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Creative industries: Reality and potential in Japan

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Abstract

Due to social and economic changes and ongoing globalization, attention has recently been paid to the importance of creativity and creative industries. In this article we use official statistics to estimate the actual volume of creative industries in Japan. We find that most industries categorized as creative, with the exception of software and computer service, are not growing either in terms of sales or the number of employees. Data analysis indicates that creative industries are primarily small and medium-sized domestic enterprises which are comparatively weak in productivity. However, our study also shows that the categorization of industries as creative or non-creative involves extremely complex questions, and that such a simple two-way classification might not be realistic. Some evidence also suggests that culturally creative activities might be increasing in industries classified as non-creative.

Keywords: creative industries, creative city, development, culture

Introduction

Researchers have long discussed the possible and desirable linkage between culture, the city, and industry. As early as the 19th century in the U.K., the Arts and Crafts movement was proposed to upgrade the quality of life through finding beauty in daily life, in reaction to the dreariness of mass production and mass consumption after the industrial revolution (Morris, 1879). This movement inspired the *mingei* movement in Japan, which focused on the functional beauty of daily commodities (Yanagi, 1928).

More recently, attention has been paid to culture in urban and industrial sectors in cities facing drastic structural changes in industrial structure, including the decline of once predominant heavy industries. Culture is considered to be one of the most important elements in revitalizing cities and regions. Globalization, digitalization, and the shift to a service-oriented economy are proceeding, and the importance of so-called creative industries is attracting attention.

In Japan, various arguments have been introduced since the beginning of the 21st century. Cities including Kanazawa, Nagoya, and Kobe have explicitly adopted the creative city strategy. Moreover, the Agency for Cultural Affairs of the Japanese government, which is in charge of cultural promotion, inaugurated its Cultural Creative Cities Network in 2004. The Ministry of Economy, Trade and Industry (METI) introduced its *Cool Japan Strategy* promoting culturally creative products such as manga and animation (METI, 2012b). However, there are various definition of creative industries with different focuses,

which makes it difficult to identify a single definition of creative industries. In Japan, METI has made estimates on the activity level of creative industries; METI's definition includes major creative industries included in other discussions. According to this estimate, although using relatively old data from 1999 and 2004¹ (Hakuhodo, 2010, hereafter *2010 estimate*), most creative industries in Japan are small- and medium-sized enterprises, and are quite diversified in their products. More importantly, they are not growing as expected, and some of them have been declining.

Considering the importance of understanding the actual situation as the basis for future planning of promotion of creative industries, this paper will examine the current status of creative industries in Japan based mainly on the method and data employed in the *2010 estimate* while supplementing it with new data. Then we will analyze creative industries in detail to determine issues and bottlenecks. Finally, we will examine remaining issues about creativity and industries. This Japanese case study may be able to give a new insight from a non-European perspective on both creative industries and on the creative city argument in general.

I. Socio-economic changes underlying creativity argument

I-1. Historical overview and creativity argument in Japan²

Japan has been modernizing itself for the past 150 years. During that interval it placed a strong focus on economic development after its new constitution after World War II renounced war. The first wave of economic development was seen in the 1950s and 1960s as Japan experienced rapid economic growth with roughly 10% growth of real GDP. This growth, sometimes referred to as Japan's economic miracle, had several notable aspects. The growth was brought about by a complex set of factors including not only resources such as the well-educated workforce and active investment, but also productivity improvements, efficient management of companies, development of transportation and technology, appropriate government policies, as well as the international political and economic environment (Patric & Rocovsky, 1976). Osamu Shimomura, a leading economist at the time who provided the theoretical framework for analyzing the economic miracle, pointed out that the Japanese people, who had been released from war-time constraints such as the gold standard and *zaibatsu*³, greatly improved their creativity (Shimomura, 1962). He observed, based on the recognition that everyone has the potential to conduct economic activity, that one of the driving forces of the economic miracle was the creativity of the general populace. This is one of the earliest statements referring to the importance of creativity for activating innovation and economic development in Japan.

After Japan caught up with other advanced countries economically, industries were forced to make innovations themselves rather than rely on advanced technology from overseas. The previous educational system, which produced a well-trained workforce for Japanese society and industry, was criticized as too uniform (Central Council for Education, 1971), and the importance of nurturing creativity for innovation through formal and informal education was discussed in order to accelerate scientific innovation. Since then, more attention has been paid to the creation of human capital with diversified character and talent for innovation. While the measurement of creativity is challenging, the numbers of patents, Nobel Prize winners, and research papers published in international journals have been used as measures.

¹ The 2010 estimate was based on such official statistics; sales are based on Survey on Service Industries, Survey on Selected Service Industries and Current Survey of Production; the number of establishments and employees are based on Establishment and Enterprise Census and Current Survey of Production. In this paper, we generally use the same data as the 2010 estimate. However, since 2012, the Current Survey of Production of Service Industries were integrated into the Economic Census Business Activities, and thus as for the estimate of service industries, the Economic Census Business Activities is used for our estimate in 2011.

² This section is largely based on Kakiuchi (2013a).

³ At the end of the 19th century, during the early Meiji period the government of Japan was directly involved in heavy industry, but financial difficulties forced the government to sell non-military operations to large family companies. These companies later grew into giant conglomerates, combining industrial, financial and trading activities that were organised around a central holding company and called *zaibatsu*.

In business activities, the total quality control (TQC) circle and *kaizen* movements (quality improvement) in Japan were greatly promoted in the post-war period and became well known internationally in the 1980s in particular. These are management techniques for improving performance at every level of a company, based on small but continuing adjustments and innovation by all employees ranging from factory workers to management. It should be noted that, in Japan, TQC activities serve not only as quality control but also function as management tools. In actual implementation, quality control activities inevitably require the cooperation of all people in the company.

This approach provided the foundation for knowledge management, suggesting that tacit knowledge should be invented and shared by all the members of a company (Nonaka & Takeuchi, 1995). Creativity has been viewed as an important element for innovation, which allows Japanese companies to adapt their operations to an ever-changing business environment by redefining the value of goods and services they are offering, adding new value to their products, and creating new markets and clients. At the same time, creativity was viewed as a capacity to adapt to the rapidly changing world (Central Council for Education, 1983). The education system has changed, aiming at facilitating self-education by inculcating the ability to gain knowledge and information, think, create, and express ideas on one's own initiative.

Despite the arguments mentioned above, the creativity argument itself had a relatively low profile in Japan, with the focus changing from time to time. It should be noted that fundamentally the discussion of creativity in Japan sees creativity not as a special talent but as a potential that anyone can develop. In addition, creativity has been mainly discussed with regard to innovation and management in the fields of science and business, and somewhat in reference to education, but not in an urban context.

I-2. The impact of globalization and creative cities

On-going globalization since the 1990s, after the collapse of the so-called bubble economy in Japan, has greatly changed Japan's society and economy. The gap between Tokyo, the capital city, and other cities has been widening. Tokyo serves as an incubator for innovation and developing talent through training in specialized services such as accounting, finance, information services and other management functions (Kakiuchi, 2013b). On the contrary, many other cities which had served mainly as sites for industrial production became less able to carry out many important functions such as the incubation of local culture, identity, and social coherence.

Since the bubble economy collapsed in the 1990s, small local cities have also lost their role as sites for industrial production due to the movement of production sites to lower-cost countries. For those cities, the critical issue is how to secure jobs for the local populace and how to maintain their economic vitality in a totally different way from previous eras. This change seemingly provided a new way to approach creativity. The creative city concept was introduced to Japan as an urban planning tool (Landry, 2000) and as a hub for the creative class (Florida, 2002). In view of social changes and rapid globalization, the concept that innovative economic structure and unique regional culture can co-exist has attracted attention. This is at odds with the conventional argument that cities with good transportation and/or rich natural resources could attract a workforce and develop themselves. Instead, advocates of creative cities suggest that, at present and in the future, those cities which can attract creative people will develop, as this human capital can attract industries, business, and investors. These talents and creative industries are expected to create high value added and economic wealth. In other regions (Europe in particular), successful cases have been reported that employ the above development model and thus offer support for the importance of creative industries (UNESCO-UIS, 2012).

