causes a lack internationalisation endeavours.

The separation between high culture and other areas of CIs plays a relevant role in Vienna. The traditional forms of art (E-music, theatre, fine arts, museums) are very strong in Vienna, the value chain is generally complete and the educational system well-established, furthermore public authorities play a central role in funding these activities. These areas sustain the „cultural capital of Vienna", meaning they are well secured, institutionalised and widely undisputed fields and activities with strong attachment to preserving the „cultural heritage". „Cultural producers" are institutions that are partly federally funded or financed by the City of Vienna (museums, music theatre, musical stages) whose cultural activities are also broadcasted effectively on radio and television under public law according to their cultural commission. Furthermore, these products represent international export articles (e.g. New Year's concert, musicals) and become essential contributions for value creation of the city in the context of cultural tourism.

Many areas that are predominantly based on public funding of the cultural production (within the high culture as well as the so-called „free" sector that is largely structured on a small scale level) are however still characterised by a producer mentality that may result in lesser developed economic application strategies as compared to other CI-areas with less public funding. At the same time it shall be emphasised that consumer orientation and the subjectivity of art production play a pivotal role here.

All in all the economic effects that were achieved in this sector – in part considerable achievements (cultural tourism, commissioning market for CI-enterprises) – have to mostly be regarded as indirect effects because employment and added value are not the result of direct economic-orientation on part of the protagonists.

Thus in the following we will outline the significance of public art and culture funding for the existence of the art and culture related CI-businesses in Vienna and furthermore their most noticeable strengths and weaknesses are highlighted.

A detailed description of the structure, market and employment trends of each sector will be given in each corresponding chapter.

4.1 Interaction Public-Private

For the entire field of creative industries in Vienna the interaction with publicly funded art and cultural fields is particularly important. Public funding that is allocated toward the operation of cultural venues, museums, festivals and cultural events or goes to the creation of art and culture directly, is an essential economic part of CI-enterprises in the context of the overall market volume, as well as in regard to economic prosperity.

The expenses of the City of Vienna for art and culture amounted to more than 171 million € in 2000, which equates to one quarter of the total expenses of the federal government for art and culture. The expenses of the federal government during the same time period amounted to more than 668 million Euro, including expenses for art education (art schools). A large portion of these federal expenses for art and culture is allocated to the city of Vienna (e.g. federal museums and theatres etc.), which multiplies the expense volume of the public funds spent in Vienna threefold.

The expenses of the federal government and the provinces altogether (without expenses for art schools) amount to, in Vienna, more than 160 million € per year for the performing arts alone per year in Vienna alone and to 110 million € per year for the sector of music with 80 % of all financial means being designated for music being allocated to the two large music theatres, the State Opera and the Volksoper. If the public expenses for art schools are also included, then the annual financing volume amounts to more than € 500 million Euro in Vienna.

Table 3: Cultural expenses of the City of Vienna and of the Federation – Federal Government according to LIKUS-main categories (2000)*

Funded sector	Vienna 2000 in Mio. €	Federation 2000 in Mio. €
Museums, archives, and sciences	33.47	112.21
Building Architectural Cultural heritage	7.75	90.74
Folk Culture, Preservation of Local customs and traditions	2.51	0.59
Literature	1.00	7.35
Library activities	0.64	20.80
Press	-	18.56
Music	18.16	9.65
Performing Arts	51.22	177.40
Fine Arts, Photography	7.94	7.40
Motion picture and video activities	10.87	12.41
Radio and television activities	-	9.61
Cultural initiatives, centres	1.28	4.84
Education, further education	0.15	141.54
Adult education	-	0.18
International cultural exchange	0.54	34.36
Large events	20.13	11.84
Other	15.75	9.31
Total	**171.39**	**668.80**

Source: Cultural statistics 2000, Statistik Austria

* Note: The cultural budgets according to LIKUS are only available for the year 2000. The cultural statistics 2001/2002 will be published in 2004 by Statistik Austria. Adult education is not included, in particular that of Vienna, in the cultural statistics according to the LIKUS-system. There are of course cultural educational programmes for instance at adult education centres, etc.

These numbers illustrate the dimension of the significance of public resources in the overall context of creative industries. This volume for public funding and the institutions that are funded through them form a relevant market for products and services generated by CI-businesses, both within the upstream or downstream area. Therefore, the publicly funded art and cultural activities are a significant commissioner and partner for a number of Viennese CI-enterprises.

Therefore, three groups can basically be identified for the CI-sectors analysed in the context of this study in terms of the significance of publicly funded art and cultural activities:

- Sectors that would hardly survive economically without public funding. This includes primarily the field of fine arts, almost all of performing arts (excluding entertainment and cabaret), and museums and libraries.
- Sectors that are largely dependent upon public funding within certain sections of value chain. This includes primarily literature and publishing, fashion, music and the film industry.
- Sectors without or with a very low degree of public funding. This includes primarily the areas of multimedia, software, games, the Internet and the fields of advertising, graphic and product design, the television and radio sector as well as large parts of architecture (here the public authorities again assume the function of important commissioners for products and services, such as within the multimedia sector).

This economic interdependence between parts of creative industries in Vienna and public funding of art and culture is a characteristic structural feature of Vienna. Thus, when regarding CIs in Vienna it has to be kept in mind that CI sectors must not only been regarded in terms of economic interdependence but also in respect to interdependence to innovation and creativity. The economic situation and the structure of the CI-corporate landscape would be of a very different nature in Vienna without the public funding of art and culture in many CI-sectors, namely structurally very thinned out and economically marginal.

Unfortunately, there are no studies yet available concerning structure and extent of such economic interdependence between publicly funded cultural institutions and the publicly funded cultural activities and Viennese CI-enterprises.

4.2 The Strength of Content in Vienna

Artistic Creative Potential, Education, Science and Research

The strength of Viennese CIs is clearly their so-called content origination. This is not very surprising considering the reputation of Vienna as a cultural capital, a university capital, a capital of research institutions and headquarter of national and internationally operating enterprises and agencies.

This demonstrates that a creative artistic environment does exist in Vienna to a large extent and that it is more established than in other Austrian cities. Many sub-disciplines of CIs that cannot be attributed to traditional high culture often distinguish themselves by way of a large socio-cultural background independent of the established art and cultural happening. This is also reflected by the different aspects of working styles and ways of living that generally are not included in the context of so-called normal biographies into official economic statistical analyses or classifications. The determination to develop a distinct way of generating art for implementing individualistic creative performances – that becomes manifest by means of technological possibilities – is a relevant factor. Many segments of CIs are characterised by the aim for the „production of meaning" – aside from guaranteeing economic survival. Most of the time, the motivation to work in this area is characterised by high individual interests despite poor structural conditions. Very small businesses and self-employed individuals are always competing for opportunities and possibilities.

The relevance of the artistic and art related activities within the Viennese CI-businesses were illustrated in the context of the comprehensive corporate interviews to a satisfactory extent. For example, between 54 % and 70 % of all interviewed individuals within the audiovisual field indicate concerning the sectors performance and support that they cooperate with artists in the fields of conception/development and implementation/production. For the area of graphic arts, design, fashion and advertising the share of these enterprises still amounts to circa one-third.

Only the sectors of multimedia, software, games, the Internet and interestingly enough advertising as well do not have many cooperations with artists.

It is understood that cooperations between artists and corporations in sectors such as fine arts, performing arts, music or literature are very important. They usually generate products in the context of art and cultural happenings.

Furthermore, education at universities is a central factor for generating creative potential in the area of creative industries. The university report of 2002 indicated 8,500 graduates for the study year 2000/2001 in Vienna, and for creative industries mainly graduates from technical universities, art universities (fine and applied arts and music), as well as from humanities and economic sciences are relevant.

Together with graduates from Viennese academies pertaining to this area they form the central reservoir for human resources for creative industries in the art and cultural sector as well as in economic disciplines of Viennese CI-enterprises. The evaluation of the interviews that were conducted with 1,123 Viennese CI-enterprises demonstrated that the percentage of university graduates amongst the individuals employed in CI-enterprises is far below the overall average at 25 %.

