

# The K-pop Wave: An Economic Analysis

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## ABSTRACT

This paper first shows the key role of the Korean entertainment firms in the K-pop wave: they have found the right niche in which to operate—the ‘dance-intensive’ segment—and worked out a very innovative mix of old and new technologies for developing the Korean comparative advantages in this segment. Secondly, the paper focuses on the most significant features of the Korean market which have contributed to the K-pop success in the world: the relative smallness of this market, its high level of competition, its lower prices than in any other large developed country, and its innovative ways to cope with intellectual property rights issues. Thirdly, the paper discusses the many ways the K-pop wave could ensure its sustainability, in particular by developing and channeling the huge pool of skills and resources of the current K-pop stars to new entertainment and art activities.

Last but not least, the paper addresses the key issue of the ‘Koreanness’ of the K-pop wave: does K-pop send some deep messages from and about Korea to the world? It argues that it does.

**Keywords:** Entertainment; Comparative advantages; Services; Trade in services; Internet; Digital music; Technologies; Intellectual Property Rights; Culture; Koreanness.

**JEL classification:** L82, O33, O34, Z1

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## INTRODUCTION

In 2012, Psy's '*Gangnam Style*' has made the entire world aware of "K-pop"—the Korean wave of popular dance and song.<sup>3</sup> But, K-pop was already flourishing much before '*Gangnam Style*', with Korean boys- and girls-bands drawing huge crowds in Japan and South East Asia since the early 2000s, and starting to make deep inroads in Europe and in the US since the late 2000s. At this time, a few K-pop stars, such as Rain, have already begun to move in other segments of the entertainment business, performing as stars in Hollywood-made movies.<sup>4</sup>

This K-pop wave is not the first emergence of Korea in the world entertainment area. Since the 1950s, Korean movies have attracted world attention, the latest illustration being the 2012 Golden Lion awarded to '*Pieta*'. In the mid-1990s, a Korean TV drama ('*Winter Sonata*') made a huge hit in Japan, opening a series of similar successes in East Asia [Russell 2008]. But, all these successes shared one feature: they remained limited in quantity (movies), in time (big ups and downs in the movies case) or in geographical scope (TV dramas).

The current K-pop wave is definitively different. It is already roughly 15 years old (longer than the boom years of the Hong Kong movies and of the 'Japanese pop' wave). It involves more than a dozen of K-pop bands having regular hits in world charts (for instance, '*Fantastic Baby*' from the 'Big Bang' K-pop band gets 1.5 times more YouTube hits than '*Marry the night*' from Lady Gaga). Lastly, the K-pop wave attracts an amazingly diverse audience—not only teens and twenties but also their parents, not only fans in Asia, but also fans in the Western world, Middle East, Africa and Latin America. All this triggers a sense of a true 'cultural' tidal wave.

This paper focuses on the main economic reasons explaining the K-pop success. Such a focus is far to ignore the artistic aspects which indeed surface in many parts of the paper. But, Korea's long tradition of remarkable skills in pop music since the 1960s has never enjoyed the world-wide recognition of the current K-pop wave.<sup>5</sup> Hence, the following question: do economic factors explain the difference between the K-pop marginality in the past and its worldwide success of today? The paper argues that indeed they do—in two ways.

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<sup>3</sup> Was '*Gangnam Style*' a Psy's success or a Youtube success (with Katy Perry's interaction)? The fate of the recent Psy's song '*Gentleman*' suggests that it was probably both.

<sup>4</sup> Rain has been included four times (2006, 2007, 2008, 2011) into the TIME list of the 100 most influential people in the world.

<sup>5</sup> Some early K-pop musicians, such as the guitarist Shin Joonghyon, have received prestigious world awards.

First is the decisive role of a few Korean firms operating in the ‘dance and song’ (hereafter DS) segment of the vast entertainment world. Section 1 shows how these firms have progressively gathered and mastered all the elements necessary for a world success: first targeting a neglected but very promising segment of the world entertainment demand which suited perfectly the artistic skills existing in Korea; then developing these skills and delivering them to the world by a unique combination of old and new techniques—a technological and business shift in the entertainment sector as dramatic as the one introduced by the Japanese carmakers in the car production thirty years ago.

The second economic factor is the set of market- and price-based incentives which have propelled the K-pop onto the world markets. Section 2 shows that small and very competitive Korean markets, with some elements of innovation-friendly concentration and a very peculiar price structure (buying songs on-line in Korea is much cheaper than in the other industrial countries), have strongly induced Korean DS firms and K-pop stars to go abroad as energetically as possible. However, it should be stressed that these factors alone could not have triggered the K-pop wave without the decisive actions of the Korean DS firms.

The K-pop success raises the question of its sustainability which is examined in section 3. Will the current K-pop wave be another short-lived hype, as so often the case in the vast entertainment world? Or, will it a powerful source of wide ranging diversification, nurturing Korean waves in other entertainment or art activities? This sustainability issue raises in turn a question that haunts many Koreans: does the current K-pop wave channel a sense of ‘Koreanness’ to the rest of the world, a question left for the conclusion.

## **SECTION 1. KOREAN DS FIRMS’ STRATEGIES: BLENDING OLD AND NEW TECHNOLOGIES**

Korea was definitively not an obvious candidate to become the epicenter of a tsunami wave in music entertainment. It faces (still does) the language barrier which matters in pop music if one sets aside English that half a century of US- and UK-pop dominance has made a kind of “*franca lingua*” (common language) for popular songs. Although based on an alphabet, the Korean language is difficult to learn. It is spoken by roughly 80 millions of people in the world (making it close to the German language) but this figure includes the 25 million secluded North Koreans and the 10 million members of the Korean diaspora disseminated in Central Asia. Until the mid-1990s, Korean officials were routinely stressing that Korea was a developing country. This was not a mark of Confucian humility, but

reflected the vivid memory that in the early 1970s, Korea's GDP per capita was still close to the GDP per capita of a Sub-Saharan African country. In the late 1990s, the nascent confidence of the Koreans in their economic "miracle" was crushed by the Asian financial crisis which was more severe in Korea than the one currently ongoing in Europe and in the US.

In short, in the late 1990s, Korea was facing huge entry costs in a world entertainment market largely dominated by US and other English-speaking performers. As a result, the very few Korean DS firms had to answer three strategic questions:

- on the demand side, did it exist segments of the DS sector which could offer good prospects to Korean performers?
- on the supply side, which were the segments in which Korean performers could have right away comparative advantages (skills) giving them a chance to be successful relatively quickly?
- on the supply side again, which were the technologies allowing Korean firms and performers, almost unknown outside Korea, to emerge quickly as full players first in regional markets, then in world markets?

By providing appropriate and innovative answers to these three questions, the Korean DS firms have generated the current K-pop wave.