II. Measuring creative industries

II-1. Defining creative industries

In order to quantify the actual volume of creative industries, we must start by defining exactly what is meant by creative industry. As we will see, this is not a simple question.

In general, "industry refers to the integrated economic activities which are similar in producing and providing goods and services" (Ministry of Internal Affairs and Communications (MIC), 2007). For practical purposes, industry is defined as a synthesis of the establishments engaged in economic activities and includes both commercial enterprises and non-commercial enterprises (with the exception of producing and providing goods and services for self-consumption in one's own household). Thus, industry in a broad sense should include activities of governments and other public services. However, the intention of our investigation in this paper is to estimate the impact of creative industries in the market from value creation, and we will therefore not include the establishments of governments. Instead, all enterprises and establishments in Japan such as companies and shops are included, which is also the case for the Economic Census for Business Activity.

As for the thematic areas, there are several major definitions (Table 1). The U.K. Department for Culture, Media & Sport (DCMS) defines creative industries as "those industries 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 economic property" (DCMS, 2001, p6) Those industries include advertising, architecture, art and antiques, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio.

On the other hand, Florida (2002, 2005) argues that the cultural atmosphere of the city can attract creative people, who are called the creative class, and that the creative class will produce high-value-added goods and services, which contribute greatly to affluence and development of the city. Creative people are engaged in a wide range of creative professions: computer-related services, engineering and science, education, arts (super core), and some business and sales management activities. However, it is rather difficult to identify exactly who belongs to the creative class in each sector if Florida's definition is used.

UNESCO-UIS (2009) also discussed culturally creative industries. The Creative Cities Network Project launched by UNESCO in 2004 connects cities that want to share experiences, ideas, and best practices for cultural, social and economic development, and sets thematic categories such as literature, film, music, crafts and folk art, design, media arts, and gastronomy. In addition, UNESCO released a framework for cultural statistics (Table 1), which considers much larger cultural domains as well as related domains.

In Japan, the 2001 Basic Act for the Promotion of Culture and the Arts lists the main cultural domains, which include art, media arts, heritage, and recreational activities. In this paper we do not discuss the gastronomic aspect, although its potential importance is high⁴.

UNESCO's definition includes libraries, museums, and heritage-related domains in the cultural index. However, in this paper, heritage, museum, and libraries are excluded, as they are largely supported by governments and the activities of these facilities are too small to be financially sustainable in the market⁵.

Finally, in view of the above definitions, the scope of the fields considered in this paper was defined as those including stationery, toys, and jewelry industries in addition to the U.K. definition. This is the same definition as used for the *2010 estimate* which was commissioned and released by the Japanese government (METI) based on official data for 1999 and 2004. We examine the recent trends of creative industries by adding the latest data based on official statistics (METI, 2012a, 2012c) to the *2010 estimate*. This scope of creative industries overlaps with other definitions such as that of UNESCO. However, it should

⁴ The Japanese government nominated Washoku (Japanese cuisine) to be listed in the UNESCO's tangible heritage List in 2013. (See press release from the Ministry of Agriculture, Fishery and Forestry, http://www.maff.go.jp/j/press/kanbo/kihyo02/131022_1.html)

⁵ The Library Law does not permit public libraries (more than 99% of libraries are public, established by governments in Japan) to charge any fee for use, and admission to public museums (around 77% of museums are public, established by governments) is in principle free of charge under the Museum Law, and only in exceptional cases can they charge necessary fees for entry. (Ministry of Education, Culture, Sports, Science and Technology, 2011)

be noted that the scope of creative industries considered in this paper is limited, and that their importance would be larger if a broader definition were used.

Table 1. Definition of creative industries

UNESCO (FCS2009)		UK (DCMS)	Japan (Hakuhodo)		
Cultural Domains	A. Cultural and Natural Heritage	Museums (also virtual)	Advertising	service industry	Advertising
		Archeological and Historical Places	Architecture		Architecture
		Cultural Landscapes	Visual and Performing Arts		Performing Arts
		Natural Heritage	Art & Antiques		Arts
	B. Performance and Celebration	Performing Arts	Design		Design
		Music	Film, Video & Photography		Film
		Festivals, Fairs and Feasts	Music		Music & Video
	C. Visual Arts and Crafts	Fine Arts	TV & Radio		TV & Radio
		Photography	Software & Electronic Publishing		Software & Computer service
		Crafts	Publishing		Publishing
	D. Books and Press	Books	Designer Fashion	manufacturing industry	Fiber & Apparel Clothing
		Newspaper and Magazine	Crafts		Crafts
		Other printed matter	Digital & Entertainment Media		Toys
		Library (also virtual)			Furniture
		Book Fairs			Tableware
	E. Audio-Visual and Interactive Media	Film and Video			Jewelry
		TV & Radio (also internet live streaming)			Stationery
		Internet podcasting			Leather Article
		Video Games (also Online)			
	F. Design and Creative Services	Fashion Design			
Graphic Design					
Interior Design					
Landscape Design					
Architectural Services					
Advertising Services					
Related Domains	G. Tourism	Charter travel and tourist services			
		Hospitality and accommodation			
	H. Sports and Recreation	Sports			
		Physical fitness and well being			
		Amusement and Theme Parks			
		Gambling			

Florida (Creative Class)	
Super-Creative Core	Computer and mathematical occupations
	Architecture and engineering occupations
	Life, physical, and social science occupations

	Education, training, and library occupations
	Arts, design, entertainment, sports, and media occupations
Creative Professionals	Management occupations
	Business and financial operations occupations
	Legal occupations
	Healthcare practitioners and technical occupations
	High-end sales and sales management

This table was made by authors based on UNESCO-UIS (2009, p.24), UK DCMS (2011, p.6), Hakuhodo (2010, p.9), and Florida (2002, p.328)

II-2. The real volume of creative industries in Japan

The sales of creative industries in Japan, as defined in the previous section, were estimated as 51.5 trillion yen in 1999, 45.2 trillion yen in 2004 (*2010 estimate*), and 44.0 trillion yen in 2011, based on our estimate, applying the same categorization as in the *2010 estimate* (Table 2). Creative industries comprise about 6.6% (around 44 trillion yen) of all industries⁶ in terms of sales. Among creative industries, service sectors comprise the major part (amounting to 38 trillion yen, 86.2% of the total sales of creative industries), and 'software and computer service' is the single largest sector (17 trillion yen, and 39.0%, respectively).

It should be noted that creative industries have not been growing in terms of market sales in this decade, while the total sales of all industries increased from 619.7 trillion yen in 2000⁷ to 621.8 trillion yen in 2004 and 667.8 trillion yen in 2011. Taking a closer look, manufacturing creative industries declined significantly compared to service creative industries. 'Fiber and apparel clothing' accounted for the largest part of total sales of manufacturing creative industries (amounting to 3,587 billion yen in 2011, declining from 6,199 billion yen in 1999 and 3,866 billion yen in 2004). Almost all other industry sectors also show the same trend, with stationery in 2004 being the sole exception.

Service creative industries can be divided into declining sectors and growing sectors. The latter includes software & computer (from 10,334 billion yen in 1999 to 12,936 billion yen in 2004, and 17,197 billion yen in 2011) and TV & radio, which once declined but has recovered recently (3,436 billion yen in 1999, 3,136 billion yen in 2004, and 4,027 billion yen in 2011). On the other hand, revenue of the architecture sector declined from 7,138 billion yen in 1999 to 4,600 billion yen in 2004 and 3,012 billion yen in 2011. Other sectors (advertising, publishing, film, music & video, performing arts, design, and arts) also declined in the same period (Figure 1).