Furthermore, Vienna has a large amount of research capacity within creative industries both in the context of universities and also outside of them. In the context of a screening project of the Viennese research landscape that was commissioned by the Wiener Wissenschafts-, Technologie- und Forschungsfonds (WWTF) (Vienna science, technology and research fund), 156 research institutions were identified in Vienna that are closely connected to creative industries through their research activities[1]. In terms of special interests, the research activities of the 156 research institutions in Vienna can be categorised in seven thematic fields such as

- Intelligent Cultural Heritage (Archaeology, restoration, conservation, archives etc.)
- Music (musicology, acoustics, physiological/psychological aspects etc.)
- Cognition, medicine, and Artificial Intelligence
- Architecture and design (incl. fashion)
- Visualisation/future interfaces (Multimedia, usability, interactive systems etc.)
- Culture, society, transformation (cultural studies, aesthetics, art and cultural sociology/history, linguistics etc.)
- Cultural economy and urban/regional research (incl. cultural statistics, cultural documentation, tourism and recreation research).

However, the official economic statistics are not able to include an estimation of the entire creative potential that is particularly of importance for content origination and of the people that are operating in artistic and art related fields. The logical structure of the NACE-codes does, for one, not follow the specific requirements of conflicting topics within creative industries, and on the other hand a large number of people who are working in creative industries adhere to work and life styles that are not included in the official economic and employment statistics or not to a sufficient degree.

For example, the figures for the entire field of freelancers whether as self-employed individuals or in the context of independent contractors are included according to the Association of Social Security Institutions, however their activities are not classified according to NACE-codes. As of July 2003, this included nationwide almost 55,000 people. This leads to the fact that particularly for

[1] see: Expertise concerning the planned research focus *Creative Industries Supporting Sciences* of the WWTF (Mediacult/Österreichische Kulturdokumentation/WIFO), Vienna, February 2003 (www.wwtf.at).

the field of content origination the economic statistical data are able to only give an incomplete view of the actual dimension of the employment rate.

4.3 Weakness in Application in Vienna

Small Scale Businesses, Weakness in Capital and Management Deficits

A characteristic of many CI-sectors in Vienna is the predominance of small-scale businesses, particularly in art and culture related fields such as U-music, film industry, literature and publishing activities, fine arts, fashion, graphic-design etc. However, small-scale businesses also predetermine a weakness in capital, which in turn does not only make expansion strategies into supra-regional and international markets more difficult but it also results in the fact that necessary management capacities and required budget for supporting distribution and application strategies are only marginally available. This problem is clearly visible in the field of U-music and also within product design where despite of international market opportunities for their products (such as new electronic music) it is hardly possible to implement these opportunities into actual distribution and application systems due to the small size of the businesses and their lack of capital and resources. It is also similar for the film industry where despite of international recognition there is still a lack of producer know-how in most enterprises. This problem is also very prevalent on the Viennese book market that is very multifaceted but due to the small size of the publishing houses while simultaneously having a very low business volume they are very dependent on the German book market.

Furthermore, the lack of specific copyrighted application and reprocessing of products and cultural goods (second and third hand application) is another weakness within the art and culture related fields. For example, a large number of productions that were created by the independent dance and theatre scene are only performed once for the duration of only a few days; good musical products pertaining to the U-field hardly ever have a chance to be introduced to internationally connected niche and speciality markets due to insufficient distribution and marketing structures; the know-how concerning options of second and third hand application in the film sector is not very profound and application perspectives in terms of copyright strategies are hardly approached.

All these problems correspond with the hardly existing possibilities for acquiring venture capital, the general weakness in capital that is characteristic for these small-scale businesses and the lack of management and marketing capacities. Pooling-strategies, access to venture and foreign capital, the equity capital strengthening and the generation of professional management know-how concerning marketing and application strategies are thus the most relevant requirements of a Viennese CI-strategy.

One basic feature of art and culture related CI-fields, is that there is hardly a lack of innovative and partly internationally marketable „products" but rather a lack of necessary capital strength and marketing-oriented application of know-how.

5. SHORT OUTLINE OF THE INDIVIDUAL SECTORS

5.1 Architecture

According to a census of employment by Statistics Austria in 2001 there were 2,733 businesses operating in the field of architecture in Vienna and more than half of these businesses, namely 54.3 % are sole-proprietorships. In sum there are 10,123 people employed in these 2,733 enterprises.

According to the data of the Association of Social Security Institutions the employment rate has remained relatively stable from 1998–2002. However, there is a slight increase in employment at 1.6 % for the area of Content Origination.

A particular **strength** of the Vienna-based architecture is its excellent international reputation, the high standard of Viennese schools and the intensive cooperative structures within architectural offices.

Central **weaknesses** of this sector include an increasing amount of competition in the light of new occupations that offer the services that architects provide in a combined package in segments and on the other hand also the increasing number of architects that results in turn in an increased extent of „internal" competition. At the same time it becomes increasingly difficult for young architects to break into the market through the requirement of proving three years of work experience and one year as a steady employee that is required for the licensure considering that there is a sharp decline of employees in the classic sense within this sector. Another disadvantage is the opaqueness of calls for competitions. Due to their weakness in capital many small offices are excluded from the opportunities for commissioning even through competitions.

Architecture and building culture continue to become increasingly important just as the awareness for architecture is increasing in the public, also the increasing demand, increasing business volume and the increasingly difficult job situation for architects. We are confronted with a paradox situation: an extreme boom of contemporary architecture but at the same time a marginalization of the profession. This field is only to a lesser degree dependent on public funding.

5.2 Audiovisual Field (Film, Video, Television and Radio)

The census of employment in 2001 registered 795 businesses that were operating in the audiovisual field with 45.5 % of these being sole-proprietorships. These 795 enterprises employed 22,089 individuals at the time of the count.

According to the data of the Association of Social Security Institutions employment decreased between 1998–2002 in this sector by 4.3 % and this employment decline occurred in the field of Manufacturing and Reproduction (manufacturing of blank image carriers, of radio and television devices, facilities for communications engineering, reproduction of recorded image carriers etc.).

A relevant **strength** of the location is the high concentration of enterprises that are operating in the Austrian AV-sector. This includes the area of television and film but also radio stations in which the dominant market position of ORF is a characteristic structural feature of electronic media. Particularly for the film industry, the high density of creative and innovatively oriented human resource is a relevant strength of this sector which is also reflected in internationally noted successes of Austrian motion picture activities in Autorenfilm, short film documentaries and experimental films.

While the television and radio markets are considered to be largely saturated, in which crowding out the competition is more likely than further growth spurts, the film sector may be a rather underfunded sector but one with good growth perspectives. Noticeable **weaknesses** can be found in the film sector in the corporate structure that is dominated by small-scale businesses, in its equity capital weakness, a lack of producer know-how concerning the international funding application of film and a lack of training opportunities (e.g. screenplay, acting for film, and postproduction).

The AV-sector is both in the television and radio market characterised by a small domestic market and is interlinked with the German media landscape. Internationalising cooperation and marketing structures are the main challenges aside from promoting digital production and postproduction capacities and require at the same time necessary investments by enterprises. New, relevant challenges for the film and audiovisual field are reflected by a further digitalisation of media (digital cinema, HDV, digital television/HDTV). They are however not systematically approached yet in terms of educational structures and corporate orientations.

5.3 Fine Arts and the Art Market

The census of employment in 2001 registered 810 enterprises in Vienna that were operating in the art and art market sector and more than 74.2 % of these enterprises have no permanent employees and therefore qualify as sole-proprietorships. Altogether there were 2,500 people employed by these enterprises at the time of the census in 2001.

According to the data provided by the Association of Social Security Institutions the employment rate within this sector increased in Vienna from 1998–2002 by 19.2 %. The highest increase in employment was registered for the field of Exchange (activities performed by exhibition and trade fair organisers, retail with antiques, broker for works of art) at an increase of almost 32 %. It is relatively difficult to make statements about employment in the production area of fine arts and the art market, that is concerning the number of artists within fine arts, because the data provided by the Association of Social Security Institutions only includes those individuals that have a fixed employment status. However, artists generally work on a freelance basis and they are only included in the employment statistics if they are employed full- or part-time in another field and thus they cannot be identified as an artist any longer. This lack of statistical data and scientific studies is a characteristic of the sector of fine arts and is not only characteristic for the number and the situation of artist operating in fine arts but also for the entire agency and sales area.

The **strengths** of this sector include primarily a high degree of artistic production. Intensive funding by public authorities creates relatively good work conditions for young artists to where the open, internationally oriented Viennese art scene offers a large number of exhibition spaces, venues and art events where works of art may be presented to the public.