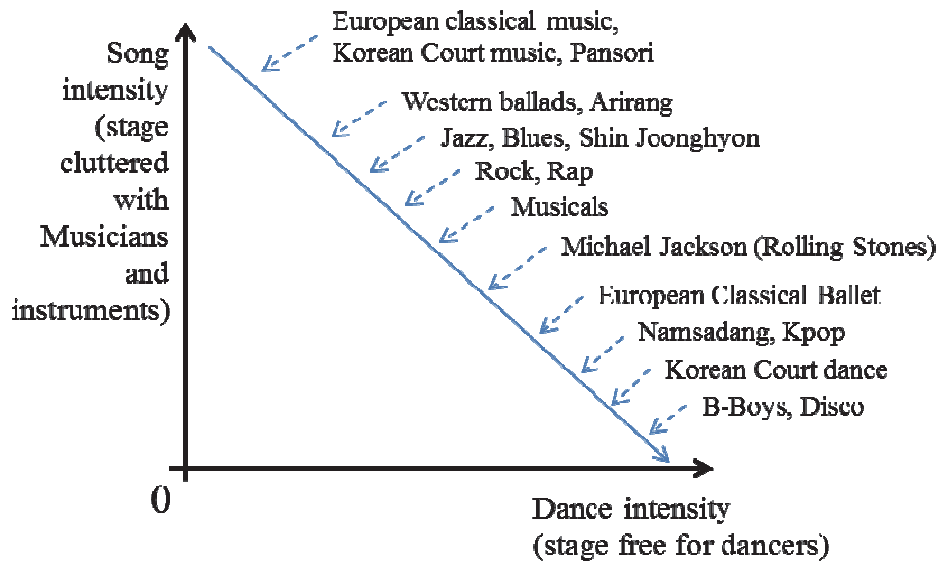
### **1.1. Demand: spotting a niche for K-pop**

Figure 1 orders the major segments of the DS sector by their relative intensities of song and dance. On the one extreme (top left) of the spectrum, European classical music, Korean Court music and popular Korean Pansori rely almost exclusively on song and music. Singers or musicians are generally static on the stage which tends to be cluttered with musical instruments, leaving little room to potential dancers. Today European popular music still follows largely this pattern, with a strong reliance on the national language.

The key innovation introduced by the US-UK pop music in the 1960s was a shift towards a higher 'dance intensity'. This was mostly achieved by a 'swinging' music, but with only limited dancing by some performers. Performances on the stage remained often static, partly because, until recently, singers have had no incentive to cultivate their potential dancing skills since the existing supports for music (LPs and CDs) could not convey any visual element. As a result, dancing was often left to 'backstage' dancers. This situation did

not change much with the emergence of music TV-channels (such as MTV) because these TV networks brought a ‘visuality’ into the pop music (with the video-clips) limited to TV screens. However, there were a few remarkable exceptions—the most remarkable one being Michael Jackson with his exceptional dancing skills. It is no surprise that Michael Jackson is a key reference to most of the K-pop stars of the 2000s.

**Figure 1. The main segments of the music and dance entertainment**



At the other extreme (bottom right) of the spectrum, Figure 1 lists entertainment segments that are more dance-intensive than song-intensive. In these segments, dancers take over the stage, music and song become mere supports (instruments are often not visible), and the performances become much more dynamic and visual.

The current K-pop wave pertains to this last part of the spectrum, with a definitive shift from song-intensive to dance-intensive performances in the mid-2000s under the influence of Rain, and his brilliant dancing skills. Interestingly, Figure 1 shows that K-pop has many ‘cousins’, from the European Classical Ballets (see below) to ‘Disco’ to traditional Korean popular rural dances (‘Namsadang’) to B-boying. Last but not least, the new technologies of the mid- and late 2000s have made possible the permanent viscosity of the K-pop wave via Internet (YouTube and its competitors) on ubiquitous portable screens (smart phones, tablets, etc.).<sup>6</sup>

<sup>6</sup> The Korean DS firms have greatly benefited from the very innovative environment generated by the Korean electronic firms in terms of information technology. But, the K-pop wave has also benefited from the direct role of some members of the Samsung family [Russell 2008].

As a result, Figure 1 leads to two complementary conclusions. First, if Korean performers are present in all the DS segments, they do not enjoy an equally easy access to world audiences. Korean language and the pentatonic scale of Korean music make (much) more problematic the success of Korean singers than the success of Korean dancers.<sup>7</sup> Second, the dance-intensive segment was largely neglected by the recent world pop music, with the total disappearance of the Disco in the mid-1980s and Michael Jackson's *de facto* retirement since the mid-1990s. In sum, a key segment of the DS entertainment was largely untapped in the mid-1990s, and the language was not a barrier in this segment.<sup>8</sup>

This conclusion did not escape long the attention of the main Korean DS firms. In this respect, it is important to stress that, in contrast with the large US, EU or Japanese DS firms, the main Korean DS firms of the 2000s (SM, YG and JYP) have been run by former or existing dancers and/or singers who have a deep insider knowledge of their sector and of the artistic strengths and weaknesses of their Korean fellows.<sup>9</sup> As a result, their firms were well equipped to assess if there were in Korea potential performers with the basic skills needed to enter successfully the dance-intensive segment—in other words, if there were initial ‘comparative advantages’ in Korea for this specific segment.

## 1.2. Supply: discovering K-pop initial comparative advantages

Economic analysis shows that a country has always some comparative advantage, that is, can always produce some goods or services relatively more efficiently than the other countries. This universal lesson (so counter-intuitive for non-economists) has been amply illustrated since the Second World War. Korea is a particularly good example, starting with comparative advantages in relatively unskilled labor-intensive basic goods (textiles) and shifting progressively to increasingly higher-skilled labor-intensive and higher-tech products (from cars to electronics).

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<sup>7</sup> A pentatonic scale is a musical scale based on five notes per octave, in contrast to the heptatonic (seven notes) scale generally used in K-pop music.

<sup>8</sup> As stressed by the economic analysis of international trade, what counts are the relative skills, not the absolute ones. Michael Jackson was both an excellent dancer and singer, but it remains above all as the “moon walker” for most people. In other words, when compared to other performers, his talent as a dancer was even more remarkable than his singing skills.

<sup>9</sup> Lee, Sooman (founder of SM Entertainment) was a singer, Yang, Hyun Suk (founder of YG Entertainment) was a dancer (in a famous Korean group, Seo Taeji and Boys) choreographer and singer, Park, Jin Young (founder of JYP Entertainment) was a dancer and singer.