● Table 2 Sales of All Industries (*2010 estimate* and METI, 2012 a) (Unit: billion yen)

		1999	2004	2011	Growth rate (2011/1999)
Sales unit: billion yen	All industries	619,655	621,762	667,828	7.8%
	Creative industries	51,525	45,235	44,135	-14.3%
	Creative industries-manufacturing	11,155	6,908	6,070	-45.6%
	Fiber & apparel clothing	6,199	3,866	3,587	-42.1%
	Furniture	1,415	1,067	929	-34.3%
	Leather article	694	430	238	-65.7%
	Tableware	635	480	359	-43.5%
	Toys	1,310	436	417	-68.2%
	Jewelry	305	219	169	-44.6%

⁶ The statistical data about all industries is based on the Basic Survey of Japanese Business Structure and Activities: a survey of over those enterprises with 50 or more employees and whose paid-up capital or investment fund is over 30 million yen. As smaller establishments are excluded in this survey, the real volume of all industries would be much larger.

⁷ Due to the revision of categories in official statistics, we used the data of 2000 instead of 1999 data, assuming there are no significant changes in the industrial structure.

	Crafts	328	208	146	-55.5%
	Stationery	269	202	225	-16.4%
	Creative industries-service	40,370	38,326	38,064	-5.7%
	Software & computer service	10,334	12,936	17,197	66.4%
	Advertising	10,190	8,986	7,328	-28.1%
	Publishing	4,988	5,502	3,636	-27.1%
	Architecture	7,138	4,600	3,012	-57.8%
	TV & radio	3,436	3,136	4,027	17.2%
	Music & video	885	917	724	-18.2%
	Film	1,807	860	1,007	-44.3%
	Performing arts	916	764	744	-18.8%
	Design	665	621	387	-41.8%
	Arts	11	7	4	-63.6%
Employees unit: thousand	All industries	45,450.5	40,128.6	55,838.3	22.9%
	Creative industries	2,387.4	2,154.9	2,053.2	-14.0%
	Creative industries-manufacturing	921.8	620.4	456.4	-50.5%
	Fiber & apparel clothing	629.8	389.0	293.4	-53.4%
	Furniture	90.9	87.1	60.2	-33.8%
	Leather article	52.6	35.1	18.6	-64.6%
	Tableware	33.6	27.2	19.3	-42.6%
	Toys	41.6	28.5	22.8	-45.2%
	Jewelry	15.2	11.0	8.1	-46.7%
	Crafts	45.6	32.5	23.8	-47.8%
	Stationery	12.3	10.0	10.1	-17.9%
	Creative industries-service	1,465.6	1,534.5	1,596.8	9.0%
	Software & computer service	455.7	618.8	795.4	74.5%
	Advertising	146.6	144.5	128.0	-12.7%
	Publishing	118.7	121.0	117.0	-1.4%
	Architecture	429.3	357.7	294.2	-31.5%
	TV & radio	68.5	62.9	68.1	-0.6%
	Music & video	105.6	107.1	83.0	-21.4%
	Film	68.6	43.5	49.1	-28.4%
	Performing arts	26.4	31.0	28.0	6.1%
Design	44.4	46.3	32.7	-26.4%	
Arts	1.7	1.8	1.2	-29.4%	
Establishments unit: thousand	All industries	5,414.8	4,709.5	5,768.5	6.5%
	Creative industries	243.4	211.9	178.0	-26.9%
	Creative industries-manufacturing	107.4	78.5	53.4	-50.3%
	Fiber & apparel clothing	71.3	47.6	32.2	-54.8%
	Furniture	10.2	10.9	7.2	-29.4%
	Leather article	8.2	5.6	2.8	-65.9%
	Tableware	2.7	2.1	1.5	-44.4%
	Toys	4.2	3.2	2.4	-42.9%
	Jewelry	2.5	1.7	1.4	-44.0%
	Crafts	7.8	6.7	5.5	-29.5%
	Stationery	0.6	0.5	0.4	-33.3%
	Creative industries-service	136.0	133.4	124.6	-8.4%
	Software & computer service	14.4	20.1	25.4	76.4%
	Advertising	11.7	10.9	10.5	-10.3%
	Publishing	3.6	2.6	7.0	94.4%

Architecture	59.2	53.8	46.7	-21.1%
TV & radio	1.7	1.6	2.2	29.4%
Music & video	27.8	27.2	20.0	-28.1%
Film	4.6	4.4	3.0	-34.8%
Performing arts	2.2	2.3	2.0	-9.1%
Design	9.6	9.4	7.0	-27.1%
Arts	1.1	1.1	0.6	-45.5%

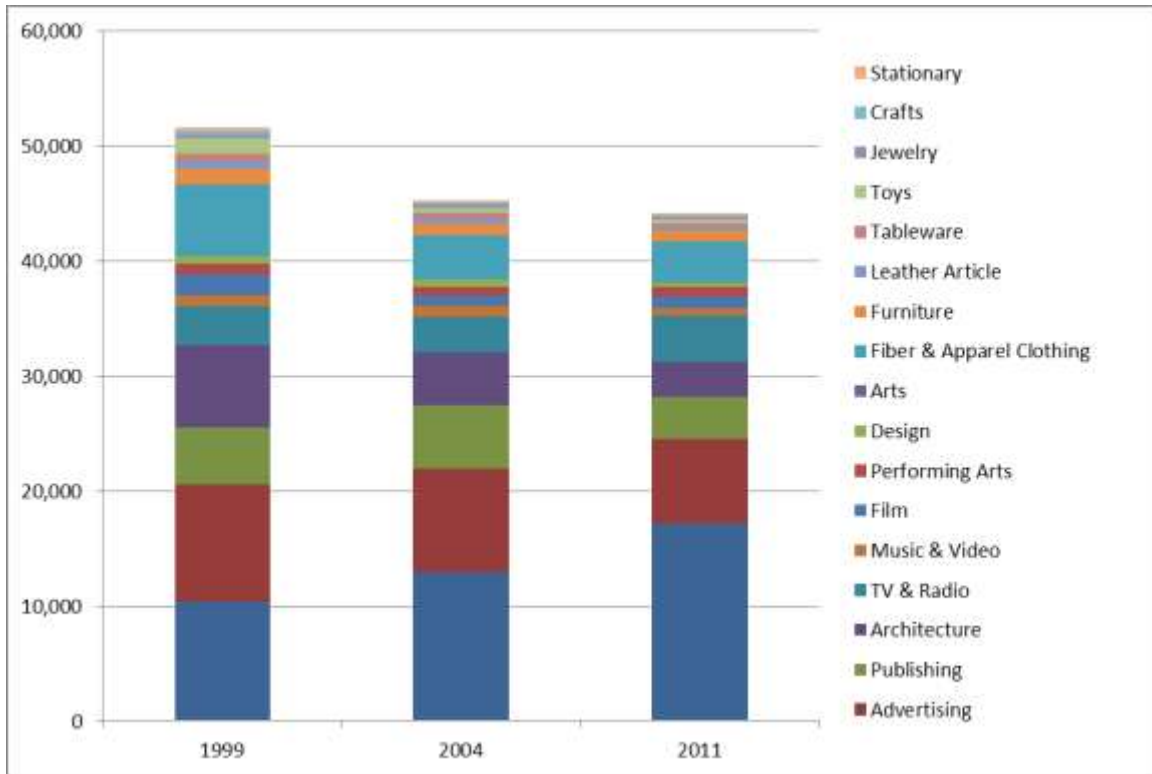


Figure 1. Breakdown of Sales of Creative Industries by Sectors (2010 estimate and METI, 2012c) (Unit: billion yen)

In terms of job creation, the same trend was also observed: only 'software & computer service' has been constantly increasing the number of employees, from 455 thousand to 795 thousand, which comprise 40.3% of the total (Table 2). The number of employees in creative manufacturing industries decreased essentially proportionately to the decline of sales, while the number of employees in service creative industries was more resilient and in some industries it increased; in performing arts, for example, revenue declined but the number of employees increased. The number of establishments in creative service industries did not decrease proportionately to the decline in revenue, and in some sectors it increased: in publishing, revenues dropped substantially while the number of establishments increased (Table 2).

