Seventh Austrian Creative Industries Report Eocus: Cross-over Effects and Innovation







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Executive Summary

The situation of the <u>creative</u> industries: <u>dynamic</u> development and even growth per enterprise unit

More than 10 percent of all enterprises in Austria belong to the creative industries. In total about 42,200 enterprises have been ascribed to the creative sector in 2014. These enterprises employed almost 152,400 persons or 5 percent of the work force of the overall economy in that year. The creative industries generated sales of 21.6 billion euros and value added at factor costs of about 8.6 billion euros. They were thus responsible for about 3 percent of the sales and almost 4 percent of the value added of the Austrian economy.

Analysis of the development from 2012 to 2014 shows that the creative industries have cemented their role as drivers of growth. The number of enterprises increased by more than 5 percent during this time, compared to an increase of slightly under 2 percent in the Austrian economy in general. Sales also increased (+5.7 percent), while the gross value added of the creative industries (+8.5 percent) is clearly above the average growth from 2012 to 2014 (overall economy: +4.4 percent and +1.3 percent, respectively). Only the number of enterprises in the creative industries (+1.7 percent) increased to a smaller extent (overall economy: +4.2 percent). These results show that, while a small-business structure continues to prevail in the creative industries sector, the enterprises themselves tend to grow, i.e. there are more persons employed per enterprise and sales are higher.

The creative industries in Austria still boast solid economic development. The average equity ratio amounts to almost 33 percent, which is above the minimum benchmark of 30 percent. Businesses in the creative industries that employ a simplified accounting standard on a cash base reported a profit share in total sales of 5.7 percent while that share amounted to 6.4 percent for enterprises with a double-entry bookkeeping system, which trumps the respective shares in the overall economy. The higher profitability compared to the overall economy can mainly be attributed to the service character of the creative industries with few fixed assets but also lower material expenses and merchandise costs.

A <u>new</u> definition for the <u>creative</u> industries

The definition for the creative industries was reviewed to better map the sub-areas of the creative industries, to make them visible and to improve comparability in a European context.

According to the revised definition, the creative industries continue to include: **all commercial enterprises that create, produce, and distribute creative and cultural goods as well as services**⁵.

The names of the different areas were adapted and certain industries were attributed to other areas. As a result, the creative industries include following ten fields:

- o architecture
- o books and publishing
- o design
- o video and film
- o artistic activities

- o music
- o radio and television
- o software and games
- o advertising
- o libraries and museums, botanical and zoological gardens⁶

6 This area was not included in statistics, as only a minor part belongs to the private sector and therefore only limited data is available.

More than 10 % of all enterprises in Austria belong to the creative industries

Development of the creative industries 2012-2014: +5% employment growth +5.7% sales growth +8.5% gross value added growth

Solid economic development of the creative industries

The creative industries include all commercial enterprises that create, produce, and distribute creative and cultural goods as well as services.

⁵ Compare the Fourth Austrian Creative Industries Report, Kreativwirtschaft Austria 2010

The <u>dynamic</u> of the creative industries is mainly driven by the <u>sector</u> software and games

Most creative enterprises can be found in the areas of advertising (2014: 22 percent of all creative enterprises), artistic activities (20 percent) as well as software and games (18 percent). The software and games area has the highest share of employment (25 percent), of sales (29 percent) and of gross value added (34 percent) and is also the most dynamic area of the creative industries as from 2012 to 2014 the number of enterprises increased by 3.8 percent and the number of employees by 9.9 percent. Sales and gross value added increased by more than 20 percent.

In contrast, the numbers of enterprises (-5.3 percent) and of employees (-2.2 percent) decreased in the area of artistic activities. In 2014, sales and gross value added were slightly below the level of 2012 (-0.2 percent and -0.4 percent).

Vienna is the biggest <u>creative</u> hub, Carinthia and Upper Austria have the most <u>dynamic</u> development

Austria's creative industries are mostly located in Vienna, 41 percent of all creative enterprises have their head office in Vienna (compared to 24% of all enterprises in the overall economy). In terms of all enterprises with head offices in Vienna, the share of the creative industries is 18.3 percent and thus clearly above the Austrian average (10.8 percent).