Indeed, the Korean DS firms have benefited from two vibrant sources of Korean dancers—one traditional and one modern—which have constituted the initial basis of K-pop comparative advantages in the dance-intensive segment.<sup>10</sup>

- the tradition of rural dance in Korea is still very lively: ‘Namsadang’ dances are a must in every Korean street when there is a popular event.<sup>11</sup> Namsadang dances possess the key features that characterize today K-pop bands: they are danced by bands, with each dancer taking the lead at one point of time with his specific performance, they are accompanied by a music with a strong ‘addictive’ tone, and they emit an intense energy.
- the recent but deep attraction of young Koreans for urban B-boying, a dance where Korea has rapidly emerged as one of the leading countries in the 1990s and the 2000s. Many K-pop stars have been B-boys.<sup>12</sup>

**Figure 2. Relative endowments: Korea vs. the West**

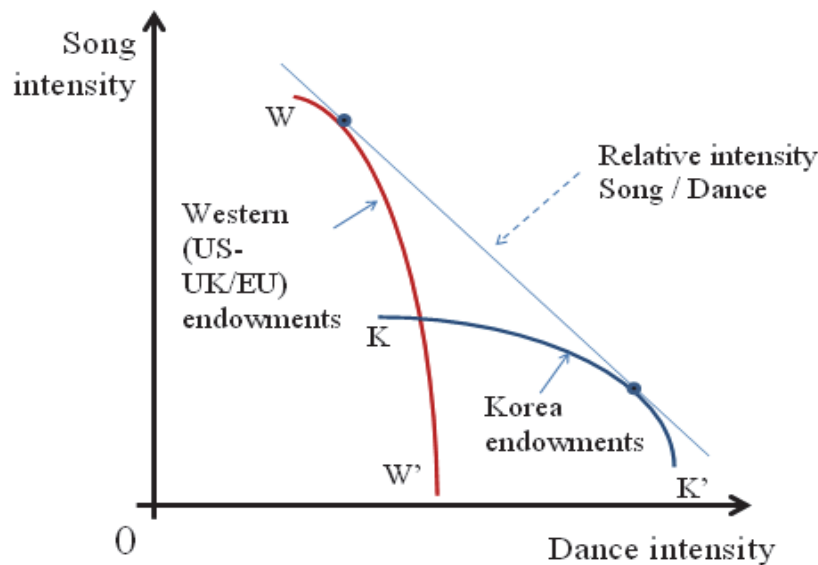


Figure 2 illustrates these vibrant sources of dancing and the initial comparative advantage they gave to Korea. The curve KK' illustrates the Korea's relatively abundant dancing possibilities compared to its more limited (if only because of the language) singing capacities. In contrast, the US or EU curve WW' exhibits relatively larger singing capacities compared

<sup>10</sup> In other words, Korean DS firms have first looked at the existing Korea's endowments (as suggested by the so-called Heckscher-Ohlin approach in the economic analysis of international trade).

<sup>11</sup> Traditionally, Namsadang were danced by groups of male dancers, going from village to village.

<sup>12</sup> For example, Woo-hyuk Jang (H.O.T), Son Dambi, U-Know Yunho (TVXQ) and Jay Park (2PM). The attraction of Koreans for B-boying is easy to understand when one recognizes a few key similarities between B-boying and some aspects of Namsadang dances.

to dancing capacities. The line WK reproduces the range of DS activities described in Figure 1. The points K and W illustrate the best baskets of entertainment activities to be produced by the K-pop and by the US/-EU-pop, respectively.

Discovering initial Korea's comparative advantages was not an easy process for the Korean DS firms. It was a long trial and error process. For instance, BoA's success in Japan (with her song '*Listen to my Heart*' 2002) still relies on a heavy song-intensity carefully delivered in Japanese—making her a quasi-local performer [Lie 2012]. Rain may have been the first Korean performer relying systematically on his dancing skills in the mid-2000s (he often sung in Korean outside Korea). These two examples still rely on individual performers—hence remain close to the Michael Jackson's format. But, the transition to boys- and girls-bands was not a difficult move in a Korean environment so much saturated with the tradition of Namsadang bands.

### **1.3. More on supply: developing Korean comparative advantages**

Once identified, Korea's initial key skills had to be developed. This is where the major Korean DS firms have been particularly innovative. They have dramatically changed the 'technology' of producing DS entertainment by combining a very old technique of producing talents (analyzed in this section) with a very new one for delivering these talents (analyzed in the next section 1.4).<sup>13</sup>

The old technique of producing talents consists in training K-pop bands members in "in-house academies" run by each Korean DS firm. Each firm recruits promising talents at an early age (starting from 9~11 years old) and train them intensively in an in-house process lasting several years—providing them lectures in dancing, singing, foreign languages, hosting them in dormitories and facilities, etc.

This technique is sometimes criticized as 'unethical'. However, it should be stressed that this technique is not new at all: it is the one adopted three centuries ago by the European Classical Ballets and still enforced today by these Ballets. For instance, the School of Dance of the Paris Opera Ballet recruits potential talents around the age of 8 years, trains them with total immersion in the School until they are 13 years old, then continues to train the most

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<sup>13</sup> In short, section 1.3 focuses on technology differences among countries (as suggested by the so-called Ricardian approach in the analysis of international trade) and section 1.4 on the role of 'variety' (as in the so-called 'imperfect competition' approach).



promising talents with again total immersion in the School until 16 years, before finally incorporating only a (very) few of their trainees as full professional dancers of the Paris Opera Ballet.

That Korean DS firms have been using the same training technique than the European Classical Ballets is not fortuitous. For both institutions, in-house training is the only way:

- to ensure that dancers will meet the incredibly high requirements imposed by dancing;
- to give a specific ‘touch’ to the dancers trained (as it is the case for the French or Russian Schools of Ballet) which is a critical element of the ‘branding’ of the K-pop bands (Ballets) among the fans (connoisseurs);
- to specialize the various members of the band according to their skills and to combine them in the best way possible;
- to increase the variety of performances provided by the band, including by creating sub-groups within the band;
- to reduce the consequences of situations where a member of the band is sick or hurt (risk-management).

Combining all these features have led to K-pop bands comprising generally of four to ten members (up to thirteen in the case of Super Junior).

In-house academies is only one illustration of a key feature of the Korean DS firms: they are ‘vertically integrated’—a frequent industrial structure in the Korean economy. Some in-house songwriters and choreographers are also integrated in the firms, with other songwriters and choreographers working under contracts. This is in sharp contrast with the market-based approach prevailing in the US and EU. In these countries, performers are trained in schools unrelated to the DS firms, and then try to find firms eager to promote their titles.

#### **1.4. More on supply: delivering Korean comparative advantages**

Very traditional in their way to nurture talents, the Korean DS firms have been very innovative in delivering their titles. They have been the first ones in the world to “go on-line” (hereafter OL) massively—that is, to use social media such as Internet providers and YouTube for releasing the new titles of their bands and for marketing these titles and the associated concerts. In sharp contrast, US and EU DS firms have shifted reluctantly and slowly to the OL delivery mode. Several reasons explain this rapid and massive OL strategy of the Korean firms:

- the Asian financial crisis has hit the Korean economy at the same time than the CDs market faced its first big plunge (late 1990s), making the decline of the CDs market much more dramatic in Korea than in Japan, the US and the EU, hence requiring much more rapid and drastic measures from the Korean DS firms.<sup>14</sup>
- the Korean DS firms have been much less directly and massively involved in the CDs production than their competitors, hence have had much less incentives to protect CDs production, in contrast with the Japanese and European DS firms (Philips, Sony) which produce both CDs and content.
- CDs have no visual content, hence do not promote well the dancing-intensive niche targeted by the Korean DS firms.