III. Value added estimates-are they competitive?

The volume of sales can be interpreted as one indicator of the general strength of each industry. However, from a value creation perspective, value added is also an important indicator. The 2010 estimate did not touch on value added, but we examined value added based on the Economic Census for Business Activity

(METI, 2012c)⁸. The subjects of these statistics are all enterprises and establishments (excluding governments).

In these statistics, creative industries account for 4.2% of total employees, 3.3% in terms of amount of sales, and 5.3% in terms of value added (Table 3). In addition, the average value added per employee was estimated to be 6,282 thousand yen, while that for all industries was 4,982 thousand yen. We thus assert that creative industries create more jobs, and service creative industries in particular create more value added per amount of sales.

Figure 2 shows value added per employee by industry sectors. Creative industries are in the upper part of all industry sectors, following electricity, information, and finance. Thus, creative industries comprise a relatively small part of the Japanese economy yet are strong in value creation compared with the average for all industries.

Table 3. Value added and the number of employees

Industries	Value added per employee (thousand yen)	Employees (% in total)	Amounts of sales (income) (million yen) (% in total)	Value added (billion yen) (% in total)
All industries	5,032	48,761,693	1,336,872,217	245,355
Creative industries	6,282	2,053,217 (4.2%)	44,134,549 (3.3%)	12,898 (5.3%)
Manufacturing industries	6,071	9,305,701	343,326,819	56,498
Manufacturing creative industries	5,522	456,407 (4.9%)	6,070,201 (1.8%)	2,521 (4.5%)
Service industries	4,830	35,660,977	905,589,213	172,237
Service creative industries	6,499	1,596,810 (4.5%)	38,064,348 (4.2%)	10,378,110 (6.0%)

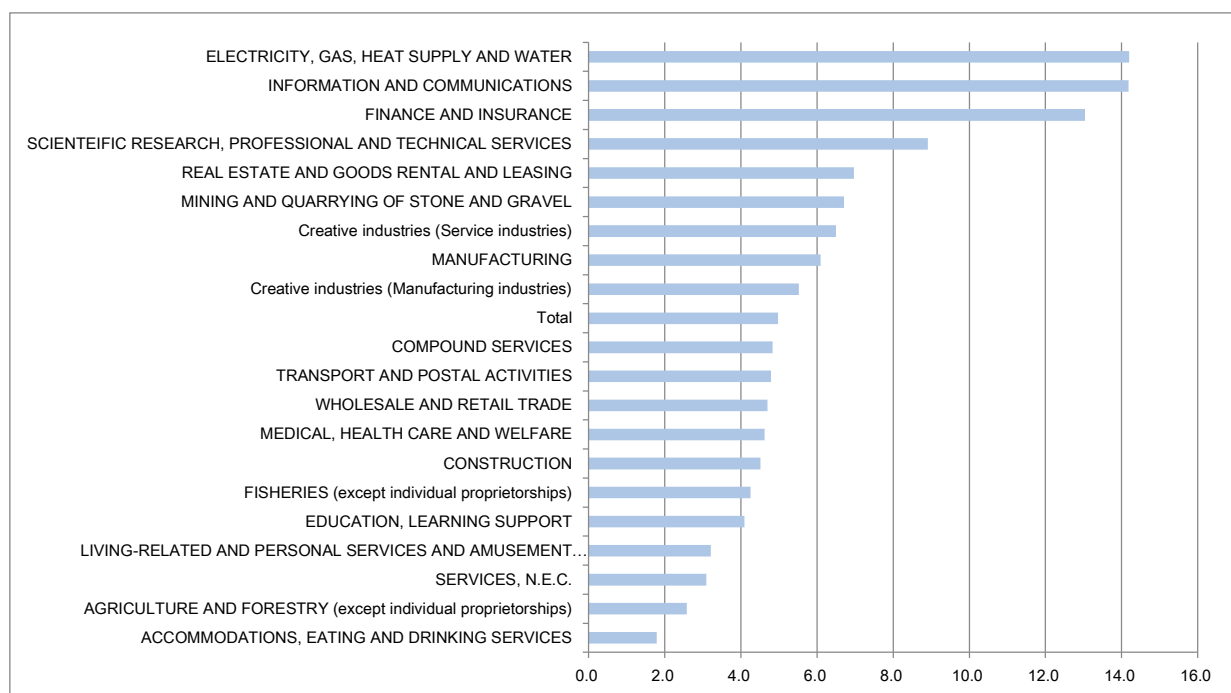


Figure 2. Value added per employee in average by industry divisions (unit: million yen)

⁸ The subjects of the census are all enterprises and establishments in Japan, including companies and shops yet excluding government, and individual operations in the field of agriculture, fishery and forestry, and household services.

Creative manufacturing industries

As the data on value added in the previous section include those of both profit and non-profit establishments, we conducted a closer examination. Manufacturing industries are composed of 532 industry groups⁹ in the Economic Census for Business Activity. On average by industry groups, more than 49 employees are working at each establishment and they produced 11,997 thousand yen in value added per employee (the median was estimated as 20 employees and 9,448 thousand yen in value added, respectively).

On the other hand, 40 industry groups constitute creative manufacturing industries, and they are much smaller in terms of value added per employee as well as the number of employees per establishment; as shown in Figure 3, they are all below the average. Thus, creative industries are rather small and not so competitive among manufacturing industries. Only limited industry groups such as 'sporting and athletic goods,' 'felt and bonded fabrics,' and 'fountain pens, pens and lead pencils' among creative industries can be ranked in the middle of the manufacturing industry groups.

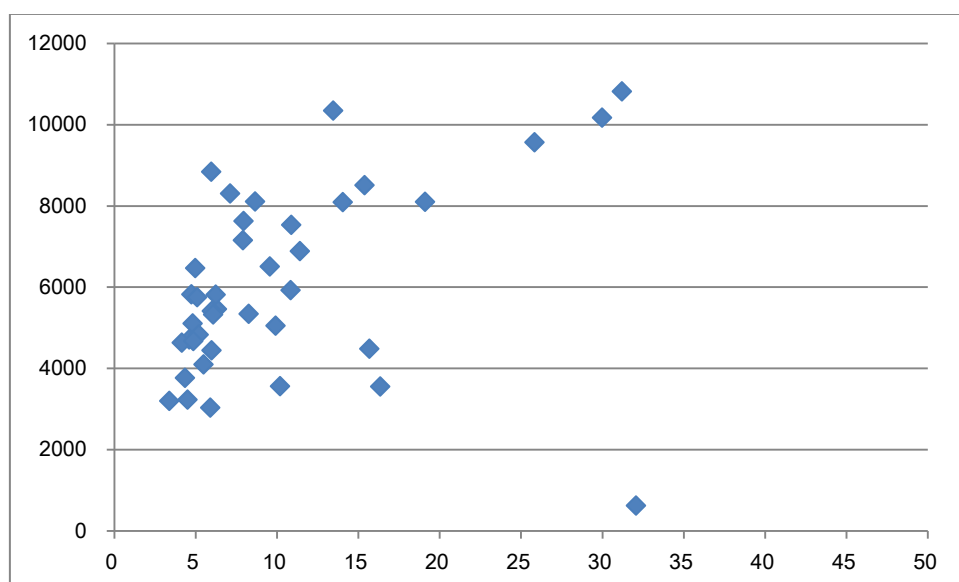


Figure 3. Average number of employees per establishment and value added per employee (unit: thousand yen) of creative industries by industry groups.