But the creative industries have also gained importance in the other federal provinces. The development of recent years (between 2012 and 2014) shows that Carinthia experiences the most dynamic development regarding the number of creative enterprises, followed by Upper Austria (+3.3 percent) and Tyrol (+2.8 percent). The lowest increase was reported in Vienna (+0.5 percent), Burgenland (+1.3 percent), Lower Austria and Salzburg (+1.8 percent each).

The creative industries cement their <u>leading</u> role and are an important <u>partner</u> in every part of the value chain

Creativity, innovation, flexibility, resilience, networking and co-operation, knowledge intensity and transfer, customer orientation, technological affinity and internationality are the characteristics which make the creative industries important partners for other parts of the economy. They are the reason why the creative industries often have a leading role – regarding work methods and models or innovation processes – and why they cause transformation processes (structural change, change towards a science society and digital economy). The creative industries have a small-business structure (61 percent are single-person enterprises) and are fairly young (39 percent of the creative enterprises have not been in existence for more than 10 years).

Human capital is the most important resource of the creative industries. It is marked by a high level of education (58 percent of the managers have university degrees), by flexibility and mobility and by new forms of employment (many freelancers, ICT-based mobile forms of working, co-working, crowd employment etc.). The creative industries are partners in every part of the value chain (from the development of ideas and designs to marketing), whereas their main focus is on development and conception (e.g. creation of creative content). 44 percent of all creative enterprises primarily see themselves in this part of the value chain. The share of architecture (80 percent) and design (64 percent) is above average. B2B-relations prevail with 78 percent of the creative enterprises counting other enterprises and self-employed persons among their most important customers.

Largest areas of the creative industries: advertising, artistic activities, software and games

Vienna has the highest share of creative enterprises, Carinthia the most dynamic development

Creativity, innovation, flexibility, resilience, networking and co-operation, knowledge intensity and transfer, customer orientation, technological affinity and internationality as main characteristics of the creative industries

Economic effects: The <u>creative</u> industries are intertwined and strongly connected to the rest of the <u>economy</u>

Their close relationships with suppliers and customers make creative enterprises an integral part of the Austrian economy. This strong interconnection – with other areas of the economy as well as among the different creative areas – is also a reason why the creative industries are an economic stimulator. Based on an input–output analysis and the data basis of the newly created Austrian satellite account for the creative industries, the entire creative value chain can be analysed and the effects on production, value added and employment can be calculated (in accordance with the terms and definitions of national accounts)⁷. Also, *direct* effects, *indirect* effects and *induced* effects⁸ were considered.

All in all, the creative industries are responsible for an economic production of \in 37.6 billion, value added of \in 18.7 billion and more than 303,000 jobs, taking into account all interconnections in Austria. Every single euro produced by the creative industries, generates, via direct, indirect and induced means, \in 1.73 of production in the Austrian economy. For every euro of value added coming from the creative industries, \in 1.76 value added is created in the entire economy. Each employee in the creative industries secures additional 0.7 jobs elsewhere in the Austrian economy. A broad variety of industries have a unique structure of intermediate and primary inputs. They require a relatively large number of intermediate inputs and receive these almost exclusively from within Austria, mainly from the creative industries themselves and other service sectors. Compared to an average industry of the service sector, they have a lower value-added intensity, but a higher share of employee remuneration.

By delivering to their customers, the creative industries support production and investment activities in many parts of the economy. Their services are mostly employed directly by other economic areas, especially the production of other services and creative services. If one follows the value chain of the creative industries' output down to end-user demand, one will find that 42.3 percent are for private or state consumption, 20.6 percent for investments and 37.1 percent for exports. In other words, investments and exports are supported the most. The creative industries thus contribute an important share to strengthening the competitiveness of the Austrian economy.

The <u>creative</u> industries cause innovation and cross-over effects in the economy, the <u>innovation</u> system, regional development, public administration and society at large

The present report focuses on the innovation and cross-over effects of the creative industries. The creative industries are a highly innovative sector that can cause innovation impulses and cross-over effects on the economy, the innovation system and regional development as well as the public sector and society at large due to its manifold interconnections. These effects go far beyond the sector's own economic performance and, for example, help increase the competitiveness of other industries, the improvement of public services or contributions to solve societal challenges in the fields of ecology and social inclusion. The Council of the European Union (2015) defines "...the cross-over effects between the cultural and creative sectors and other sectors [...] as a process of combining knowledge and skills specific to the cultural and creative sectors with those of other sectors in order to generate innovative and intelligent solutions for today's societal challenges."