Going OL: becoming more efficient and more focused on content

The intensive OL strategy has made the Korean DS firms more efficient and focused on producing the DS content than their competitors.

**Table 1. Going on-line: becoming more efficient and focused DS providers**

<b>Operators</b>	<b>US dollar</b>	<b>%</b>
<b>Music companies</b>	<b>11,4</b>	<b>51,8</b>
registration fees	0,7	3,0
operating margin	2,0	8,9
production costs	2,4	10,7
overhead costs	2,9	13,1
advertising costs	3,6	16,1
<b>Retailers</b>	<b>4,9</b>	<b>22,0</b>
<b>Performers</b>	<b>4,2</b>	<b>19,0</b>
<b>Others (songwriters, etc.)</b>	<b>1,6</b>	<b>7,1</b>
<b>Total</b>	<b>22,1</b>	<b>100,0</b>
<b>Services component [a]</b>	<b>8,4</b>	<b>38,1</b>

*Note:* [a] sum of the advertising and retailing costs.

*Source:* SVM web site: [forum.zebulon.fr/repartition-du-prix-dun-cd-de-16-20-ht-t37097.html](http://forum.zebulon.fr/repartition-du-prix-dun-cd-de-16-20-ht-t37097.html), (January 2004).

Marketing CDs requires a heavy budget in advertising and retailing services. As illustrated by Table 1, these two activities amounted to almost 40 percent of the total costs of

<sup>14</sup> CDs sales in Korea fell from index 100 (1997, the peak year) to 85 (1998) 69 (2002) and to only 20 (2006).

a typical music company—a huge amount of money diverted from what should be the core objective of any DS firm: producing content (dances, songs and spectacles). By going OL, the Korean DS firms have been able to cut substantially the costs of these two activities and, when possible, to re-allocate these funds to the core business of producing content—in short to become both more efficient and more content-focused.

Going OL: enlarging the scope of consumers’ possible choices

Going OL has also strongly induced the Korean DS firms to increase massively the potential variety of choices available to the consumers first in Korea, and then (indirectly) in the rest of the world.

Table 2 gives a good sense of the magnitude of this evolution. For the price of one CD, Korean consumers can buy roughly 250 (iTunes early 2012) to 150 (Amazon early 2013) titles whereas consumers in other countries can buy only 10 to 15 titles. In other words, Korean consumers have access to roughly 13-20 times more titles than consumers in other industrial countries, a massive expansion of the variety of the choices at their disposal—a key feature for the modern societies which price variety so highly.

**Table 2. Going on-line: boosting the variety of the consumers’ choices**

	iTunes price per song (US\$)	Amazon price per song (US\$)	CD average price (US\$)	Number of downloads per CD	
				iTunes (nbr)	Amazon (nbr)
Korea	0.05	0.09	13.5	254	145
Australia	2.32	1.72	21.2	9	12
Japan	2.57	2.52	23.1	9	9
EU-Britain [a]	1.57	1.28	15.7	10	12
EU-Britain [b]	-	1.02	15.7	-	15
EU-France	1.60	1.93	19.6	12	10
EU-Germany [a]	1.27	1.28	16.5	13	13
EU-Germany [b]	1.66	--	16.5	10	-
USA [a]	1.33	1.28	11.2	8	9
USA [b]	-	0.89	11.2	-	13

Sources: For iTunes prices: Stop Dumping Music Campaign, June 2012. For details on Amazon prices, see Annex 2.

This result is largely due to the very low OL prices of songs in Korea compared to those in the rest of the world (CDs price in Korea are much more similar to those in the rest of the world). It raises a crucial problem: low prices mean low revenues, hence require cuts in costs. If ‘too’ deep, these cuts could endanger the sustainability of the K-pop wave by forcing Korean DS firms to produce ‘remakes’, that is, to repeat themselves and to make variety more apparent than real (a situation faced by TV channels with multiple but rather similar shows).

So far, the Korean DS firms have been able to successfully address this challenge by profoundly reshaping the traditional model of producing DS titles:

- as said above, going OL allows these firms to re-allocate, when possible, the funds saved on advertising and retailing expenses to the core activity of content production;
- going OL helps the Korean DS firms to find additional resources within the DS segment because, by creating a permanent and deep relationship between the K-pop stars and their fans, Internet has fuelled the need of concerts targeting fans (with the associated events). As shown in Annex 1, half of the K-pop concerts are fan-oriented. This is a major overhaul of the pattern generated by LPs and CDs which have rather increased the distance between performers and their audiences.;<sup>15</sup>
- going OL induces Korean DS firms to find additional resources outside the DS segment For instance, as Internet is heavily used by the advertising industry, the Korean DS firms have quickly realized that they could earn substantial additional revenues by allowing their K-pop stars to become models in advertising, particularly in the cosmetic and fashion sectors;
- going OL also induces Korean DS firms to find less costly techniques for producing music. For instance, Korean DS songwriters are at the forefront of using software enabling them to test the music they are composing without the use of expensive studios;<sup>16</sup>
- last but not least, the ‘internationalization’ of the activities of the Korean DS firms helps them to mobilize not only new funds, but also new skills. Members of the bands and/or upstream contributors (songwriters, choreographers, designers) coming from outside Korea bring with them almost inevitably more variety.

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<sup>15</sup> For its April 2012 concert at the Zenith in Paris, Super Junior was able to fill up 6300 seats with minimal advertising launched only a month before. The average official price was a very hefty 100 euros a seat (prices on the spot were much higher) but the fans got a concert lasting 3:30 hours . Fans came from all over Europe.

<sup>16</sup> These efforts echo the long history of techniques lowering costs for creating and memorizing music—the most famous one being the ‘musical hand’ attributed to Guido d’Arezzo (around 1000 BC).

## **SECTION 2. MARKETS AND PRICES: THE IRRESISTIBLE PUSH FOR K-POP EXPORTS**

With their strategy, the Korean DS firms have been able to grab the opportunities offered by the DS markets and prices, a success best illustrated by the huge boom of K-pop exports documented in section 2.1. This remarkable success has been driven by three main forces: the ‘smallness’ of the Korean DS market (section 2.2), the intensity of competition in these markets (section 2.3) and the differences between the DS prices prevailing in Korea compared to those prevailing in other industrial countries (section 2.4). Finally, section 2.5 examines how the Korean DS firms have been able to find innovative ways to handle the intellectual property rights (IPR) issues in the 2000s.

