

# DOMESTIC CULTURE INDUSTRIES NEED TO BOOST COMPETITIVENESS

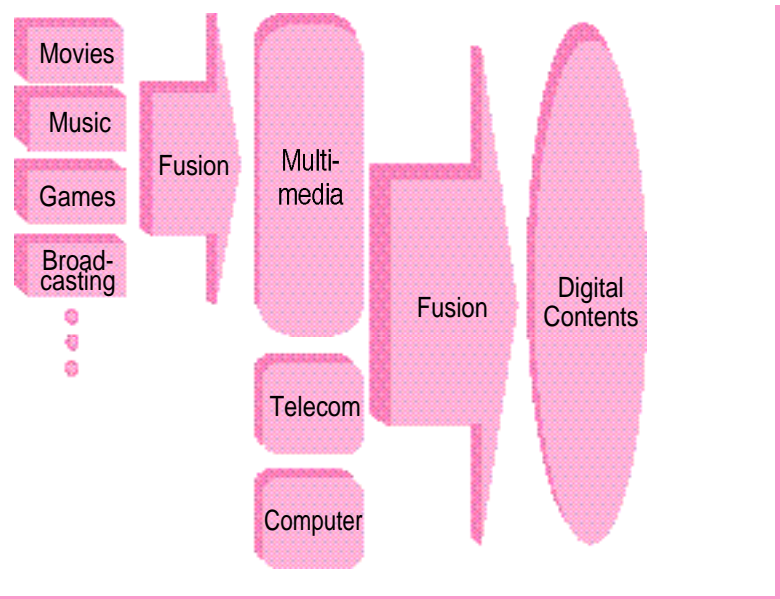
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## Concept and changing trends of culture industries

*The spread of digitalization has led to an increasing tendency to combine and fuse culture products.*

Culture industries include the development, production, distribution, and consumption of cultural products, as well as related services. In the past, culture industries included publishing, newspapers, broadcasting, and movies, but recently, the industries have come to include advertising as well as digital contents<sup>1)</sup>. In addition, the spread of digitalization has led to an increasing tendency to combine and fuse culture products. For example, movies, music, and games are becoming combined into the multimedia industry using IT technology. In addition, the telecom and computer industries are fusing with the multimedia industry to be reborn as the digital contents industry.

Figure 1. Culture Industry Trends in the 21st Century



1) Digital contents refers to contents that are digitalized, produced, distributed, and consumed through electronic media, as well as those that are broadcast and received through information or broadcasting networks. Contents refers to all material or knowledge conveyed by symbols, text, audio, sound, and video, or their aggregates. (Ministry of Culture and Tourism)

## Domestic culture industries

### Industry scale

The total output of Korea's culture industries in 1999 was 20.91 trillion won, accounting for 1.8% of the country's industrial output. Exports and imports were 0.85 billion dollars and 0.47 billion dollars respectively, accounting for 0.5% and 0.3% of total exports and imports. 483 thousand people, or 2.8% of the workforce, were employed in culture industries, a large proportion considering the sector's weight in the economy. The value-added rate of culture industries exceeded the 30% rate of manufacturing, with games at 60.3%, animation 26.4%, publishing 52.3%, music 48.3%, broadcasting 47.8%, and movies at 46.7%.

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**Table 1. Scale of Domestic Culture Industries**

	Output (bil. won)	Export (bil. won)	Import (bil. won)	Employment (Thousand persons)
<b>Scale</b>	20,907.8	0.85	0.47	483
<b>Share (%)</b>	1.8	0.5	0.3	2.8

Source: Ministry of Culture and Tourism

Note: Output and employment figures are for 1999, export and import figures are for 2000

### Linkages with other industries

If final demand for culture industries increases by one unit, the production induction index (which reflects the production of all domestic industries) is 1.76, which is lower than the index for manufacturing (1.89) but higher than that of services (1.53). Thus, compared to other service industries, culture industries have a high production stimulus effect.

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The value-added stimulus index for culture industries is quite high at 0.91, which is far higher than the average for manufacturing industries (0.64). If 1 billion won of final demand for culture industries arises, 54 jobs will be created directly and indirectly. This is not only higher than the average for services (34 jobs), but almost threefold that of manufacturing's 19 jobs.

Fourth, the influence index of culture industries, which gauges an industry's backward linkages, was higher than for services, but the sensitivity index, which measures forward linkages, was much lower than that of services. This shows that culture products are not used as intermediate materials for other industries, but that culture industries have high interdependence with other industries.