The 'fiber and apparel clothing' industry sector comprises a major part of creative manufacturing industries, but it is shrinking as the number of establishments and employees and the volume of production of textile-related industries¹⁰ have been declining for the past several decades in Japan¹¹. During this period, imports of apparel products greatly increased (in nominal term, 1.5 times larger from 1990 to 2010)¹² and per capita domestic consumption of clothes and footwear greatly decreased (in nominal terms, a roughly 40% drop from 1990 to 2010)¹³. Relocation of production to overseas sites with less expensive costs was probably largely responsible for the increase of imports and decrease in consumption.

⁹ Excluding sectors for which data were not available, a total of 532 sub-sectors (according to the classification of Economic Census) are analyzed.

¹⁰ "Manufacture of textile mill production" and "manufacture of apparel and other finished products made from fabric and similar materials" in Census of Manufacture, METI, are referred to as textile-related industries in this paper, as in the Census of Manufacture; METI merged these two categories into one in 2008.

¹¹ Census of Manufacture, METI, each year

¹² Import of apparel products was estimated at 1.9 trillion yen in 1990 and roughly 3 trillion yen in 2010, according to Trade Statics of Japan. <http://www.customs.go.jp/toukei/info/>

¹³ Family Income and Expenditure Survey, Statistics Bureau in Ministry of Internal Affairs and Communications <http://www.stat.go.jp/english/data/kakei/index.htm>, each year

This industry sector is composed of several industry groups such as ‘garments and shirts (except Japanese style)’, ‘silk reeling plants, spinning mills’, ‘chemical fibers and twisting and bulky yarns’, and ‘dyed and finished textiles’. The most productive industry is ‘felt and bonded fabrics’, which produces non-woven fabric by machine pressing of wool and/or chemical processing of artificial textiles, and its value added per employee was estimated to be more than 10,000 thousand yen.

In these industries, more than 75% of the workforce is engaged in manufacturing processes, while specialists such as designers and engineers comprised only 2% of the total workforce in 2010 (MIC, 2010).

Creative service industries

In service industry sectors, creative industries are more competitive than in manufacturing. Service industries in total created and average value added of 4,755 thousand yen per employee, while creative industries created an average of 6,499 thousand yen (Table 5). Service creative industries are quite diversified (Figure 4).

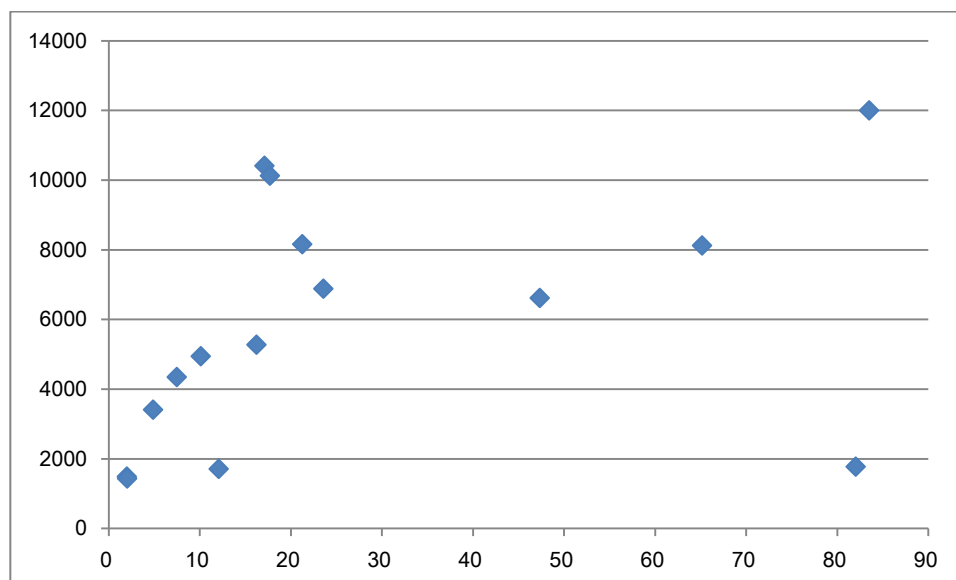


Figure 4. Average number of employees per establishment and value added per employee (unit: thousand yen) by industry sectors

Table 4. Breakdown of service creative industries

Industry division	Industry group	Value added (million yen)	Number of employees per establishment	Value added per employee (thousand yen)
Software & computer service	Computer programming and other software services	5,024,180	33	6,611
	Internet based services	369,518	15	10,410
Advertising	Commercial art and graphic design	110,398	9	4,940
	Advertising	1,069,542	13	10,122
Publishing	Newspaper publishers	390,155	18	8,124
	Publishers, except newspapers	562,539	16	8,158
Architecture	Engineering and architectural services	1,276,620	6	4,340
Music & video	Information recording materials, except newspapers, books, other printed products, etc.	106,962	52	21,172
	Music instructions	46,648	2	1,431

	Audio and visual recordings rental, except otherwise classified	77,533	12	1,709
TV & radio	Broadcasting	817,551	31	11,998
Film	Services incidental to video picture, sound information, character information production and distribution	240,267	14	6,880
	Cinemas	25,203	30	1,776
Performing arts	Performances (except otherwise classified), theatrical companies	147,672	14	5,269
Design	Design services	111,529	5	3,408
Arts	Authors and artists	1,793	2	1,489

‘Software and computer service’ is the largest industry sector and comprises more than half of creative service industries in the number of employees and value added (Table 4). There are other strong industries in terms of creating value added per employee, such as ‘broadcasting’, ‘internet based services’, and ‘advertising’, although their volume is relatively small. On the other hand, in such industries as ‘artists’ and ‘music instructions’, both of which are very small, value added per employee was roughly 10% of that of high-value-adding industries.

Let us look in detail at the largest and only growing industry sector, ‘software and computer service’, which is composed of ‘computer programming and other software services’ and ‘internet based services’. ‘Computer programming and other software services’ can be divided into several industries such as ‘custom software services,’ ‘embedded software services,’ ‘package software services,’ and ‘game software services.’ Among these, ‘custom software services’ comprised roughly half of this industry group, and ‘game software production’, which is a small segment, comprises only less than 2% (METI, 2012c). In this industry group, roughly 70% of workers are technical workers such as system engineers and programmers, and the remaining workforce is clerical and sales workers (Figure 5). Designers comprise less than 1% (MIC, 2010).

On the other hand, ‘internet based services’ include ‘web portal providers’ (including internet shopping site providers), ‘application services providers’, and ‘internet support services’. This industry group is much smaller compared with the above-mentioned industry group in terms of total value added. Roughly 40% of its workforce consists of clerical and sales workers, 30% of designers, and 20% of technical workers.