### **2.1. The boom in K-pop exports**

Within the last few years, the Korean ‘all music’ (K-pop plus other Korean music) market has witnessed an unprecedented growth. Table 3 shows that the value added of the whole Korean music sector has increased at an annual average rate of 23 percent over the period 2005-2011, roughly six times the annual average growth of the Korean GDP (whereas the world music markets have plunged by 23 percent between 2005 and 2008 (last available year) according to IFPI). The growth rate of the export of Korean music is even more remarkable: on average 36.4 percent per year for the period 2005-2011, with skyrocketing figures for the most recent years (more than 100 percent for the years 2008-2011).

These exports consist almost entirely of K-pop CDs, and they do not include the massive OL sales in foreign countries nor the revenues from concerts outside Korea. As a result, the ratio of exports to value added indicated by Table 3 (12.3 percent in 2011) is a systematic underestimate of the relative boom of K-pop exports since the numerator reflects only exports of K-pop CDs while the denominator covers all Korean-made music. There is no precise measure of the share of K-pop in the Korean all music market, but this share is estimated by some observers to roughly 80 percent in the early 2010s (KOCCA 2011). As a result, a more accurate estimate of the ratio of K-pop CDs exports to K-pop domestic market would be 15 to 20 percent in the early 2010s.

This estimate covers only ‘direct’ music exports. It does not take into account the K-pop music incorporated in other segments of the entertainment industry. For instance, many Korean-made games use K-pop titles in their musical background (K-pop dance festival wii, Tap sonic, etc.). Table 3 presents the basic data for the Korean electronic games sector. The

fact that the Korean games sector is so large compared to the music sector suggests that the ‘indirect’ exports of K-pop music embedded in Korean electronic games can easily reach a level comparable to the USD 200 millions of the ‘direct’ K-pop exports in 2011—doubling the K-pop exports ratio.<sup>17</sup>

**Table 3. The recent boom in K-pop exports (million US dollars)**

	2005	2006	2007	2008	2009	2010	2011
<b>Music</b>							
Sales	631	1211	2522	2345	2131	2535	3420
Value added (VA)	559	801	848	859	801	988	1442
Exports	22	17	15	15	24	72	177
Imports	8	9	11	10	9	9	11
exports/VA (%)	3.9	2.2	1.8	1.7	3.1	7.3	12.3
imports/VA (%)	1.5	1.1	1.2	1.2	1.2	0.9	0.8
<b>Games</b>							
Sales	8474	7796	5536	5083	5156	6427	7946
Value added (VA)	4278	3825	2677	2547	2624	3259	3777
Exports	551	486	421	641	712	1179	1961
Imports	227	217	419	351	260	210	185
Exports/VA (%)	12.9	12.7	15.7	25.2	27.1	36.2	51.9
Imports/VA (%)	5.3	5.7	15.7	13.8	9.9	6.4	4.9

*Source:* Authors based on data from KOCCA (2012), Content Industry Statistics.

## 2.2. The ‘smallness’ of the Korean DS market

The most frequent explanation given to the boom of K-pop exports is the small size of the Korean music market, a direct transposition of a similar argument made for the industrial sector. However, such an automatic transposition should not be taken as granted because, contrary to manufacturing, scale economies are not important in many aspects of the DS production: they are likely to be modest when selling OL or when making concerts. Such economies are substantial only for the CDs segment which is of marginal importance for

<sup>17</sup> This would be the case if K-pop represents only 10 percent of the value added of Korean-made games. To our knowledge, there is no estimate of the percentage of value added of K-pop music which is incorporated in Korean-made games.

many Korean DS firms. Finally, the Korean music market was even smaller from the 1960s to the 1990s, when there was no export success. In short, something else than the mere size of the Korean market should have been at work.

**Table 4. The ‘smallness’ of the Korean DS markets**

	2006			2008			2010		
	all music	digital music	GDP	all music	digital music	GDP	all music	digital music	GDP
Korea	126	70	952	145	70	931	179	98	1,007
Relative market sizes, with Korea=1									
USA	52.7	15.6	14.1	35.4	28.4	15.4	22.8	20.7	14.6
Japan	37.4	7.4	4.6	32.8	13.8	5.2	21.6	10.0	5.4
Britain	13.5	1.5	2.6	9.7	2.8	2.9	7.1	3.5	2.2
Germany	11.9	1.1	3.1	9.9	1.7	3.9	7.4	1.8	3.3
France	9.5	1.1	2.4	5.9	1.8	3.1	4.4	1.5	2.6
Italy	3.2	0.4	2.0	1.8	0.4	2.5	1.2	0.4	2.0
China	0.7	0.5	2.9	0.6	0.8	4.9	0.4	0.5	5.8
Australia	3.9	0.4	0.8	2.9	0.8	1.1	2.1	1.1	1.2
India	0.9	0.1	1.0	0.8	0.4	1.4	0.7	0.6	1.5
Brazil	2.2	0.1	1.1	1.5	0.4	1.8	1.2	0.4	2.1
Korea	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

*Note:* Size of the music markets (Digital and Physical sales) in millions of US dollars and billions of US dollars (GDP).

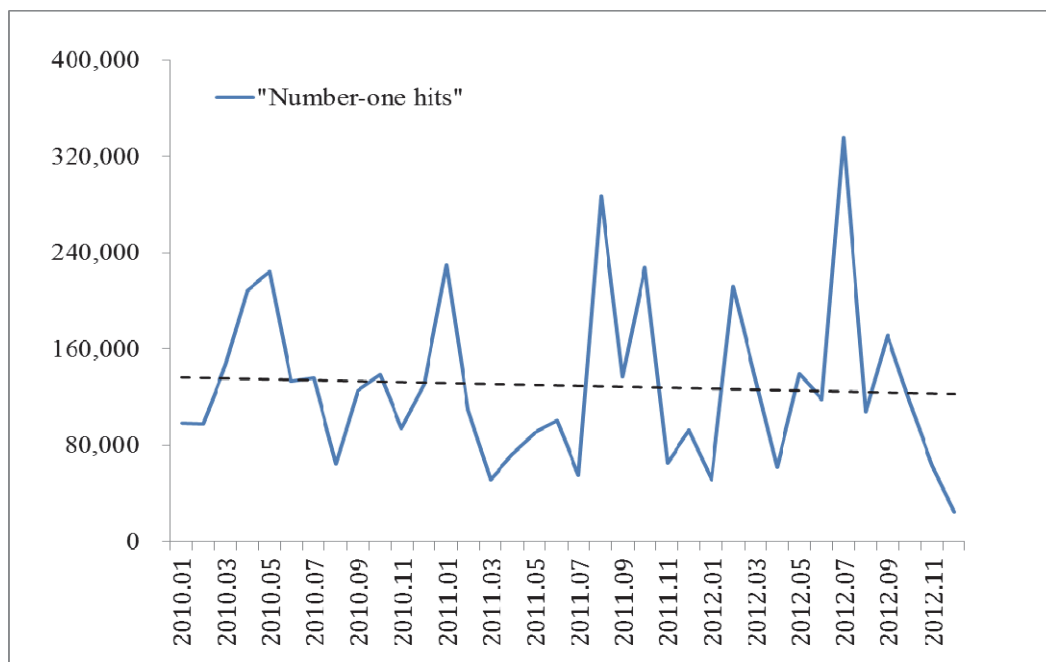
*Source:* Authors based on data from KOCCA (2011), IFPI (2011) and IMF (2011).