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Table 2. Linkage Effects of Culture Industries

		Culture	Services	Manufacturing
<b>Production Stimulus</b>		1.76	1.53	1.89
<b>Value-added Stimulus</b>		0.91	0.89	0.64
<b>Induction of Employment (persons/billion won)</b>		54	34	19
<b>Forward and Backward Linkages</b>	<b>Influence</b>	0.94	0.83	1.03
	<b>Sensitivity</b>	0.63	1.42	2.01

Source: Bank of Korea, "Industry Linkage Table for 1998", April 2001.

### Trade in culture products

*Imports are proliferating for most culture products.*

While exports of movies and videos are increasing, game exports are on a downtrend. Meanwhile, imports are proliferating for most culture products. The movie industry, which was stagnant during the financial crisis, has maintained a 30% share of the domestic market in the last two years, and external transactions are also dynamic. In particular, due to the popularity of Korean culture in China and other east Asian countries, Korea's movie exports have risen more 50% a year, while import growth is also accelerating.

Second, although the export growth of the game industry is wavering, games are still the key export product in culture industries. Export of arcade games is increasing, and domestic online games such as "Lineage" are also enjoying rapid export growth.

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Third, animation exports have decreased continually from 0.1 billion dollars in 1997 to 65 million dollars in 2000 due to less subcontracting agreements. However, exports are expected to increase from 2001 due to improved planning and creation

Table 3. Exports and Imports of Key Culture Products

	(Unit: Million dollars)					
	1998		1999		2000	
	Export	Import	Export	Import	Export	Import
<b>Movies</b>	3.1(34.8)	32.1(-53.7)	6.5(109.7)	26.9(-16.2)	7.4(13.8)	46.2(71.7)
<b>Games</b>	82.3(107.3)	37.1(-66.4)	107.7(30.9)	46.6(25.6)	101.5(-5.8)	55.9(20.0)
<b>Animation</b>	85.0(-15.1)	-	81.7(-3.9)	-	65.3(-20.0)	-
<b>Publishing</b>	54.3(30.2)	63.3(-46.6)	62.2	81.6	64.2(3.2)	118.5(45.2)
<b>Music</b>	8.0(-19.2)	1.6(-91.2%)	8.9(11.3)	3.5(118.8)	9.1(2.20)	7.6(117.1)
<b>Video</b>	7.1(-12.3)	24.0(-38.0)	8.4(18.3)	37.2(55.0)	9.5(13.1)	47.8(28.5)

Source: KOTIS,<sup>F</sup> International Financial Statistics Yearbook IMF, 1999, 2000

Note: Figures in parentheses indicate annual percentage change

functions of domestic animation firms.

Fourth, exports of the publishing, music, and video industries have stalled while imports in these sectors is rapidly growing. In the case of videos, imports have doubled in the past two years.

### Comparison of culture industry competitiveness

Excluding games and music products, the trade differentiation index for all domestic culture products was negative, showing low export competitiveness. In particular, movies and videos have a trade differentiation index near -1, which shows heavy external dependency in these products. The game and music industries, which have some competitive advantage are seeing rapid decreases in their trade differentiation indexes despite efforts to promote culture industries.

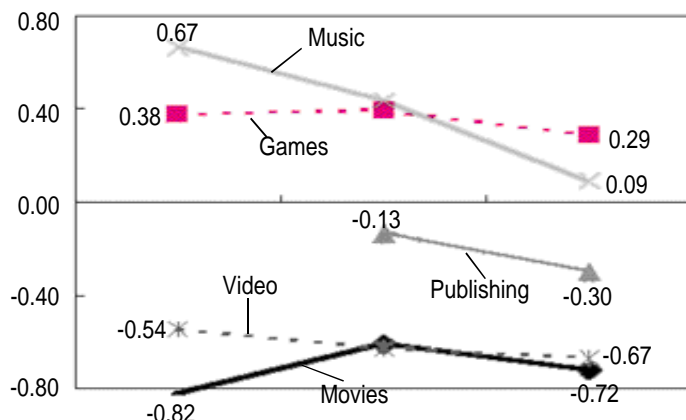
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In general, Korea's culture industries do not account for a large share of the economy, but the sector's high job creation and value-adding effects make it important. Therefore, as a strategic sector, culture industries should be prepared for competition in the 21 century.

### Prospects for culture industries

According to forecasts by the international consulting firm PwC(PricewaterhouseCoopers), the scale of the world culture industry market will

Figure 2. Trade Differentiation Indexes of Key Culture Products



Source: 1) Derived from National Statistical Office data  
 2) Trade differentiation Index consists of  $(\text{Export}-\text{Import})/(\text{Export}+\text{Import})$ , and exports are more differentiated (competitive) the closer the value is to 1, and imports are more differentiated the closer the value is to -1.