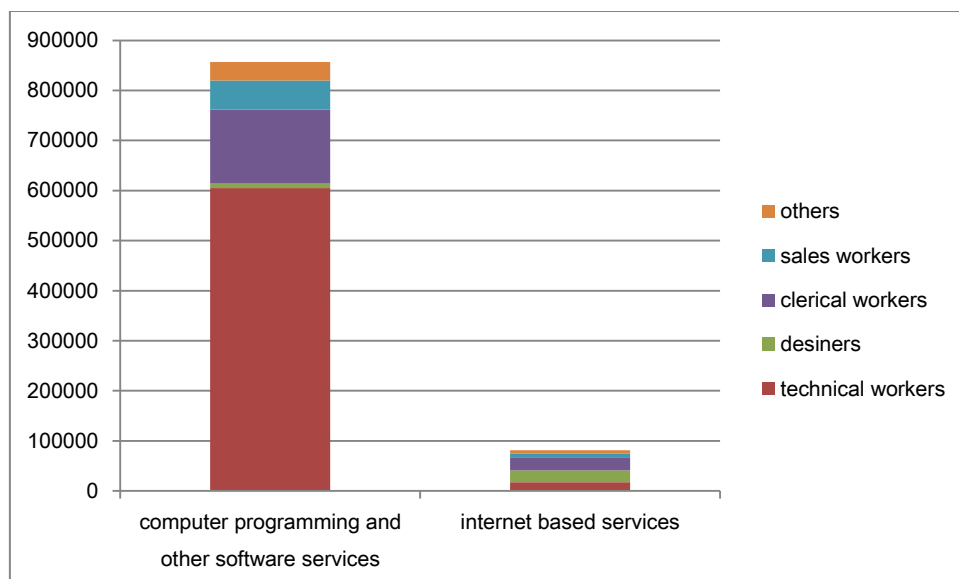


Figure 5. Professional classification of workforce in ‘software and computer service’

II-4. Import and exports

Another important aspect concerning the impact of creative industries is its importance in exports. In the U.K., roughly 10% of total service exports was contributed by creative industries (DCMS, 2011¹⁴), which demonstrates the importance of creative industries in the U.K.'s economy.

In Japan, with some fluctuation due to international and domestic environments, the trade balance was positive in total for the three decades before the Great Tohoku Earthquake and subsequent nuclear accidents in 2011, which resulted in the cessation of nuclear electricity generation in Japan and increased imports of fossil fuels¹⁵ (Figure 6). Service exports stayed at 13-15% of total exports in the preceding decade, and service imports were 17-18%.

The export of goods such as 'chemicals,' 'general machinery,' 'electrical devices,' 'material products,' and 'transport equipment' made a substantial contribution to exports in total (over 80% in 2012). On the other hand, 'textile yarn' and 'fabrics' comprised only 1% of the total.

Among service exports, 'transportation,' 'royalties and license fees,' 'other business services,' and 'travel' contributed over 80% of the total in 2012. It should be noted that 'royalties and license fees' greatly increased in this decade. The ongoing overseas production of Japanese companies has led to increasing income from royalties and license fees, which contributed to improving the trade balance in recent years. 'Personal, cultural and recreational services' comprise only 0.1% of service exports in Japan.

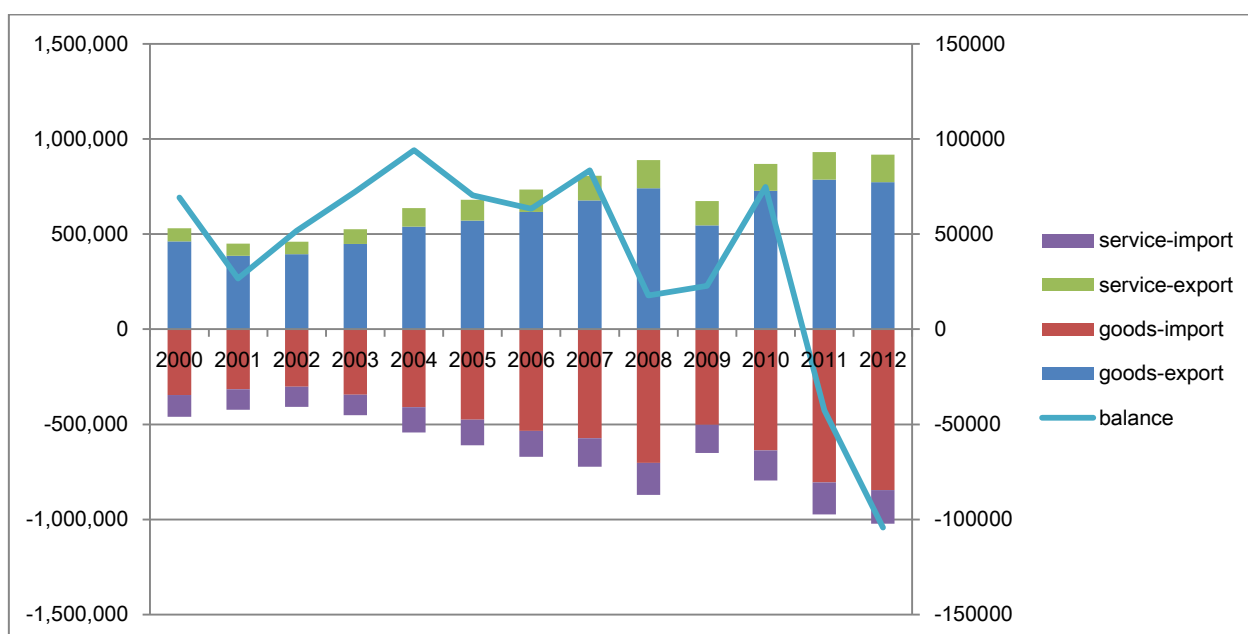


Figure 6. Trends of imports and exports (unit: million dollars)

III. Sectorial analysis

In previous sections, we have observed that creative industries are a relatively small segment of the economy in Japan, with little significance in exports. However, major creative industries employ many technical workers and manufacturing process workers, as well as clerical and sales workers. It is rather

¹⁴ The creative industries accounted for 10.6% of the UK's exports in 2009 (do not included the export of goods), DCMS, 2011, Creative Industries Economic Estimates Full Statistical Release https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/77959/Creative-Industries-Economic-Estimates-Report-2011-update.pdf

¹⁵ Trade Statistics of Japan, Ministry of Finance, http://www.customs.go.jp/toukei/info/index_e.htm, each year.

difficult to tell the difference between ‘creative industries’ and other industries in terms of creativity of the workforce by professional classification. Thus, this classification seems to be somewhat arbitrary.

In this section, we focus more on creativity and examine the current status of industries where creative workers (namely artists and creators) are a predominant part of the workforce: ‘traditional craft industries’ and ‘contents industries’.

III-1. Traditional craft industries¹⁶

‘Traditional craft industries’ have been recognized and promoted since 1974 by the Act on the Promotion of Traditional Craft Industries. To combat the effects of mass production and consumption and the rapid decline of traditional craft industries, industries may be designated under this act if they utilize traditional skills and techniques using traditional materials have been applied to mostly hand-made production, for roughly 100 years or more, with industrial concentration (clusters). Using original skills transferred from previous generations, these clusters of industries produce crafts for everyday use.

Under this system, more than 200 industries are now recognized in such categories as ‘weaving,’ ‘dyeing,’ ‘other fiber crafts,’ ‘pottery and porcelain,’ ‘lacquer,’ ‘wood,’ ‘bamboo,’ ‘metal,’ ‘Buddhist altars and accessories,’ ‘paper,’ ‘stationery,’ ‘stone,’ ‘dolls,’ ‘miscellaneous crafts,’ and ‘craft materials.’ Although traditional craft industries are one small segment of the manufacturing creative industries analyzed in the previous section, they spread over a wide range of industry divisions, from textile-related ones to stationery and toys. By nature, they have enhanced traditional skills and regional cultural value in their production.