Indeed, Table 4 does not show the ‘smallness’ factor as such an overwhelming force. The US, Japan and Britain emerge as the main countries with significantly bigger music markets than Korea—indeed bigger than what the relative GDP weights would have predicted (for instance, 20-22 times in 2010 in the US music markets compared to 15 times for the US GDP). But, the differences are shrinking fast since the mid-2006, precisely when K-pop exports prosper. And, the other countries have music markets with a similar size than those of Korea, or even with a smaller relative size than what the relative GDP weights would have predicted.

Another interpretation of the ‘smallness’ factor is the volatility inherent to the Korean DS markets. Figure 3 which shows the monthly CD sales of the #1 hits in Korea between January 2010 and December 2012 suggests several observations:

- sales are highly volatile since they range from a low 25,000 CDs (December 2012) to 330,000 CDs (September 2012, that is, 6 percent of all the sales of the period covered);
- there is no clear pattern over time: peaks and valleys occur almost randomly over the years;
- there is even a possible slight decreasing trend of #1 hits sales during these three years (say after Fall 2011).

**Figure 3. A risky business: #1 hits CD monthly sales, 2010-2012**



*Source:* Authors based on data from Gaon Chart provided by KMCA (Korea Music Content Industry Association).

In short, blockbusters are rare, very different in magnitude, hard to predict and possibly less frequent in the most recent period. Indeed, all these features are incentives for Korean DS firms to look for foreign markets as a key element of their risk-management policy.

### **2.3. The level of competition in the Korean CD markets**

A second driving force behind the K-pop export boom is the level of concentration—hence competition—in the Korean DS markets. Highly competitive Korean domestic markets should induce Korean DS firms to look for ‘easier’ markets in the rest of the world.



A separate analysis of the level of concentration in the CDs and OL markets is necessary because the Korean DS firms' determined strategy to charge very low download prices has divided the Korean music markets into these two segments much more sharply than in any other industrial country:

- the OL segment is the one where Korean consumers can test every possible new DS title since it is so cheap to listen to and to watch new releases.
- by contrast, the CDs market is the one where Korean consumers satisfy their deep preferences—it is the market for the 'fans'.<sup>18</sup> CDs of the K-pop bands are conceived by the Korean DS firms more as 'collectors' than as mere CDs. They target a 'fan' base that needs to be satisfied on an almost permanent basis because of the very close links between the K-pop stars and their fans (the status among fans is partly determined by the number of CDs owned). While CDs are the 'product-based' link between a band and its fans, concerts reserved for the fans are the 'service-based' link. Indeed, new CDs are often released in conjunction with concerts for the fans. This core function of the CDs explains the amazing profusion of different types of CDs (full albums, mini-CDs, pre-released and re-masterized versions, etc.) in the Korean DS sector.

As a result, the following analysis of the level of concentration in the Korean DS markets considers five different markets:

- the #1hits CDs market and the Top10 hits CDs market; the #1hits CDs market is taken into account because it is such a key element of the success record of a DS firm;
- the Top10 downloads (Gaon Chart) and the Top10 streaming (Gaon Chart) hits for the non-visual OL (NVOL) markets;
- the Top10 hits in the visual OL (YouTube) segment; this segment is the one which focuses most on the visual element of the K-pop wave.

It should be stressed that prices vary a lot among these five markets: they are substantial for the CDs market, low for the NVOL markets, and nil for the YouTube segment.

Table 5 summarizes the main results (for details see Annex 2). It is divided in two blocks. Block A looks at the concentration in terms of titles and K-pop bands. Hence, it reflects the level of competition viewed from the perspective of the Korean final consumers. Block B examines the concentration in terms of Korean DS firms: it is thus better suited to capture the

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<sup>18</sup> It is important to realize the power that the 'fans' can have in certain circumstances. In the legal dispute that opposed SM and JYJ (three performers from the TVXQ band who argued that their contract was too long and unfair) the threat of a petition filed by 120,000 members of the TVXQ fan club supporting JYJ was a key factor.

market power of these firms with respect to the upstream contributors to the Korean DS production (songwriters, choreographers, etc.).

**Table 5. Market concentration from the perspectives of consumers and producers**

	(1)	(2)	(3)	(4)	(5)
	CD #1	CD Top10	Downloads Top10	Streaming Top10	YouTube Top10
	2010.1-2012.12 (Monthly)	2010.1-2013.3 (Monthly)	2010.1-2012.12 (Annually)	2010.1-2012.12 (Annually)	2010.1-2012.12 (Annually)
<b>A. Concentration from the K-bands (final consumers) perspective</b>					
Number of bands	16	88	23	24	12
Number of titles	31	270	30	30	20
Herfindahl index	0.1361	0.0715	0.0553	0.0480	0.4055
<u>Four most successful bands</u>					
band 1	Super Junior	Super Junior	T-ara	Sistar	Psy
band 2	Girls Generation	Girls Generation	Sistar	IU	Big Bang
band 3	Big Bang	Big Bang	Big Bang	Busker Busker	2NE1
band 4	TVXQ	TVXQ	Miss A	T-ara	Girls Generation
C4 coefficient	64.6	42.1	34.8	28.7	82.6
<b>B. Concentration from the K-firms (upstream contributors) perspective</b>					
Number of firms	9	47	16	16	6
Number of titles	31	270	30	30	20
Herfindahl index [a]	0.4371	0.1439	0.0850	0.0938	0.6328
Herfindahl index [b]	0.3111	0.0639	0.0822	0.0911	0.3200
<u>Four most successful firms</u>					
firm 1	SM	SM	YG	YG	YG
firm 2	YG	YG	JYP	JYP	SM
firm 3	C-JES	C-JES	Core Content	CJ E&M	Cube Ent.
firm 4	Rain Ent.	FNC Music	Starship Ent.	Starship Ent.	DSP
C4 coefficient	88.5	58.1	47.9	49.6	97.0

*Source:* Authors based on data from Gaon Chart provided by KMCA (Korea Music Content Industry Association) and YouTube.