However, they are generally to a lesser degree sales oriented and are therefore at the same time – from the perspective of economic usability of modern and young art – a noticeable **weakness** within the sector. Art promotion and art dealing of works of young and unknown artists is hardly established, particularly as a result of the lack of connection of the producing artists with galleries and museums. As a result of insufficient marketing, the already considerable extent of dependence of Vienna based artists on public funding is intensified. The „collecting culture" that is not very predominant in Vienna mainly focuses on already established art and is less willing to take chances. The restrictions on exports of art objects are another obstacle for internationalising the secondary art market. The sector of fine arts in Vienna is one of those fields that would hardly have a chance to survive in an economical sense without public funding. One distinct characteristic of this sector is that an increasing number of artists are met by a relatively small number of galleries that are specialised concerning young and unknown artists, as well as a small number of potential buyers in an international comparison. Nonetheless, the open and internationally oriented art scene makes Vienna an appealing location for the international art market. Furthermore, this sector is characterised by a low degree of networking with other sub-markets and with other CI-areas.

5.4 Performing Arts and Entertainment

According to the census of employment by Statistics Austria in 2001 there are 965 enterprises within performing arts that operate in Vienna and 57 % of these enterprises are sole-proprietorships. These 965 enterprises employ 4,831 individuals overall.

According to the data of the Association of Social Security Institutions from 1998–2002 an increase in employment of 12.8 % was registered.

The **strengths** of the sector of performing arts in Vienna include a large number of performance sites at this location, an international reputation of being a theatre capital and a well-established value chain from education to post-application in the so-called „high culture" area of spoken theatre. Modern dance has also established itself in the meantime in Vienna and necessary infrastructures have been created through dance festivals and the Tanzquartier. Furthermore, the segment of cabarets also has a well-established infrastructure and – as one of the few lucrative private sectors – it also has possibilities in the context of second and third hand application.

The **weaknesses** include a non-existing image of the city as a location for innovative theatre productions, hardly any international connections within the free scene along with poor working and application conditions, as well as an insufficient educational system in individual areas such as theatrical technique, acting for film or lighting design.

In general the area of the performing arts is in Vienna a primarily publicly funded sector. Therefore, private enterprises are more of a marginal phenomenon within creative industries and performing arts cannot be regarded as a main area for a creative industries-strategy. However, there are a variety of economic relations with supplying CI-enterprises with products and services and for post-application in the so-called „high culture" segment. No studies have been published yet concerning the significance of such economic interactions.

5.5 Graphic Arts, Fashion and Design

According to the census of employment by Statistics Austria in 2001 there are 4,520 enterprises operating in Vienna within the sector of graphic arts, fashion and design, in which 33 % of these enterprises are sole-proprietorships. Overall there were 21,251 persons employed in these enterprises at the time of the registration period in 2001.

According to the data of the Association of Social Security Institutions employment decreased in this sector between 1998–2002 by 8.4 % with the highest decrease in employment in the field of Manufacturing und Reproduction (includes the manufacturing of leather clothes, outerwear, other wearing apparel and accessories, manufacturing of footwear etc.) at 23.3 %. Due to insufficient data, however, a prognosis for growth cannot be made. Particularly the core area (that is the designers and design companies) and thus the area with large growth potential according to experts is hardly included in the statistics.

A major **strength** particularly within graphic design is based on the flexible structures of mostly small offices. They have a well-established network and they operate in the crossover area with a bundled but very broad range of services and often refer to themselves as full-service agencies, that is the customer receives everything „in one package".

Weaknesses of this sector are a large number of small sole-proprietorships that have hardly any opportunities to expand and to offer their range of services to a larger market due to their low capital resources and low annual revenues. Even though the interest in product and industrial design has been increasing in Austria, there is no considerable demand for it yet in Vienna. The lack of potential customers is mainly a result of the small number of large industrial production sites in and around Vienna versus the rest of the country. The low extent of integration with research is a large disadvantage particularly for this area. A major weakness of the fashion industry is the low degree of networking between fashion-design, retail and Viennese production sites and the lack of adequate infrastructure (trade fairs, journals).

Despite a low awareness of design in Vienna and the entire nation of Austria, Vienna was able to establish itself as an important centre for Austrian design companies. The potential in this sector is assessed as relatively large. Many creative talents have a variety of qualifications and offer a broad service portfolio. The integration within the CI-sector is very well established. Public funding does not play a large role in this sector, with the exception of fashion.

5.6 Literature & Publishing, Print Media

According to the census of employment by Statistics Austria in 2001 the field of literature and publishing comprised 2,316 enterprises of which almost half, namely 1,149 (49.6 %) are sole-proprietorships. Overall a total of 14,586 persons were employed in these 2,316 enterprises during the registration period.

According to the data of the Association of Social Security Institutions employment has remained nearly steady from 1998–2002 and there was only a slight increase of 0.4 %. A decrease in employment at almost 13 % was registered in the field of 13 % Manufacturing and Reproduction (printing, bookbinding and other printing plant processing etc.).

Major **weaknesses** of the Viennese and Austrian book market are the low levels of capital, its small size and a resulting high degree of dependency on the German book market. The publishing sector and the book trade operate based on small-scale businesses, even though strong concentration tendencies have been observed in both areas during the past years. The resulting polarisation of the market with some large companies that have high revenues and often with international shareholding and many small enterprises that are low in capital leads to increased pressure for small enterprises. The situation is particularly alarming in the field of book trade due to a high density within the book trade that is also the highest in Vienna within the entire German speaking area. Small enterprises (a maximum of 10 titles that can be supplied) within publishing that include approximately 65 of the Austrian publishers are able to finance in many cases with the help of public funding the production but not the necessary marketing and distribution strategies for promoting the success of a book. As a result most Austrian authors switch to large German publishers once they become successful. Another disadvantage of the Viennese book market is that there is a lack of qualification and educational programmes that respond to changing professional and working conditions. Furthermore, the publishers/book stores do not have the necessary resources for utilising such an advanced training programme.

Public funding becomes very important and is partly compensating considering this situation. The **strength** of this sector is the funding of publishers that has existed for the past decade. This enabled an increase of the production of titles of Austrian publishing houses by almost one-third. Generally, new technologies become increasingly important in connection with the production and distribution of books, magazines etc. They are particularly utilised in the context of the Viennese immediate book trade and the large enterprises operating in this field register revenue of 100,000 titles per day. Thus, this sub-discipline is one of the most innovative sectors within the area of book trade. Compared to other countries online-book trade is being utilised to a lesser degree in Austria. Also new technologies such as "Print-on-Demand" are hardly being applied yet.

5.7 Multimedia, Software, Games and the Internet

According to the census of employment by Statistics Austria in 2001 the field of multimedia, software, games and the Internet comprised 1,949 enterprises in Vienna of which 44 % operate as sole-proprietorships. Overall a total of 24,000 persons were employed in these almost 2000 enterprises.

According to the data of the Association of Social Security Institutions employment has increased in this sector from 1998–2002 by 32.2 %. The highest increase in employment was found in the field of Content Origination (software companies, web design, creation of databases etc.) at more than 75 %.

The **strengths** of this sector include a well-established infrastructure with the Internet, mobile phone networks, cable networks and a dense network of Wireless Local Area Networks (W-LAN). Furthermore, the educational field has established itself in the meantime in Vienna for this sector and reputable research institutes are now located there. As a location for international corporations Vienna has formed an important East-West platform for the past years, which is also demonstrated by a high percentage of exports within this sub-category. Aside from a lack of relevant hardware production (Manufacturing and Reproduction) the value chain at this location is well established.

A distinct **weakness** of this sector is a lack of cooperations on site between the diverse local corporate landscape and developing centres of international large corporations that are also rather scarce here. Particularly the local multimedia sector is predominated by small-scale businesses and exhibits a rather heterogeneous structure in terms of its corporate profiles. Only a low degree of relevant Austrian research activities take place on site and thus it is difficult for the location of Vienna to establish a distinct profile and to place this profile in an adequate manner. The sub-discipline of games that is predominated by sole-proprietorships exhibits only a restricted extent of developmental potential and is not a relevant factor in the context of an analysis of CIs.

In general structural adjustments took place as a result of market slumps and pressure due to international competition, which is reflected by increased requirements for enterprises concerning specialisation, developmental capacities and an improved establishment of cooperation and distribution structures. Obstacles for further development of the sector in the context of an international crisis in this branch can be found in a lower profiling of Vienna within Austria in comparison to other CI-sectors, an insufficient positioning of the location despite top performances in some highly differentiated production and service fields and an environment free of risk concerning the access to private capital. The potential that is available in an art and culture related context and the existing creative potential of the location is hardly utilised due to such structural characteristics.