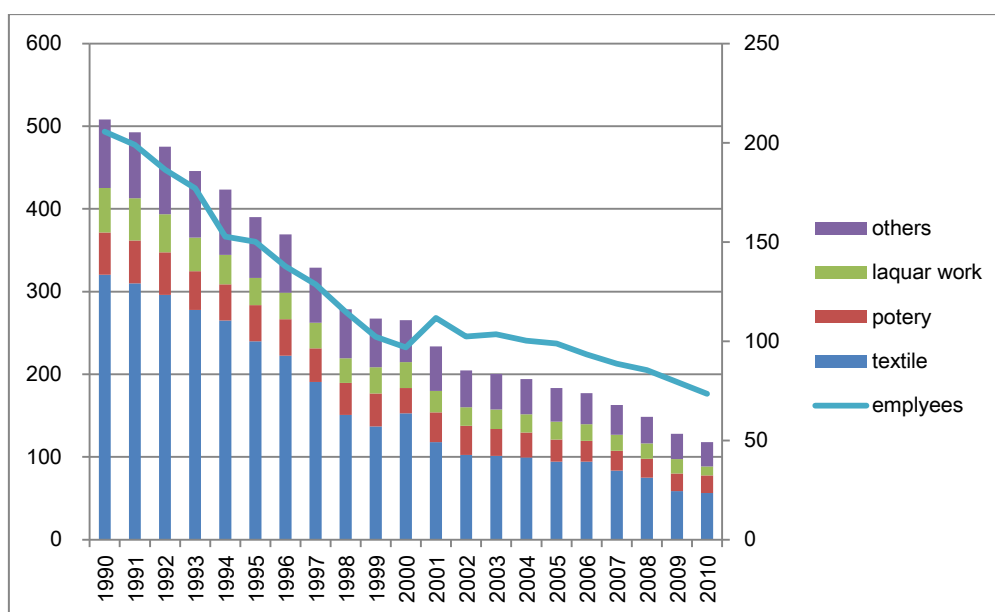


Figure 7. Trend of sales (unit: billion yen) and the number of employees (unit: thousand) in traditional craft industries

Despite these national efforts, traditional craft industries have seen a steady decline. Sales decreased from 508 billion yen in 1990 to 118 billion yen in 2010, and the number of employees also decreased from 205 thousand to 73 thousand in the same period (Figure 7). Lifestyle changes and less expensive commodity imports affected those labor-intensive industries (METI, 2011). Five to six workers are engaged at each enterprise on average, and the average age of these workers has been increasing as it is difficult for these industries to attract younger workers.

¹⁶ Data used for this section were provided by the Association for the Promotion of Traditional Craft Industries.

III-2-1. Contents industries¹⁷

The total sales of contents industries (digital text, text, game, digital music, music, digital image and image), including manga and animation, has been about 12.0 trillion yen in this decade, with a slight decrease. One notable change is a decrease of music, and a great increase of digital contents, especially games and images (Figure 8).

By contents, box office revenues, TV broadcasting, and the sales of images such as DVDs accounted for 4.5 trillion yen, that of music was 1.3 trillion yen, and games was 1.4 trillion yen. Text sales amounted to

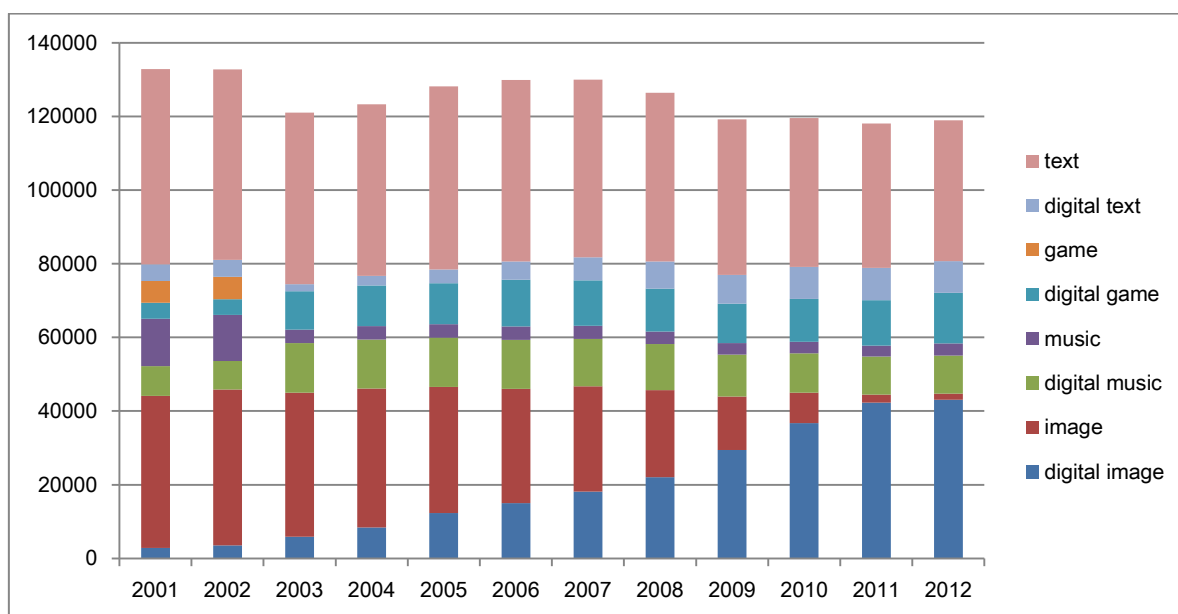


Figure 8. Trend of sales of Contents Industries (Digital Content Association of Japan (DCAJ), 2013) (Unit: billion yen)

III-2-2. Film industry

Among contents industries, one of the oldest industries is the film industry. Motion pictures were invented in 1895 in Paris, and in 1896 the first film was presented to the public in Japan. Since then the movie industry grew greatly in the entertainment markets until the middle of the 20th century, and declined sharply since then due to the introduction of television sets and other devices. In the 21st century, annual sales of the film industry were estimated to be around 200 billion yen, including both foreign and Japanese films (box office revenue was estimated as 195 billion yen in 2012). Since 2006, more than half of the sales in Japan were of Japanese films (65.7% in 2012).

Production, distribution and box office (movie theaters) are mainly managed by three major companies, although there are also some independent companies. In general, Japanese films are shown under the so-called 'block booking system,' where these major companies have respective chains of movie theaters which show their productions. Foreign films are shown by two major chains. A significant part of box office revenues are paid to distribution companies and production companies realize profits only after deducting all

¹⁷ Data used in this section and the next section was largely based on Digital Contents White Paper (Digital Content Association of Japan (DCAJ), 2013).

costs. Only a small segment will be paid to creation companies. The gap between major companies and independent ones is widening due to a lack of investment by independent companies.

As for exports, sales of 'film,' 'TV broadcasting,' and 'secondary use of these images' in 2012 amounted to roughly 5.3 billion yen, which comprised only 2.7% of the total sales of films. The largest reason might be the relatively large size of the domestic market and the reluctance of major companies to take the risks and costs of selling their products overseas, while small independent companies have difficulties raising funds even for production. In addition, for further export promotion, countermeasures against piracy, modification of products for different overseas market, and deliberate marketing strategies are necessary.

IV. Summary and discussion

IV-1. Summing up of creative industries

Until recently, discussion of the role of creativity was not so prominent in Japan, although it was mentioned in the context of science and business. Creativity is regarded as an important source of innovation. However, it should be noted that in these contexts, creativity is regarded as a talent that everyone can cultivate, rather than as a special talent limited to a particular segment of the population in Japan.

This situation seemingly changed in the 21st century from an urban development perspective. The newly introduced creative city concept brought much attention to creativity and creative industries, with a strong emphasis on art and culture rather than science and technology, at least in Japan. This approach appeals in particular to smaller cities that face difficulties coping with on-going globalization: relocation of production sites to low-cost countries and the necessity of shifting from industrial structure to knowledge-based, high-value-added production utilizing ICT and innovation. In view of the high concentration of IT-related content businesses in large cities, local cities with rich cultural assets such as traditional craft industries have incorporated the creative city concept into their urban strategies and industrial policies. At the national level, the 'Cool Japan' promotional policy focuses on the contents industries.