*The scale of the world culture industry market will rise from 0.85 trillion dollars in 2000 to over 1 trillion dollars in 2003.*

rise from 0.85 trillion dollars in 2000 to over 1 trillion dollars in 2003. This indicates an average annual increase of 7%, and is a high rate considering that the world economy is expected to grow by only 2 or 3% until 2003. In particular, the game industry's growth rate is almost 30%, and is expected to be a leading component of the culture industry. Meanwhile, the distribution of digital contents through the internet, such as e-books, internet movies, and music sales over the internet, is expected to expand rapidly.

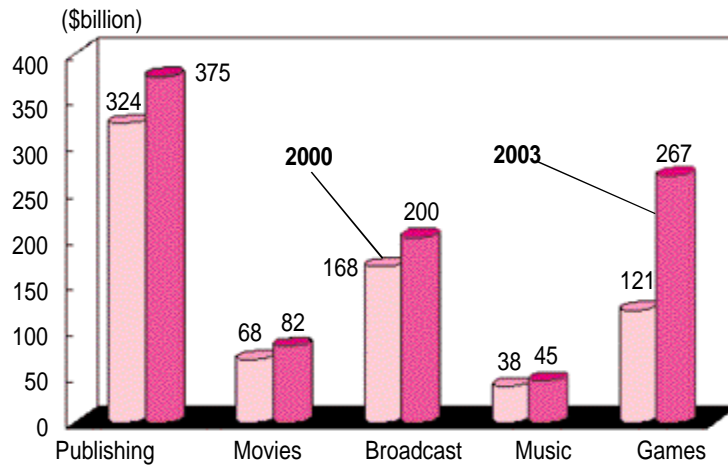
Although the US, which enjoys a dominant 40% share of the world culture industry market, is expected to be the world's culture industry leader in the 21st century, China is also expected to become a contender. While the scale of China's culture industry market was only 10 billion dollars in 2000, it is expected to overshadow Korea's market in 2003, and grow to about 0.16 trillion dollars by 2025, which exceeds Japan's culture industry market.

**Domestic market forecast**

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The domestic culture industry market is expected to grow at an average annual rate of 14.6%, twice the world rate. By 2003, the market scale is expected to reach 36 trillion won. With the continuing proliferation of multimedia PCs and the internet, the market for games is expected to grow by over 30% a year. In particular, online games are expected to see average annual growth of over 50% due to the advancing telecom technology and increased consumer demand. In addition, with the revitalization of the Korean movie production, the movie industry is expected to grow at nearly 20% a year. While growth of the broadcasting, music, and advertising markets are also expected to be dramatic, continuing market opening will bring intense competition from foreign companies.

**Figure 4. Prospects for Key Culture Contents Markets**



Source: PwC(PricewaterhouseCoopers), 2001.

Table 4. Prospects for Korea 's Culture Industry Market

(end of month, annual rate, %)

	1999	2003(E)	Average Annual Increase (%)
<b>Publishing/Printing</b>	4,500.0	6,588.0	10.0
<b>Movies</b>	311.4	600.0	17.8
<b>Video</b>	350.0	542.5	11.6
<b>Animation</b>	270.0	405.0	10.7
<b>Games</b>	901.4	2,825.3	33.1
<b>Music</b>	380.0	665.0	15.0
<b>Newspaper/Magazines</b>	3,600.0	4,000.0	2.7
<b>Broadcasting</b>	3,075.0	7,600.0	25.4
<b>Advertising</b>	4,300.0	7,500.0	14.9
<b>Character/Crafts</b>	3,220.0	5,352.0	13.5
<b>Total</b>	20,907.8	36,077.8	14.6

Source: Ministry of Culture and Tourism, " Contents Korea Vision 21 ", June 2001.

### Tasks for developing culture industries

Because creativity is a core competitiveness in the culture industries, these industries need to be developed through voluntary, private-led efforts. Thus, the government 's role should be limited to indirect support for the culture industry, such as the provision of a legal and institutional framework, or the creation of a distribution structure. The US is known for not intervening in its culture industry, which is among the world 's most dynamic and original.

Second, universities need to establish programs to foster creative culture industry talent. Although there are many institutes teaching contents development, there are practically no schools or programs that train professional talent able to create high value-added cultural products.

Third, the creation of regional culture industry complexes that fit regional characteristics could achieve both preservation of the area 's culture as well as formation of value-added. In light of the saying that uniquely Korean objects actually have the most global appeal, highly competitive regional products should be promoted as export goods or goods to attract tourism.

Finally, expanding export of high value-added culture products is expected to contribute significantly to Korea 's economic revitalization. Culture contents should be actively developed and exported in light of each market 's characteristics. In the long term, exchanges with people of other countries (especially youth) should be expanded to actively market Korea 's cultural products. **VIP**

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