5.8 Museums and Libraries

According to the census of employment by Statistics Austria in 2001 876 enterprises were operating in the sector of museums and libraries in Vienna and more than half of them, namely 477 (54.5 %), were sole-proprietorships. Overall there were 5,053 persons employed in these 876 enterprises at the time of the registration period in 2001.

According to the data of the Association of Social Security Institutions employment increased in this sector from 1998–2002 by 218 %. This large increase in employment can be attributed to the field of Exchange (including libraries and archives and the conservation of ancient monuments, as well as providing company-oriented services etc.).

The **weaknesses** include a lesser degree of market orientation and a high degree of dependence on public funding for such institutions. Another problem is posed by the insufficient arrangement of exhibition and collection policies of the enterprises, a lack of distinct profiles of the enterprises and overlapping exhibitions.

One of the **strengths** of this area is the recently introduced full legal capacity that has indeed contributed to an increased efficiency and to a stimulation of the market. With the newly founded Museumsquartier, Vienna has acquired one of the largest cultural areas within Europe with a multiplex of publicly funded cultural institutions. Relevant characteristics are aside from a concentration of organisations of a value chain that is based on the division of labour, the cultural and economic application also mix. Many of these institutions were newly founded with modern operation and marketing structures. This cultural diversification of institutions and the local concentration have turned the Museumsquartier into an ideal type of a location that is based on innovative interactions between cultural institutions as customers and the supplying institutions of CIs.

Museums, libraries and archives are highly dependent upon public funding and therefore their classification as creative industries is somewhat problematic. However, because they are institutions that are important parts of the value chain of other CI-areas (literature and fine arts) they are included in the context of the present study as relevant aspects of creative industries in Vienna. By culture conveying activities libraries and museums perform basic preparatory activities for the creative industry that are indispensable for the survival of many enterprises in the CI-sector. The area of museums is also very important for the image of the city as an art and cultural capital and for the city's culture tourism that is growing everywhere.

5.9 Music

According to the census of employment by Statistics Austria in 2001 1,292 enterprises were operating in the field of music in Vienna and 55.2 % of these enterprises were sole-proprietorships. Overall there were 8,894 persons employed in these 1,292 enterprises.

According to the data of the Association of Social Security Institutions employment decreased in this sector between 1998–2002 by 11.4 %, and the field of Manufacturing and Reproduction (Manufacturing of sound storage, image and data media, reproduction of recorded sound storage media and the manufacturing of phonograph devices) had the highest decrease in employment at 32.3 %.

Relevant **strengths** of the Viennese music business include the international reputation of being a music capital and a well-established structure of the value chain (with the exception of large pressing plants) in the field of classical music and within music theatre. This includes internationally reputable education, music publishers and music agencies and prestigious performance sites and the audiovisual reprocessing of productions. A further strength of this location is also the high density of musicians and particularly the innovative musical achievements in the field of the so-called serious contemporary music, the new electronic music and of jazz.

Major **weaknesses** of the music business in Vienna are particularly found in the field of U-music. Despite their strength within Content Origination (new electronic music, jazz, Wienerlied etc.) and growing opportunities for independent labels within a globally networking music market it is hardly possible to implement new technologically induced possibilities of music application in value adding and employment relevant effects due to a predominance of small-scale businesses with a lack of capital, insufficient marketing budgets and a lack of distribution know-how. Furthermore, insufficient educational and advanced training opportunities (for example music management, marketing and distribution) play a significant role, just as a lesser appeal and structuring of performance sites for life-performances.

In general the Vienna based music business is spilt into a dual-sector-system. The traditional classical music field that is funded through public means to a large extent has a well-established value chain, efficient application conditions and professional management structures. The U-music field is a large private sector and predominated by small-scale businesses, which has extensive potential that – also due to deficits in capital accumulation and insufficient sectoral management capacities – are hardly implemented in an economically relevant manner.

5.10 Advertising

According to the census of employment by Statistics Austria in 2001, 1,693 enterprises were operating in the sector of advertising of which 56.5 % of these enterprises were sole-proprietorships. Overall there were 7,000 persons employed in these 1,693 enterprises.

According to the data of the Association of Social Security Institutions employment increased in this sector between 1998–2002 by 41.4 %, with this increase in employment being found in the field of Content Origination (includes planning and implementation of advertising campaigns, advertising consultancy and distribution and delivery of advertising materials).

Major **strengths** of this sector are at a predominance of rather small advertising agencies a broad and trans-sectoral range of services that combines advertising, design and consulting activities. Despite of an overall decrease in advertising during the past years particularly small-scale Viennese enterprises were successful due to their low fixed costs and the resulting increased economic flexibility.

The increasing number of enterprises however also led to increasing competition which is intensified by a lack of cooperations and networking – this is a central **weakness**. The EU eastward enlargement may result in further dynamics of the market.

In general it shall be noted that the advertising sector is one of the prospering CI-sectors in Vienna, at least in terms of employment that increased by 41.4 %. Public authorities play only a marginal role as sponsors in the advertising sector that is mainly privately structured. On the other hand, they are relevant as commissioners particularly for young enterprises that still need to establish themselves.

6. RESULTS OF THE BUSINESS SURVEY

The present business surveys aim at depicting the situation of enterprises in this sector and to elaborate economic policy measures based on this assessment. While the approach of the value chain was utilised for differentiating individual CIs, in which the upstream and downstream economic areas pertaining to the CIs were included, the interviews are only limited to the actual "creative" areas within CIs. The analysed enterprises were classed according to four clusters.

A total of 1,123 enterprises and individuals participated in the interviews. This is a response rate of 35 % of the questionnaires that were mailed out. The responding units were classified according to the following four clusters: (i) the audiovisual field, (ii) performance & support, (iii) graphic art, design & advertising and (iv) software & multimedia (see table 4). Our sample comprised 715 enterprises or almost 64 % of the respondents working as graphic artists, designers or advertisers, while only 6 % of all the enterprises pertained to the performance and support sector. The relatively small percentage of enterprises within this sector is attributed to a high percentage of public enterprises that were not included in the study. The audiovisual field, software and multimedia comprise ca. 15 % of all the responses.

Table 4: Distribution of the sample according to industry clusters

Industry	**N**	**%**	**Cumulative %**
Audiovisual field	166	14.78	14.78
Performance and support	63	5.61	20.39
Graphic arts, design, advertising	715	63.67	84.06
Software and multimedia	179	15.94	100
Total	**1123**	**100**	

Source: WIFO

The response rate of the different industries was approximately the same for all four clusters and as a result the structures in Vienna can be depicted. Particularly the relevance of the field of graphic art, design and advertising is striking. Even if the advertising industry is excluded, a distinct focus on graphic art and design still remains visible in Vienna.

Approximately half of the CI-enterprises are satisfied with Vienna as a corporate location. Every fourth enterprise that indicated intervening factors evaluated bureaucracy/official regulations as excessive, restrictive, slow, service oriented to a low degree and all in all as obstructive. Almost as often mentioned, as it is thus in second place, on the listed defects was the traffic situation. As an advantage of the location for the creative industries located in Vienna a large accumulation of important customers, partners and decision makers can be named. Overall every third enterprise evaluated this aspect as positive and this equates to an advantage of regional networks. The varied cultural range is particularly valued within creative-artistic industries. While more than half of the enterprises from the sector „performance & support" and almost 30 % from the audiovisual field responded in such a way, the percentage within the sector of software & multimedia accrues to only 8 %. Responding individuals pertaining to this sector and also to the area of „graphic art, design, and advertising" most often mention the high quality of life within the city, which is a collective term for the high value of recreation, good shopping opportunities, high housing quality, an adequate price-performance ratio, etc.

Our sample of Viennese CIs comprised 21,823 employees and almost half (exactly 10,805, or 49.5 %) of which are female and the other half (precisely 11,018, or 50.5 %) are male. As expected the percentage of men that are employed on a full-time basis in every sector exceeds the corresponding percentages of women, while on the other hand the percentage of part-time employment and freelancing is higher for women than for men. One exception in this aspect is the software and multimedia sector, where men are more often employed as independent contractors and freelancers than women. Nonetheless, it shall be noted that this is the only sector where these freelancers are of lesser relevance.