In order to elucidate the current status of creative industries, we examined creative industries in detail, mostly following the *2010 estimate* of the Japanese government. Data analysis indicated that, despite of the efforts of governments and expectations of growth, creative industries are not growing in terms of sales or the number of employees and establishments as a whole, except for 'software & computer service'. Several reasons might account for this. In manufacturing, most companies are rather small and not so competitive in terms of value added, and relocation of production sites and growing import of less expensive goods might greatly affect their sales. In addition, a change of lifestyle brought about problems in selling their products. Traditional craft industries are more at risk, as they are mostly dependent on non-automated production.

Among creative service industries, the only growing industry group is 'computer service,' and contents industries are rapidly becoming digitalized. However, sales in the 'contents' industries are not increasing. As typically seen in the film industry, the domestic market might be large enough to discourage taking risks and assuming costs to sell their products outside of Japan. This situation might change in the near future as the domestic market is anticipated to shrink due to the decrease in population.

VI-2. Technical problems about definition

Our estimate applied thematic categorization to creative industries. However, this application has several technical problems. As seen in the largest and only growing industry sector, 'computer service,' most of the workforce is composed of technical workers such as system engineers and programmers, followed by clerical and sales workers. Distinguishing system engineers from other engineers in terms of creativity might be difficult, as would asserting that clerical workers working in software industries are more creative than those engaged in other industries. In Japan, more than two million technical workers and 11 million clerical

workers are working in various industries, from agriculture to manufacturing, information and communication, construction and to service. There is no industry division where these technical workers such as system consultants, system architects, and software developers are not working (MIC, 2010).

On the other hand, focusing on individual creativity, there will be no disagreement that artists are creative workers. As is shown in Figure 9, artists are working in various industries. In particular, designers are working in ‘manufacturing,’ ‘information and communications,’ ‘wholesale and retail trade,’ and ‘scientific research, professional, and technical services’ such as design and advertising.

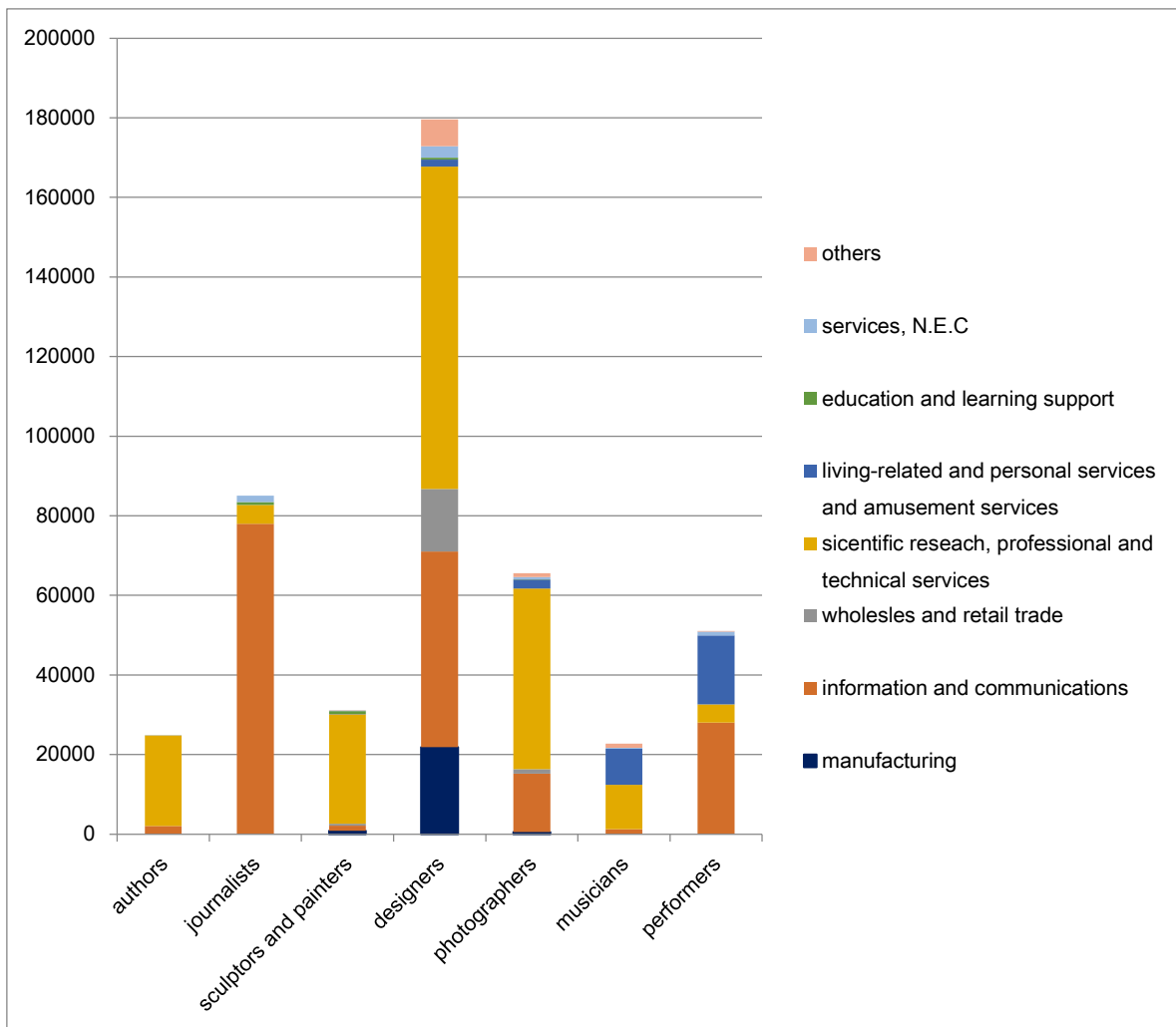


Figure 9. Breakdown of artists by industries

Recent business management toward knowledge creation suggested the importance of designs which recreate pre-existing value and redefine the concept (Nonaka & Takeuchi, 1995). In order to differentiate products and avoid commoditization, there is constant pressure from the market to add more value for customers. Typical non-creative industries such as manufacturing are now increasingly looking for cultural creativity. In the field of automobile production, from the early period, design has been one of the most important elements¹⁸. Today, Toyota produces automobiles with highly advanced technology fully protected by intellectual properties rights while increasingly emphasizing styling and design. Thus, in practice, it is very

¹⁸ "...the principal attractions of the product would be appearance, automatic transmissions, and high compression engines, in that order; and that has been the case." (SLOAN,1963)

difficult to show a clear and sharp line between creative industries and non-creative industries, either using industry categorization or professional classification.

VI-3. Potential and new developments

The importance of creativity might be regarded from different perspectives. Traditional craft industries, although declining as industries, can be a source of creativity with plenty of know-how and skills. In fact, there is some evidence that those skills and techniques might be adapted to new products and new markets, which might be one of the potential options for preservation of those skills and perhaps even modest market growth.

On the other hand, creative industries (in particular, traditional craft industries), can contribute to increasing the attractiveness of a city. In order to preserve historic sites and buildings, artisans with skills in special traditional techniques that are indispensable to maintain and repair these historic buildings constitute a necessary investment for promoting tourism. For the artisans, participation in the preservation efforts of the city provides a good opportunity to obtain employment. Thus, while efforts to preserve the townscape can be viewed as a cost for the city, these costs contribute to attracting tourists, thereby benefiting the city socially and economically. Creative city strategies in this sense can contribute to upgrading a city's culturally creative image, which may justify the use of public funds. At the same time, for local cities which have difficulty attracting internationally competitive industries and factories, tourism-related industries are an additional option. Cultural assets, a part of which are provided by creative industries, have great potential. Creative industries can be viewed as more important than the data show. These spillover effects of creative industries should be examined to further understand the nature of creativity in economic development.

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