Focusing first on the final consumers side (block A) the K-pop bands/titles provide three observations:

- a first measure of concentration (the Herfindahl index which is the sum of the squares of the market shares of the bands/titles) is low in the CD and NVOL markets, hence mirrors a highly competitive market for Korean consumers. This index is high for the

YouTube segment, reflecting the exceptional case of Psy's '*Gangnam Style*'. The less exceptional success of '*Gentleman*' strongly suggests that '*Gangnam Style*' is an outlier: eliminating this title would decrease the Herfindahl index to a low 0.1371, in line with the other markets.

- a complementary measure of the concentration (the C4 coefficient which is the sum of the market shares of the four largest bands) shows a notable concentration in the CDs market. It is smaller for the NVOL markets, as it could be expected since the OL markets offer many more opportunities of varieties than the CDs markets. The C4 coefficient is again very high in the YouTube segment (the '*Gangnam Style*' effect); but, eliminating '*Gangnam Style*' would decrease the C4 to a still high 63.2.
- an unexpected and very interesting result is that only one K-pop band (Big Bang) pertains to the C4 set in all the markets. Indeed, there is a sharp difference among the C4 K-pop bands emerging in the CDs, NVOL and YouTube markets, suggesting that the mere existence of these various channels contributes to the variety of K-pop titles.<sup>19</sup>

Shifting the focus to the Korean DS firms and their upstream contributors (block B of Table 5) suggests also three observations:

- the Herfindahl indexes in the CDs and YouTube markets are substantially higher than those prevailing in the final consumers perspective. For the #1 hits, it is even (much) above the threshold (0.2500) which is analyzed as a situation of market power by the US competition authorities. In sharp contrast, the Herfindahl index remains low in the NVOL markets, again reflecting the much higher variety of choices allowed by the OL technologies.
- the C4 coefficients are also systematically and significantly higher than their level in the final consumers markets, mirroring the fact that the major Korean DS firms manage several K-pop bands.
- The same unexpected and very interesting result is that only YG pertains to the C4 club in the five markets, with SM and JYP not in the top C4 in two of these markets (respectively, OL and CDs).<sup>20</sup>

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<sup>19</sup> Surprisingly, Psy is not ranked among the Top10 CDs sales, and he does not pertain to the C4 bands in the CD and NVOL markets (he is only 6<sup>th</sup> and 7<sup>th</sup> in the download and streaming markets, respectively).

<sup>20</sup> One may wonder whether this result does not reflect to some extent the origins of the founders of these three firms (the former singer being more in tune with the CD markets, the former dancer with the OL markets

To sum up, the level of competition in the Korean DS markets—very competitive markets with respect to the final consumers with some elements of dominance in the upstream markets—does generate incentives for Korean DS firms to look for ‘easier’ foreign markets in the rest of the world where to prosper.

#### 2.4. Prices and revenues in Korea and in the rest of the world: the big rift

The last force (from a supply side perspective) behind the K-pop export boom flows from the fact that Korean prices of K-pop are much lower than the corresponding ones in the rest of the world—hence driving all K-pop actors (firms and stars) to go abroad [Cho 2012].

**Table 6. Differences between Korean prices and prices in the rest of the world**

Country	Downloading					Streaming		Level of	
	Unit price of song		performer's revenue			Rate (monthly)		IPR	
	Won	Korea A=1	fee (%)	Won	Korea A=1	Won	Korea A=1	2000	2010
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<u>Korea</u>									
case A	105	1	40	42	1	3,000	1	3.9	4.1
case B	600	6	40	240	6	5,000	--	3.9	4.1
case C	1,102~1,436	11~14	40	450~587	11~14	--	--	3.9	4.1
Australia	1,843	18	55	1066	25	--		5.9	5.6
Canada	1,552	15	55	857	20	11,490	3.8	6.3	5.6
EU-Britain	1,339~1,678	11~14	55	633~793	15~19	17,600	5.9	6.3	5.5
EU-France	2,138	21	55	1194	28	13,905	4.6	6.1	5.9
EU-Germany	1,421	14	55	793	19	10,823	3.6	6.1	5.7
Japan	2,718	27	55	1564	37	10,928	3.6	5.4	5.2
U.S	998~1,447	10~14	55	549~796	13~19	11,490	3.8	6.3	5.1

*Notes:* Korea case A: price per song for downloading a package of 100 to 150 songs per month. Korea case B: price per song in the “hold-back system” implemented since March, 2013 (“hold-back system” allows IPR holders to guarantee of a certain level income from the newly released songs by requiring music service providers to hold back the sales of the songs at the discounted rate: the service providers should sell the songs at the set price (600 won) for a period of time. Korea case C: price per song on mp3 charged by Amazon. For these comparisons, and exchange rate of 1\$  $\cong$  1,100 Korean Won has been used (for details see Annex 3).

*Source:* Authors based on data from iTunes, Amazon, and Korean internet retail stores (Melon, Soribada, etc.) (columns 1 to 7) and on the IPR index of the World Economic Forum (columns 8 and 9).<sup>21</sup>

Table 6 gives a sense of the big rift between Korean and foreign OL prices:

- Column 1 gives the Korean and foreign prices of downloading music as of April 2013. Column 2 presents the same information by indexing all the prices on the Korean price (case A): foreign prices range from 10 times (US low range) to 27 times (Japan) the comparable Korean case A price.
- Column 3 gives the share of the price received by the performers, column 4 calculates their corresponding revenue. Column 5 shows that the revenue for Korean performers range from 13 times (US low range) to 37 times (Japan) the revenue earned in Korea for the same title.
- Columns 6 and 7 provide similar information on the prices for streaming. The price differentials are much smaller, but they are still substantial, with foreign prices 4 to 6 times higher than those in Korea, and with roughly the same ranking in terms of the ‘most’ profitable countries.

These results deserve a *caveat*. Table 6 does not take into account the fact that costs in foreign countries could be higher than those in Korea (hence justifying higher prices). However, the observed price differences are so large that it seems unlikely that they could be reversed by costs differences in the OL business.

Table 6 suggests a desirable strategy to K-pop stars: they should target first Japan—by far the most profitable market—then France and the other EU markets, and then the US, with the *caveat* that the US market can generate larger reputation effects than any other country. Interestingly, this conclusion fits well the observed behavior of the K-pop stars.

## **2.5. The K-pop sector and the intellectual property rights issue**

During the 2000s, Korea has begun to implement a regime of intellectual property rights (IPRs) increasingly similar to the ones enforced in other OECD Members.<sup>22</sup> Paradoxically,

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<sup>21</sup> The World Economic Forum IPR index is constructed based on a survey of CEOs to capture experiential or perception on the IPR regimes that influence the business and investment in the market.