Freelancers are extremely important for the operation of CIs. The „typical" company within each analysed CI-branch employs a high percentage of its employees as independent contractors or freelancers and only 15 % of the enterprises indicated that a flexible employment structure is not relevant for their corporate success. Whenever commissioned, freelancers are more often responsible for producing creative performances than permanent employees. The audiovisual field and „graphic art, design and advertising" a median-company employs freelancers for up to 100 % for creative operations, the 25 % amounts here already to 50 %.[2] The software and multimedia sector is positioned at the other end of the scale: compared to other sectors, freelancers perform here the lowest percentage of creative duties (also less than permanent employees). At the same time employment on a freelance basis or based on a contract for services is hardly relevant within this sector and in case they are utilised they are remunerated to the lowest percentage of the turnover. Aside from the aspect of remuneration this correlation is also found with a reversed algebraic sign within the audiovisual field and for „graphic art, design, and advertising". This allows for the conclusion that freelancers continue to become more relevant as the creative requirements within the sector increase – and therefore they have a more relevant position within CIs as compared to other economic sectors. Creative operations that were carried out by independent contractors and freelancers are the more relevant for the corporate success the higher the creative potential is within the sector.

In general CIs are an economic sector that offers an interesting starting point for economic policy measures:

- **Employees are highly qualified:** The formal educational level of the CIs that were assessed through our sample is very high. Every fourth employee within the sector is a university graduate and another 44 % have a matriculation level.

- **Cooperation and cluster structures are well established***:* In the total sample only every third company (that enabled a statistical evaluation) carries their business operations out independently. As a result most of the time business operations are carried out in the context of a network and permanent partnerships are more or less preferred in each sector. In sum it can be stated that the four industries do not differ to a large extent in respect to their clustering and to existing cooperations. Even though the clusters – as defined here – are generally structured in a complementary manner, that is the most important pre-suppliers and consumers pertain to the same sector, there are still links to other clusters. Furthermore, the advertising and PR-sector were identified as universal consumers of CIs and graphic designers as some sort of „universal pre-suppliers" for all other sectors.

- **Half of all enterprises were founded during the past decade:** Therefore, CIs are a rather young economic branch that is in general very dynamic. However, there are also businesses within the Vienna based CIs that had been operating in this field for a long time. Start-ups were mostly motivated by new technological possibilities (audiovisual field, multimedia).

[2] That is, the 14 enterprises (out of a total of 58 businesses pertaining to the audiovisual sector, that employ freelancers in the first place and that commented on their creative potential), that are the least likely to employ their freelancers for creative operations, however utilise every other freelancer for 'creative' purposes. For graphic art, design and advertising: the 75 enterprises (out of a total of 301) that are the least likely to employ their freelancers.

– **High degree of innovation:** Also for CIs, the enterprise size predetermines the likeliness for innovations that will be introduced by a given company. The larger an enterprise, the more likely it will be to introduce innovations. Furthermore, considerable differences can be found between the individual sectors. As expected, the innovative potential is the highest in the software and multimedia sector, where 66.5 % of all enterprises have carried out process and/or product innovations within the past three years. Within performance and support at least half of the businesses can be referred to as innovative in one way or the other, for graphic art, design and advertising this is only true for every third enterprise. The innovation rate is in most fields – at comparable dimensions – clearly higher than for other fields of the service sector (see Falk/Leo, 2003). However, the concept of innovation is defined in a very narrow sense in industries whose creative input accounts for a major part of the sold products. It is even more striking that technological innovation is seen to be so relevant for CIs.

– **The trend in demand is assessed as extremely positive:** The employment trend is predicted to develop in a positive manner within the next few years, which also fits this image. According to each sector 20–50 % of all businesses expect an increase of employment within the next years.

– **Digital goods are more than just a buzzword for CIs**: The e-content within CIs exceeds by large that of the overall economy: more than 23 % of the total revenue of this sector is accounted for by sales of digital products and three out of four enterprises utilise the Internet for sales promotion and every fourth enterprise offers e-commerce (macro-economically only one out of ten).

This situation allows for the conclusion that there are good conditions for further growth within this sector. However, there is also a number of structural limitations for further growth that however deteriorate the generally positive initial situation. One of the most relevant obstacles is the predominance of small-scale businesses within CIs. 210 out of the 1,123 analysed enterprises are sole-proprietorships (18.7 %), 365 (32.5 %) enterprises employ 2–4 individuals, while only 24 % have 5–10 employees. Only about 25 % of all enterprises comprise more than 10 employees.

Overview of enterprise sizes according to NACE (Association of Social Security Institutions, census of employment)

Table 5: Distribution of the sample according to firm size

Employees	N	%	Cumulative %
1	210	18.7	18.7
2–4	365	32.5	51.2
5–0	268	23.86	75.07
>10	280	24.93	100.0
Total	**1,123**	**100**	

Source: WIFO

The predominance of small-scale businesses within CIs also leads to a lack in necessary resources in order to finance larger investment and innovation projects and to establish distribution structures abroad:

– **Hardly any international activities:** A considerable number of CI-enterprises export their performances or produce them abroad. Within all sectors approximately 17 % of the revenue is generated through international markets. Even though this is impressive considering the small average size of the enterprises the export potential of this sector is not yet exhausted. Only 28 % of the enterprises indicated that they needed to establish new markets abroad in order to guarantee their long-term existence. Therefore, a large portion of the enterprises is satisfied with the domestic market conditions. It also has to be taken into account that the ability to establish export activities is highly dependent upon the enterprise size: Large enterprises export far more often than small enterprises because they are able to accumulate the necessary (human-) resources that are required for establishing new foreign markets.

- **Below average access to funding**: While private venture capital plays a rather insignificant role as a financing source, the percentage of enterprises that receive funding from business development is balanced over all branches; of course primarily projects with large artistic-creative potential benefit from art funding. 20 % of all CIs received funding for business development. Overall a balanced public funding policy prevails that all CI-sectors benefit from but within each sector primarily the most innovative, dynamic and export-oriented companies benefit from them. Funded enterprises are characterised by significantly higher growth rates and improved employment trends – however no conclusions can be drawn concerning the causality on the basis of this cross-sectional study. This is usually general funding for business development that does not always meet the needs of CI-enterprises as hardly any programmes existed that were tailored to the needs of the creative segments of the economy.

- **Problems of funding for business activity**: A fundamental problem for CIs is the access to external sources of funding. The reluctance of the banking system to finance activities of CIs is a result of the intangible nature of the products, the small size of the companies, the low degree of securities that can be guaranteed and also less professional experience of banks with this sector. Therefore, it is difficult for a large number of CI-enterprises to utilise external financing sources for their activities.

All in all, CIs are a very interesting economic branch. Future trends are not only evaluated very positively by external observers but also by the enterprises themselves. Aside from expected market and employment growth the high level of qualification and innovation, the high degree of networking, the high number of newly founded companies and the widespread use of digital technology are important assets.

Growth perspectives of the sector are limited by a small average enterprise size, a lack of financing possibilities and a low degree of internationalisation of the sector. The latter two factors are however a result of the small enterprise size.

Therefore, in general the positive structural features shall be established further and the negative ones counteracted. This implies above all the generation of consistent funding instruments that guarantees access to external financing sources for the enterprises and enables them to carry about projects that involve a certain amount of risk in order to create conditions for corporate growth. At the same time the demand for CI products should also be intensified on the part of the public authorities. This implies a less risk averse commissioning that can also be processed independent of the company size.

Furthermore, it shall be taken into account that employees of CIs have a high ideational motivation that prioritises personal sense-making more than purely commercial motives. This orientation may result in conflicts of objectives within the companies themselves as well as in the context of the interaction with economic policy. This initial situation – that is found to a varying degree within the different sectors – has to be taken into account for the generation of economic policy measures.

7. ECONOMIC POLICY RECOMMENDATIONS

Creative industries are a heterogeneous conglomeration of economic fields. The dividing line separates artistic-creative and technological orientations. On the other hand, only a fraction of CI-enterprises operates in a traditional sense. More important than growth and high profit are the creative process, the aspect of sense and pleasure (see corporate interviews) of the activities and the contribution to public discourse.

In order to promote this sector the different perspectives, orientations and objectives have to be taken into consideration. Furthermore, sector-specific characteristics have to be taken into account for generating strategies.

The promotion and development of CIs is a laborious process that requires many small and very few if any large steps. As a consequence, success is only perceived on an intermediate term level not a short-term level. Even though large, noticeable initiatives may contribute to the further development of CIs, a limitation to such would not be a lasting strategy for improving Vienna as a CI location.