Each euro produced by creative industries, generates directly, indirectly and induced € 1.73 of production in the Austrian economy

The creative industries especially support investments and exports and thus help strengthening the competitiveness of the Austrian economy.

Cross-over effects of the creative industries go far beyond their own economic performance

⁷ A satellite account is an extension of the system of the national accounts and the input–output table comprising a certain sector – i.e. the creative industries – in more detail and with additional variables and structures. At the core of the satellite account for creative industries, there is a disaggregation of the input–output table, in which the creative industries and their partial areas are included as sectors.

⁸ The direct effects describe production, added value and employment in the creative industries. The indirect effects comprise the resulting production, added value and employment from the demand of the suppliers of the creative industries as well as the suppliers of their suppliers etc. Induced effects arise from the income-consumption cycle.

There are three main fields to distinguish: "industry cross-overs", "network cross-overs" and "knowledge cross-overs": The term "industry cross-overs" refer to effects regarding productivity and innovation for the economy and society, comprising vertical value-chain-related or horizontal cross-sectoral effects. "Network cross-overs" are effects that develop because of the high density of creative enterprises and/or cultural organisations in a certain location (clusters or cultural quarters). Positive effects range from an increase of the regional economic growth to an increase of regional attractiveness and identity. "Knowledge cross-overs" include new ideas, innovations and processes that are developed in creative enterprises or arts organisations and have effects on the overall economy and society. The developers of these ideas, innovations and processes are not directly rewarded. This is the case when new forms of organisation, work procedures or techniques devised by the creative industries are applied in other sectors of the economy. The cross-over effects analysed in the present report mainly refer to industry and network cross-overs.

Innovation system effects: high <u>innovation</u> as well as R&D <u>activities</u> of the creative industries

The central role of the creative industries in the innovation system was already presented in detail in the Third Austrian Creative Industries Report. Analyses of the present report confirm this result and the important role of this impact channel for cross-over effects. The innovation capabilities and the way the creative industries innovate are an important precondition to cause cross-over effects. Creativity and innovation are the core competence of creative enterprises whose business models include the implementation of new ideas, products, services and processes. The products and services are often tailored to every single customer.

This orientation reflects the high share (91 percent) of creative enterprises actively innovating. Innovating enterprises introduced new products and/or important improvements in at least one of the following fields during the last three years: product innovation, procedural innovation, process and organisation innovation or marketing innovation. A high level of activity in the creative industries can be determined in all of these fields of innovation, but it is especially high in the field of product innovation: just under three out of four creative enterprises produced new products or services for customers during the last three years. In addition, more than half of the creative enterprises introduced process and marketing innovations during this period. R&D is very important: 41 percent of the creative enterprises with innovation activities introduced systematic processes in terms of their own research and development work.

The main focus of creative innovation is on new design (57 percent of the enterprises) and technology applications (53 percent). Qualified employees, an appropriate enterprise culture, a good business climate and sources for inspiration are of high importance for innovation processes in the creative industries. More than half of the creative enterprises take spontaneous as well as planned steps towards innovation.

<u>Awareness for the protection of intellectual property still limited</u>

Regarding intellectual property, copyright (incl. right of use) is the most important factor for the creative industries. The overall awareness for the protection of intellectual property still seems to be poorly developed among creative enterprises. Even though 74 percent of the creative industries have introduced new products or services during the past three years, only 37 percent report having constituted a copyright. 36 percent of enterprises reported having protected their property with right of use.

Cross-overs in the creative industries include "industry cross-overs", "network cross-overs" and "knowledge cross-overs"

The innovation capabilities and the creative industries' way of innovating is an important precondition to cause innovation and cross-over effects.

91% innovation active creative enterprises

Focus of innovations: new design and technology applications

74% produced new products or services for their clients Protection of brands, utility models, flavour models (design) or patents is of minor importance (2 to 10 Informal protective measures percent) – except for the larger enterprises and the design area. Informal protective measures play a more important role for the creative industries. They may include making sure they are ahead of their competitors (31 percent) and guaranteeing a certain complexity of the product or service (30 percent).