In the following we will attempt to elaborate on the main line of attack for the development of Vienna as a CI-location, that are for all of the sectors – even if to a varying degree – of importance. The following four dimensions are proposed:

1. Growth Strategy

Many current problems are a consequence of the predominance of small-scale businesses within the sector. Many businesses are too small to make large investments without external funding. However, larger investments are necessary for completing the product and service range and to move toward foreign markets. This calls for the creation of conditions that favour corporate growth. There is a wide scale of measures aiming at reaching this goal:

– **Professionalising of business activities:** Despite a high educational level of the employees employed within the CIs there is often a widespread lack of qualifications in respect to business management. This is an important starting point for specific support programmes. This however includes the problem that the lack of qualifications may differ for each company. Here a rating can be performed for the company as a first measure. This enables the identification of weaknesses in order to select adequate advanced training and consultation services. Another – unspecific – measure is to organise conferences and workshops concerning CI-relevant questions and problems. These events do not only enable the contact with corporations but also all other services of the City of Vienna may be broadcasted.

– **Securing access to external financing sources**: CI-enterprises are often excluded from external financing sources. Banks are reluctant to invest in intangible products because securities are hard to provide and market trends and the future of the company is difficult to predict. This problem cannot be counteracted through PR but can be at least somewhat eased. Another possibility would be that the City of Vienna assumes the liability for loans which would minimise the risk for the banks when granting loans. Also venture capital should be pushed in certain partial aspects. Particularly in the context of large and risky projects, venture capital may be an advantage. However, here it is not argued for the City of Vienna to function as venture capitalists. There is rather room for mediating steps from both sides: venture capitalists could be informed much more about the activities within this sector. CI-enterprises should be prepared for an adequate interaction with venture capitalists.

- **Establishing innovation funding**: This financing problem is also common in the context of developing product and process innovations. Previous funding provided by the City of Vienna does not focus on eliminating this problem. Competitions – such as the Call for creative industries Vienna 2002 – provide only selective and focused support for research and developmental activities. The rare and inconsistent approach of this support attempt may lead to large lags between the time where the enterprise has a need for funding in order to conduct a project and the actual implementation of a support programme. In order to counteract this problem of innovation financing it is necessary to establish a funding approach that enables access to funding at the time when an innovation project is planned and carried out. The principle is bottom-up promotion scheme in a traditional sense and the generation of such by the City of Vienna is justified because there is hardly any comparable support programme nationwide in this field and therefore duplications of support programmes do not occur.

- **Intensify the know-how transfer** for copyright-based application strategies: For most CI sectors, copyright regulations are a relevant aspect for the present and future application of opportunities. However, such possibilities often remain unexplored due to insufficient know-how and lesser-developed business plans. Therefore, fundamental knowledge concerning the functioning of the copyright industry should be supported as well as the know-how of application strategies that base upon them in regard to second and third hand application possibilities. Existing in intermediary institutions (such as mica, Wiener Filmfonds, departure etc.,) could cooperatively provide information, service and consultancy services. Furthermore, sectoral workshops and events may contribute to the transfer of copyrighted management and application know-how.

- **Improve the information concerning consultancy and funding possibilities**: Small enterprises have in general problems to find access to support funding systems. This is partly a result of complex structures, lacking resources for an intensive exploration of the funding system and of the belief of enterprises that funding systems were not made for them. This should be counteracted by a concise overview of the funding system for CI-enterprises.

2. Internationalisation

The export percentage of CIs is remarkable considering the average enterprise size but is still after all clearly below the Austrian industry average. The low extent of export is partly due to the nature of the produced goods and services (theatre performances, performances, print media, radio and television etc.). However, a large part of CIs would be able to export by far more. The minor export success is also connected to a high need of resources and the high amount of uncertainty that such a decision involves. This situation may be counteracted by the following measures:

- **Increase presence abroad**: A first step toward foreign markets is the presence at trade fairs and exhibitions. They allow for the presentation of products and services and the establishing of contacts. It would be preferable to support the international presence of CI-enterprises financially and in terms of organisation. At the same time it is possible to organise and support performance shows, exhibitions and performances of CI-members abroad.

- **To also make existing information and funding possibilities accessible for CIs**: Austria has established in the past an export funding system that may be only partially utilised by CIs. This includes activities carried out by the Chamber of Commerce, in particular the foreign trade offices of the Chamber of Commerce. This calls for programmes of emphasis for supporting internationalisation endeavours of CI-enterprises.

– **Integration of international distribution systems**: It is very difficult for small enterprises to integrate into international distribution systems due to a lack of familiarity with the market. A sector specific preparation of necessary resources may facilitate the access.

3. Cluster Orientation

CIs already possess extensive cooperation patterns within cluster-like structures. The necessity to cooperate is partly a result of the small enterprise size in order to complete the range of products and also of the project oriented structure of many undertakings within CIs (such as in film production). Aside from developing cluster specific strategies the following measures should also be implemented:

– **Facilitating sector specific platforms**: The different fields within CIs are hardly structured at all. As a result of a predominance of small enterprises, different activities are not perceived as such and a large number of activities carried out by CIs do not involve large public interest, both within the sectors as well as outside of them. Therefore, it makes sense to promote sector specific platforms that may serve as a starting point for an increased self-organisation of the sectors and for making activities more visible.

– **Interaction between CIs and the economy**: It is difficult for many enterprises pertaining to CIs to communicate their activity spectrum to potential customers within the economy. Events, publications and websites that offer CIs the possibility for presenting themselves and to interact with potential customers may provide assistance here.

– **Complement deficiencies within education and further education within central areas:** even though the education within the CI-sectors in Vienna has a high degree of density and quality there are still individual deficiencies in respect to education and training in some central areas of different CI sectors. They include a lack of opportunities for advanced training for sectoral technical and economic management qualifications, some content related core areas and special technical qualifications (see individual chapters). Often these educational deficiencies could be bridged in an inexpensive manner through enlarging and the new profiling of existing educational facilities in which they can be promoted through workshop structures in the area of advanced training. Introducing specific stipends for usage abroad may be an important measure in order to support qualification potential in fields that do not provide adequate educational perspectives in Vienna. Another possibility for acquiring non-existent qualifications know-how in specific areas could be provided by educational stipends and internship programmes.

4. Developing Governance Structures

Governance is defined as the organisation, implementation and evaluation of activities performed in the context of CIs. The reason for mentioning this point – that is certainly of importance for all public activities – is that there are already many institutions and organisations that are involved or that shall be involved. In regard to the aforementioned strategies and measures it was attempted to avoid the allocation of tasks to institutions because the implementation and cooperation between institutions are still unsettled. However, it is obvious that a strategy carried out in a coordinated effort requires the willingness to cooperate of all the involved individuals and that supervision is necessary in order to guarantee the cooperation for a common objective.

– **Establish cooperations between the economic and cultural sector:** The development and prosperity of many CI-sectors involve economy related programmes and services and specific supportive policies for the cultural sector. A relevant objective in respect to promoting cooperation in terms of CIs in the medium-term could be the synchronisation of different cultural economic support programmes in order that within some areas the content related support for culture and a application oriented business development are reconciled in the context of a co-financing model. The City of Vienna created an institution that meets such needs in the form of the „departure economy, art and culture ltd.". „departure" could function as the platform that initiates necessary communication, coordination and concept development steps.

– **Strengthening the Vienna-image around the CI-dimension:** Vienna has the reputation of the being the capital of classical music, of large theatre stages and of cultural heritage. In a location assessment Vienna is still on an international scale a „late comer" concerning technology, artistic innovations and modernity. The unilateral emphasis of the classical heritage led to an under-representation of the cultural and technological changes and innovations in the image of the city during the past two decades. Vienna should integrate internationally relevant aesthetic innovations such as in music (new electronic music, contemporary classical music), of performing arts (off-scene), of film (international prices) etc. into the overall image of the city and to establish Vienna as a location of classical cultural happenings and a modern city of aesthetic innovations. Increased „crossover"-event-concepts in terms of a cooperation between architectural-historic performance sites and innovative cultural contents would be necessary as well as the increased integration of the modern and innovative element into the concept of the marketing of the city.

– **Synchronised procedures with sector specific institutions:** Many fields – such as music, design and fashion – already have sector specific institutions that should be involved in the implementation of measures. Thus the target group can be reached easier and the sector specific knowledge of a given institution can be utilised easier, and also double-tracking activities are counteracted. The integration of sector specific institutions guarantees their scope and increases their significance.

– **Public commissioning:** The public authorities are partly an important commissioner for CIs. However, for public commissioning small enterprises shall be given equal opportunities as large companies. Furthermore, the public authority should function as a consumer of innovative and creative products and services.

III. COVERAGE AND OFFICIAL DATA SOURCES

1. COMMENTS CONCERNING THE METHODOLOGY OF THE NACE-CLASSIFICATION

One of the three methods for evaluating and representing creative industries in Vienna was official data sources pertaining to employment and business statistics. In order to utilise these data for a study about creative industries it is necessary to coordinate the dimension of content referring to the production and service areas that were summarised by the umbrella term with the stipulated data-acquisition grid pertaining to the classification of economic branches.