The creative industries as a trendsetter and driving force for new forms of innovation

The creative industries have cross-over effects on the Austrian innovation system due to their trendsetting function of using new (also non-technological) forms of innovation. Due to their high customer integration in the innovation process they are regarded "early adopters" of open innovation methods, and new forms such as social innovation or service innovation are also increasingly applied in creative innovations.

Business model innovations, which are already regarded as more relevant compared to traditional forms of innovation, also play an important role in the creative industries. About 44 percent of all creative entrepreneurs have described their own business models as innovative or very innovative as compared to that of their competitors. During the past three years, about one fifth of the creative enterprises innovated their business models. Thereby creative enterprises help their customers to test and rethink their own business models.

Innovation impulses develop through co-operation and interconnected (cross-sector, interdisciplinary) working

Co-operation and interconnected (cross-sector, interdisciplinary) working play an important role for creative enterprises and are the basis for the development and implementation of innovations in and by the creative industries. About 44 percent of all creative enterprises co-operate with partners in innovation activities, especially in the fields of artistic activities (62 percent), design (62 percent) and advertising (57 percent). The most important partners for creative enterprises are other enterprises from the creative sector (56 percent), followed by customers (47 percent), competitors (37 percent) and suppliers (36 percent).

Creative enterprises receive important impulses for their own innovation activities through co-operations - innovations are developed through mutual exchange and networks within and outside the creative industries. Apart from internal innovation impulses, 69 percent of the creative entrepreneurs state that they rely on external inspiration: from co-operation partners (42 percent), but also from the media - including special-interest media - (40 percent) and from new technologies (40 percent).

Industry cross-overs: increase of innovation and <u>competitiveness</u> by the creative industries in a large variety of industries

The effects of Austria's creative industries on the overall economy (industry cross-overs) are clearly visible and partly measurable (quantitatively). The creative industries are often the link between two or more other industries and can contribute to other economic sectors with their specific services (e.g. design, IT, communication) and thereby make them more attractive, support their marketing and improve the business processes. Industry cross-overs of the creative industries develop a broad effect through their focus on enterprise customers (business-to-business relations) and through the provision of creative services along the entire value chain. As the analysis of economic impacts in the present report show, 61 percent of the output of the creative industries goes to clients that need the creative products as input or as investment products (and therefore much more than it is the case in

of high relevance

About 44% of the creative enterprises with innovative business models

44% of the creative industries enter innovation-related co-operations

Innovation impulses from outside the enterprise are important for 69% of all creative entrepreneurs

The ceative industries contribute to an attractive design of other fields of economy, to their marketing, the improvement of their business processes and to promote digitisation

the services sector). Retail trade and business services are especially important purchasers of creative products and services.

The different cross-over effects and the benefit for other economic sectors mainly comprise an image increase, innovations, support to stand out from the competition, increase of awareness level, higher quality offers as well as an extension of sales. A central cross-over effect of Austria's creative industries is strengthening the innovation performance of other economic sectors. Almost 40 percent of all creative enterprises support their clients in introducting innovation. These contributions do not remain within the creative sector but mainly (62 percent) go to sectors outside of the creative industries. 29 percent of all creative enterprises primarily use innovations to support other enterprises by creating improved and more customer-related products and services. 17 percent of the creatives primarily aim at starting new processes in other enterprises with their innovation activities. The creative industries deliver contributions to the entire innovation process, but mainly in the early stages of developing ideas (71 percent) and designing the product or service (69 percent).

<u>Creative</u> business models helping with the <u>transformation</u> of traditional businesses

The case study on the co-operation between the design agency "moodley" and the bakery "Auer Brot" shows that the creative industries support their customers with innovation of their entire business models and with repositioning their brands – even in traditional industries. They contribute strategies that aid in handling the structural change: supporting them in their digitisation process, increasing the appeal of their premises as well as selling them as attractive employers. The case study shows how design processes can help improve business models, simplify purchase processes, design more attractive spaces and work places and to deliver a remarkable experience. Design is thereby understood as a holistic concept which entails a comprehensive, long-term process that can take several years. The introduction of new ideas and approaches by the creative industries is especially appreciated by their customers.

The creative industries also create new incentives for suppliers: 87 percent of creative enterprises use new products, processes or technologies that were developed by other enterprises. About 69 percent use new software applications including new internet technologies, especially in the fields of software and games (90 percent) and film (88 percent). In the time period in question, 16 percent of the creative enterprises used products and services that were newly developed or adapted for them, 25 percent bought products and services that were specially adapted for them. The creative industries thus play an important role for the digitisation of the economy. They do not only use technologies in a passive manner, but also provide impulses for technology producers with regard to new developments.