The enterprise and employment figures from Statistics Austria and those provided by the Association of Social Security adhere in their structure to the Europe-wide uniform statistics of economic branches NACE which had been represented in Austria at the time of the study by the ÖNACE 1995. Methodical difficulties followed because this classification of economic branches is not primarily based on a selective assessment of cultural and culture related creative and artistic enterprises. As a result different relevant fields are assessed to a varying degree and new forms of production and service in the context of technical innovations can be illustrated only in the background of traditional industries. A working group of the EU has undertaken preparatory steps in order to implement a system of cultural statistics at the best possible rate (European Commission 2000, p. 90 sqq.), however the commissioning interest of the present study goes beyond the scope of cultural statistics. In the following, the procedure for the methodological classification and the evaluation of the official data that are based on it will be presented.

A generally binding definition of the economic branches that had to be included has not been established till date. Numerous studies concerning „creative industries", „cultural industries" or „cultural economies" have elaborated on a possible classification that aims at projecting the operations that are of interest as an aggregate of different cultural sectors with a traditional orientation and with new fields onto a business statistical system. Such an orientation generally enables a comparison between the methodologies of studies but a closer look reveals that the comparability is limited due to differences between the national representations of business statistics (SIC, NACE of the European Union) and also due to the fact that these definitions are based on local political fields of interest. Due to both factors previous definitions are not in perfect accordance with each other concerning the evaluated economic classes and also their clustering into different branches. Furthermore, a differing degree of specification for different production and service branches results as a consequence of country-specific data structure (see Hochschule für Gestaltung und Kunst Zürich 2003).

The methodical evaluation of the present study analysed international definitions and compared them in order to establish an optimum NACE-set for the Vienna based cultural and creative sector. The starting point for this were historic attempts of British provinces to define the term that were utilised in the studies that were initiated by the Department of Culture, Media and Sports (DCMS) and have furthermore influenced other British regional studies (DCMS 1998, DCMS 2001, Bretton Hall College 2000, Comedia 2001). Another important point were the cultural studies conducted by the German provinces North-Rhine Westfalia and Saxony-Anhalt that have promoted the definition of cultural life within the private sector through the course of many years (Arbeitsgemeinschaft Kulturwirtschaft 1992, 1995, 1998, 2001; Arbeitsgruppe Kulturwirtschaft LSA 2002). Also recent studies from Australia (Cunningham et al. 2003), New Zealand (NZ Institute of Economic Research 2002), and Hong Kong (Hong Kong Development Council 2002) and the comprehensive list of „cultural industries"-NAICs by Statistics Canada (Statistics Canada 2002) were included. In regard to content the ANZSIC-set of the Brisbane-study was selected from a range of related studies as a valuable basis for a European classification that is not limited to traditional cultural areas. It provides, in the light of adapting the former British approach, the following criteria for a definition of the analytical subject of creative industries:

„The creative industries involve activities which have their origin in individual creativity, skill and talent; have the potential for wealth and job creation through generation and exploitation of intellectual property; have creative intangible inputs which add more economic and social value than is added by manufacturing; encompass and link the traditional cultural industries (such as the performing arts) with the new economy 'info-intensive communication and cultural industries' (such as computer game design)." (Cunningham et al. 2003, p. 6)

In order to enable an integration of the classification of economic branches based on the aforementioned deliberations with the conceptive tasks within the present study the ANZSIC-classes were transformed by means of official correspondence lists (Australian Bureau of Statistics 1993, OECD 2002 p. 83sqq) into NACE-classes (ISIC Rev.3). When transferring the codes into the ÖNACE 1995 they were largely in congruence even though explicit correspondence with each class could not be achieved and a few classes are not included in the ÖNACE 1995.

Furthermore, the assessment and illustration of Viennese creative industries is based on a value chain related model. The model „Creative Industries Production System" (CIPS) that had been implemented by the economic geographer Andy Pratt (London School of Economics) divides the entire cultural and creative industry into four logical production subcategories: Manufacturing Inputs; Content Origination; Reproduction; Exchange. They indicate – independent of the content of a given cultural or creative field – the status of a certain economic branch within comprehensive value added logic. This enables a perspective that allows for biases within the content classification to different economic classes while internal classifications are adjusted. The CIPS-model was adapted for the present study in order to enable the classification of all the fields that had been stipulated by the commissioner in an adequate manner. Related categories of Manufacturing Inputs and Reproduction were combined which resulted into a system consisting of three sections.

The objective of elaborating a Viennese definition of cultural and creative economic fields was twofold: on the one hand, all of the stages of value adding were supposed to be assessed uniformly in all sub-sectors that are represented to differing degrees within the NACE-codes; and also of avoiding distortions that may lead to systematic over or under estimations of individual fields. The resulting set of ÖNACE-classes aims at illustrating the value chains within the fields of creative industries that were designated by the commissioner and of presenting the degree of core fields that are based on creativity and innovation including necessary pre-operations and further processing. Therefore, every NACE-class is allocated to two areas:

- A production and service area pertaining to creative industries that is based on content (such as music or performing arts) that represents a segment of the sectoral value chain and

- A production logic creative industries sub-sector that determines the status of an economic branch within a system that consists of three parts Manufacturing and Reproduction – Content Origination – Exchange.

As sources the census of employment in 2001 (Statistics Austria) that was available at the time of the reporting of the temporary evaluation and the data from the Association of Social Security Institutions were included. They are based on different methodical approaches and thus enable different conclusions and consequently the results of the evaluation of both sets of data are simultaneously indicated.

Due to the structure of the available data, the definitions and evaluation had to be performed on a 4-class basis. This resulted in biases because some 4-class units are not selective in respect to tasks that are relevant to creative industries and they also partly include non-creative industries related economic fields and at the same time combine several tasks of creative industries fields as one unit. In order to use the relating ÖNACE-classes that produce in an analytical way unsolvable classification difficulties due to their configuration they had to be included based on estimations on a pro rata basis and to be distributed across several value chains that were based on production and service contents. Wherever such classifications were based on percentages it was therefore necessary that they were performed based on current structural information provided by the Chamber of Commerce in Vienna in respect to business and employment percentages in Vienna with information stemming from the nationwide structural data of the census of employment by Statistics Austria in 2001 and the Austrian sales tax statistics in 1999 by Statistics Austria.

Table 6 of the appendix includes all ÖNACE-classes that were selected on the basis of the aforementioned analysing procedures for the Viennese definition of creative industries. Table 7 illustrates which individual classes were classified as branches on the one hand and value chain segments on the other, in which it also indicates an estimation key for each class.

2. LISTS OF NACE-CLASSES ACCORDING TO THE VIENNESE DEFINITION OF CREATIVE INDUSTRIES

Table 6: Vienna Definition of creative industries classified according to content type and value chain segments

	Manufacturing and Reproduction	Content Origination	Exchange
Architecture		74.20	
Audiovisual field (film, video, television and radio)	24.65 (33.3 %) 32.20 32.30 (50 %) 22.32 92.12	92.11 92.20 92.72 (50 %)	92.13 52.45 (40 %) 71.40 (50 %)
Fine arts and the art market		92.31 (25 %)	52.50 (33.3 %) 52.63 (50 %) 74.84 (12.5 %)
Performing arts and entertainment		92.31 (25 %) 92.33 92.34 92.72 (50 %)	55.40 (50 %) 92.32 (50 %)
Graphic art/fashion/design/ photography	18.10 18.22 18.24 19.30 26.21 33.40	36.22 36.61 74.81 74.84 (12.5 %)	52.42 52.43 52.44 52.50 (33.3 %) 52.48 (20 %)
Literature/publishing/print media	22.21 22.22 22.23 22.24 22.25	22.11 (50 %) 22.12 22.13 22.15 92.31 (25 %) 92.40	52.47 71.40 (50 %) 74.84 (12.5 %)
Music	24.65 (33.3 %) 32.30 (50 %) 36.30 22.31	22.14 92.31 (25 %) 22.11 (50 %)	55.40 (50 %) 92.32 (50 %) 52.45 (60 %) 74.84 (12.5 %)
Museums/libraries			52.50 (33.3 %) 74.84 (50 %) 92.51 92.52 92.53
Software/multimedia/Internet	24.65 (33.3 %) 22.33	36.50 72.20 72.40 72.60	52.48 (20 %) 64.20
Advertising		74.40	

Note: NACE-classifications that extend across several fields at the same time were classified in percentages based on the census of employment in 2001 (ÖSTAT 2003), the Austrian sales tax statistics in 1999 (ÖSTAT), and the current information concerning the structure of business and employment percentages provided by the chamber of commerce in Vienna.

Table 7: Vienna definition of cultural and creative economic fields	
Nace No	**Industry**
18.10	Manufacture of leather clothes
18.22	Manufacture of other outerwear (incl. tailor-made products)
18.24	Manufacture of other dressing apparel and accessories
19.30	Manufacture of footwear
22.11	Book publishing and music publishing
22.12	Newspaper publishing
22.13	Magazine publishing
22.14	Publishing of recorded media
22.15	Other publishing activities
22.21	Newspaper printing
22.22	Printing
22.23	Book binding and other processing of printed matter
22.24	Typesetting and reproduction
22.25	Other printing activities
22.31	Reproduction of recorded sound media
22.32	Reproduction of recorded image carriers
22.33	Reproduction of recorded data media
24.65	Manufacturing of unrecorded media
26.21	Manufacturing of ceramic household ware and decorative objects
32.20	Manufacturing of television and radio transmitters and apparatuses for telephony
32.30	Manufacturing of radio and television receivers
33.40	Manufacture of optical and photographic instruments
36.22	Manufacture of jewellery, gold and silver goods (without fantasy jewellery)
36.30	Manufacture of musical instruments
36.50	Manufacture of toys
36.61	Manufacture of fantasy jewellery
52.42	Clothing retail
52.43	Shoes and leather goods retail
52.44	Furniture and related goods retail
52.45	Retail with electric household items, radio and TV apparatuses and musical instruments
52.47	Retail with books, magazines, newspapers, stationery and office supplies
52.48	Retail n.e.c. (incl. photography, watches and jewellery, toys incl. computer and video games)
52.50	Retail with second hand goods
52.63	Other retail, not at showrooms (e.g. aution halls)
55.40	Other public house activities
64.20	Teleservice
71.40	Rental of consumer goods n.e.c.
72.20	Software companies (incl. web design)
72.40	Databases
72.60	Other data processing activities
74.20	Archtitectural and engineering activities and related technical consultancy
74.40	Advertising
74.81	Photo studios and photo laboratories
74.84	Company related services n.e.c.
92.11	Motion picture and video manufacture
92.12	Film distribution and video programme providers
92.13	Cinema
92.20	Radio and television activities
92.31	Artistic and writing activities and performances
92.32	Operation and technical assitance for cultural and other entertainment activties
92.33	Acting and amusement parks
92.34	Performing cultural activities

Table 7: Vienna definition of cultural and creative economic fields	
Nace No	**Industry**
92.40	New agency activities
92.51	Libraries and archives
92.52	Museums and preservation of historic monuments
92.53	Botanical and zoological gardens and natural parks
92.72	Entertainment

3. REFERENCES

Arbeitsgemeinschaft Kulturwirtschaft (1992) *Dynamik der Kulturwirtschaft in Nordrhein-Westfalen. 1. Kulturwirtschaftsbericht*, hg. vom Ministerium für Wirtschaft, Mittelstand und Technologie des Landes Nordrhein-Westfalen. Dortmund.

Arbeitsgemeinschaft Kulturwirtschaft (1995) *Kultur- und Medienwirtschaft in den Regionen Nordrhein-Westfalens. 2. Kulturwirtschaftsbericht*, hrsg. vom Ministerium für Wirtschaft, Mittelstand und Technologie des Landes Nordrhein-Westfalen. Dortmund.

Arbeitsgemeinschaft Kulturwirtschaft (1998) *3.Kulturwirtschaftsbericht Nordrhein-Westfalen: Kultureller Arbeitsmarkt und Verflechtungen*, hrsg. vom Ministerium für Wirtschaft und Mittelstand, Technologie und Verkehr des Landes Nordrhein-Westfalen. Dortmund.

Arbeitsgemeinschaft Kulturwirtschaft (2001) *Kulturwirtschaft im Netz der Branchen. 4. Kulturwirtschaftsbericht NRW*, hrsg. vom Ministerium für Wirtschaft und Mittelstand, Energie und Verkehr des Landes Nordrhein-Westfalen. Dortmund.

Arbeitsgruppe Kulturwirtschaft LSA (2002) *1. Kulturwirtschaftsbericht Sachsen-Anhalt,* erstellt im Auftrag des Landes Sachsen-Anhalt (Kultusministerium). Bonn.

Australian Bureau of Statistics (1993) *Australian and New Zealand Standard Industrial Classification (ANZSIC). Concordance, ANZSIC to ISIC Rev 3*, available at: http://www.abs.gov.au/Ausstats/

Bretton Hall College (2000) *Cultural Industries Key Data. The Cultural Industries in Yorkshire and the Humber*, ed. by Simon Roodhouse and Calvin Taylor. Leeds.

Caves, Richard (2000) *Creative Industries. Contracts between Art and Commerce*. Cambridge, Mass./ London.

Comedia (2001) *East Midlands Creative Industries Study*, available at: http://www.comedia.org.uk/downloads-3.htm.

Cunningham, Stuart et al. (2003) *Brisbane's Creative Industries 2003*, Queensland University of Technology (QUT), available at: http://www.creativeindustries.qut.com/research/cirac/documents/bccreportonly.pdf.

Cunningham, Stuart and Hartley, John (2001) *Creative Industries - From Blue Poles to Fat Pipes. Paper presented to Australia Academy of the Humanities, National Summit on the Humanities and Social Sciences, National Museum Australia, Canberra, 26-27 July*, available at: http://creativeindustries.qut.edu.au/research/cirac/documents/CunninghamHartley.pdf.

Department of Culture, Media and Sports [DCMS] (1998) *Creative Industries Mapping Document 1998*, available at: http://www.culture.gov.uk/global/publications/archive_1998/Creative_Industries_Mapping_Document_1998.

Department of Culture, Media and Sports [DCMS] (2001) *Creative Industries Mapping Document 2001*, available at: http://www.culture.gov.uk/creative/mapping.html.

European Commission (2000) *Cultural Statistics in the EU. Final Report of the LEG.* Luxembourg.

Falk, Martin and Leo, Hannes (2003), *Die Innovationsaktivitäten der österreichischen Unternehmen, Empirische Analysen auf Basis der Europäischen Innovationserhebung 1996 und 2000*, WIFO, Wien, 2004.

Flew, Terry (2002) *Beyond ad hocery: Defining Creative Industrie*. In: The Second International Conference on Cultural Policy Research Conference Report. Wellington, pp. 1-29.

Geldner, Norbert (2000) *Der Wirtschaftsbereich Kultur und Unterhaltung und seine Rolle im Wiener Arbeitsmarkt.* Wien.

Hauptverband der Sozialversicherungsträger (2003) *Beschäftigungsdaten 2002.* Wien.

Hesmondhalgh, David (2002) *The Cultural Industries*. London/ Thousand Oaks/ New Delhi.

Hochschule für Gestaltung und Kunst Zürich (2003) *Kultur.Wirtschaft.Schweiz. Das Umsatz- und Beschäftigungspotenzial des kulturellen Sektors. Erster Kulturwirtschaftsbereicht Schweiz.* Zürich.

Hong Kong Development Council (2002) *Creative Industries in Hong Kong*, available at: http://www.tdctrade.com/econforum/tdc/tdc020902.htm.

Howkins, John (2001) *The Creative Economy. How People Make Money From Ideas.* London.

NZ Institute of Economic Research (2002) *Creative Industries in New Zealand. Economic Contribution. Report to Industry New Zealand*, available at: http://www.industrynz.govt.nz/industry/creative-industries/default.asp#downloads.

O'Connor, Justin (1998) *The Cultural Production Sector in Manchester. Research & Strategy*. Manchester.

O'Connor, Justin (1999) *The Definition of „Cultural Industries"*, available at: http://mmu.ac.uk/h-ss/mipc/iciss/home2.htm.

OECD (2002), Measuring the Information Economy. Paris, available at: http://www.oecd.org/ dataoecd/16/14/1835738.pdf.

Statistics Canada (2002) *Structure for the NAICS Canada 2002 Information and Cultural Industries Sector*, available at: http://www.statcan.ca/english/Subjects/Standard/naics51.htm.

Statistik Austria (2002) *Kulturstatistik 2000*. Wien.

Statistik Austria (2003) *Vorläufige Arbeitsstättenzählung 2001*. Wien.