Regional cross-over effects: <u>increasing</u> the <u>appeal</u> of cities and regions and strengthening the regions' value and innovation systems

Austria's creative industries are to a high extent regionally rooted: the most important customers and co-operation partners can frequently be found in the same region. Similarly, they also source many of the necessary inputs from domestic suppliers. Therefore, they also gather their transformative potential from regional contexts. 15 percent of all creative entrepreneurs state that their innovation activities are mainly intended to initiate change in their respective region. The Fifth Austrian Creative Industries Report has analysed the positive effects that can be initiated by the creative industries in a regional context. These include among others: increasing attractiveness of cities and regions, strengthening regional innovation systems and promoting economic growth and tourism. The case study "Werkstätte Wattens" presented in this report clearly shows how local value and innovation systems can be strengthened and how traditional, locally based companies, technology companies,

40% of the creative industries support their clients (primarily from other sectors) in introducing innovation

The creative industries support the innovation of business models, positioning of brands and coping with structural changes in traditional industries

87% of the creative enterprises use new products, processes and technologies that were developed by other enterprises

15% of the creative enterprises mainly carry out innovation activities to trigger processes of change in their regions start-ups and the creative industries can stimulate each other by including the creative industries in a business and start-up centre. Cross-over effects arise from new company locations, new jobs, the creation of multi-disciplinary, creative eco-systems as well as the prospect of a new, interesting image for the region, inspired by the innovative (entrepreneurial) spirit of the start-up centre.

Cross-over effects of the <u>creative</u> industries in public administration: innovative contributions from new public management to health care

The creative industries are a cross-section industry and as such not only serve a wide range of economic industries but also offer their services to public authorities. As described in the Sixth Austrian Creative Industries Report, roughly 20 percent of creative services or sales, amounting to 3.4 billion euros, are directly or indirectly enquired by public authorities. According to the survey, 43 percent of Austrian creative enterprises regard public authorities as their most important customers and clients. About 25 percent report that public authorities were able to introduce innovations with their help and another 16 percent of creative enterprises co-operate with partners from public institutions for their innovation activities.

The public administration profits in many ways from the cross-over effects of the creative industries. The public sector obtains creative services – e.g. innovative architectural solutions – via the programme on innovation-oriented public procurement (public procurement of innovative solutions – PPI) and the creative industries are directly involved in the modernisation process in the field of new public management and provide input to improve procedures, better communication and interaction with citizens and enterprises, development of software and mobile applications for e-government solutions etc. New forms of innovation like open innovation or service design, wherein the creative industries take a leading role, are thereby of special importance.

Healthcare is an exemplary public area in which the creative industries can have a strong effect. Creative services can help reduce medical costs and shorten hospitalisation by improving disease prevention and rehabilitation of patients with the help of creative activities. The case study "Anne Eli" in this report shows how the interaction between healthcare institutions and the target group of pregnant migrants can be improved by developing an app that has an appealing design and communication concept.

<u>Cross-over</u> effects on society: the <u>creative</u> industries contribute to solving ecological, social and societal challenges

The creative industries can contribute to solutions for today's ecological, social and societal challenges due to their transformative potential. Because of its lead role in exploiting non-technological innovations, new business models and services, the education sector, the social and labour market and the non-profit sector can benefit. 21 percent of the creative enterprises supported innovation activities of associations and initiatives in the past three years. About one fifth of the creative enterprises primarily introduce innovations with the aim of solving social problems, the highest share of which can be found in the field of architecture (38 percent). This underlines the importance of the creative industries for social innovation. The case study "Anne Eli" in this report also shows how the co-operation of creative entrepreneurs from different fields generates societal benefits in the field of migrant health. Through the (human-centered) design access, innovative solutions for a complex challenge were developed – the improvement of the access to health knowledge for pregnant migrants and the improvement of the communication with the doctors. Implementing the app can thus also improve the social inclusion of the target group. 25% of the creative enterprises support the innovation activities of public institutions

18% of the creative enterprises primarily introduce innovations with the aim of solving societal problems A Creative Industries Report by Kreativwirtschaft Austria For you and your ideas!