<sup>22</sup> This evolution is still not complete, as best illustrated by a recent ruling of the Seoul Central District Court [Korea Time April 2013] according to which digital music files transmitted by online music service providers in the context of a department store cannot be seen as ‘albums for sale’, hence are not eligible for royalties to be paid to copyright owners. The lawsuit was filed by the Federation of Korean Music Performers (FKMP) and the Korean Association of Phonogram Producers (KAPP) against Hyundai Department Store demanding payment

during the same decade, this regime has been under increasing criticisms in the OECD countries. At the core of the debate is the economic impact of IPR which is very sensitive to the quality of the IPR regulations and of their implementation. Too lax IPR or too loosely enforced IPR may reduce the desirable production of goods or services. But too strong IPR or too tightly enforced IPR fuel anti-competitive behavior [Furukawa 2010].

These criticisms are particularly strong in the DS sector because IPR are particularly developed in this sector where IPR protect not only songwriters, but also performers and DS firms involved in the production and distribution of the titles.<sup>23</sup> Such a tight IPR regime in the DS sector has raised questions from OECD consumers and policy-makers [Aguilar and Martens 2013] such as: why do IPR last so long? Why do they last after the death of the songwriters, and protect his/her heirs? Why do they include DS firms as right-holders, particularly when the price of producing music is declining thanks to electronic techniques? As a result, the OECD countries have witnessed resistance to IPR in the 2000s (the fights on P2P in music a few years ago, on the ‘torrent’ technique in film today, etc.).<sup>24</sup>

Interestingly, such a tight IPR regime generates uneasiness even among songwriters and among those who value artistic works. Songwriters generally compose above all because they want to ‘create’ (maximizing their profits are not their main concern). In a interview, Rain [KBS World 2010] echoes this crucial point: *‘I know the problems generated by illegal downloading, but I cannot use the logic of the market for my musical creation; that is unacceptable to me; I don’t want to be safe and this is why I spend so much time and money on my albums’* (based on the English sub-titled translation). Meanwhile, those who value art wonder whether the tight IPR regime currently enforced in the OECD countries would have allowed them to enjoy reading the second part of ‘Don Quixote’.<sup>25</sup>

In this context, it is very interesting to note that, in the 2000s, the various actors of the Korean DS sector—stars and firms—have generated innovative alternatives to the OECD model of IPR legal regime.

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of 240 million won for using digital music files. Such a conclusion would not be possible in some OECD countries where such fees are automatically levied in similar circumstances.

<sup>23</sup> This section focuses on all the operators (firms, content providers, collecting societies, etc.) which are marketing copyrighted works. It does not discuss the fact that copyrights also protect the integrity of the work and the expression.

<sup>24</sup> This is best illustrated by « Pirat Parties” favoring liberal reforms of copyright laws in Europe which have had their most important successes in Germany and Sweden. The Pirat Party has 45 seats in various Parliaments of German States, and 2 seats at the European Parliament (both from Sweden).

<sup>25</sup> In 1605, Cervantes published the Book I of ‘Don Quixote’. But he was very slow to write his Book II. He might have never written it without the publication of a book written by Alonso Fernandez de Avellaneda and presented as the sequel of Cervantes’ Book I. In short, the absence of IPR forced Cervantes to go back to work (he published his Book II in 1615)—delivering a priceless treasury to the Spanish and world literature.

On their side, K-pop stars have always been willing and able to ‘internalize’ IPR issues, making an OECD-type IPR regime of little use for them, if any. A first option is best illustrated by Rain who has composed his own songs, made his own choreographies, and owned his own firm.<sup>26</sup> The wide ranging education that K-pop stars receive during their in-house training period helps them to achieve such a goal. An alternative option is best illustrated by BoA who owns shares of the DS firm (SM) which manages her.

On their side, Korean DS firms have faced two different IPR problems.

Their first problem is related to the K-pop performers: a Korean DS firm needs to minimize the risks that performers quit the firm when they become well-known. The band structure helps to manage such risks: by ensuring that any member of the band needs the other members, it increases the costs of leaving the band; at the same time, it can be flexible enough to give some degree of freedom to (a) performer(s) by creating autonomous units within the band. Available evidence suggests that only 5 percent of the performers of the three major Korean DS firms have changed firms since 2000.<sup>27</sup>

The Korean DS firms’ second problem is the risk of piracy on the consumption side. The best way to fight piracy is to adopt a ‘limit pricing’ strategy, that is, to set the price of DS titles not at the monopoly level, but at a level low enough to discourage piracy. In the Korea of the late 1990s with little IPR enforcement, ‘limit pricing’ meant sale prices for downloads close to zero.<sup>28</sup> Since then, prices have increased but, as shown by Table 6, they remain still very low—raising the question of why increasing prices only ‘now’ and ‘modestly’.

- the answer to the ‘now’ part can be found in Table 3. The boom of K-pop exports is recent: it started only in 2008, it was preceded by sluggish years and bad experiences, and K-pop remains a very risky business (see Figure 3)—all factors that can explain the still careful confidence of the Korean DS firms in the K-pop ‘miracle’.
- answering the ‘modestly’ part is more complex.<sup>29</sup> The Korean DS firms may hesitate to increase prices because Korean consumers are highly skilled in software and equipped with the most advanced technology—hence have the ingredients to evade notable price increases. However, the key answer seems to involve Korean internet-

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<sup>26</sup> It is not rare that Western pop singers compose their own songs. But, they rarely do their own choreography and create their own firm—a feature shared by Jay-Z and Rain who are currently negotiating a contract.

<sup>27</sup> Estimate based on the 221 names of current and past performers listed in Wikipedia’s entries for SM, YG and JYP. But, 63 former trainees of one of these firms are managed by another (almost always Korean) DS firm.

<sup>28</sup> This situation has much to do with the role of music in Joseon Korea. After the Restoration Coup of King Injo (1623) entertainers were banned from the Royal Court (contrary to what was happening in Europe) and entertainment became mostly a popular activity—with a focus on dance in Eastern Korea and on music in Western Korea, and with lively contests among bands organized by cities (little to envy to today TV shows...).

<sup>29</sup> There is a planned annual increase from 105 won in 2013 to 150 won in 2015.

providers (Melon, Soribada, etc.) and their telecom parent companies. These firms may want to limit the risk of foreign competitors entering the Korean OL market, hence are reluctant to let their OL prices coming close to Amazon's price (see Korea case C in Table 6). Despite some efforts in 2010-2011, the major Korean DS firms have so far not been able to offer a workable alternative to this situation.

Are the K-pop solutions to the IPR issues 'better' than the OECD typical approach—that is, do they offer more or better incentives to create? Answering this question goes much beyond this paper. But, columns 8 and 9 of Table 6 do not suggest any positive correlation between the IPR indexes and the dynamism of the DS segment. Rather, the countries with the highest IPR indexes (France, Germany) have completely failed to export their DS production to the world. Meanwhile, the low IPR index for Korea has not prevented the K-pop to start from nothing and to generate the current world tidal wave—offering the latest illustration of the 'Cervantes syndrome'.

### **SECTION 3. THE 'SUSTAINABILITY' OF THE K-POP WAVE**

Is this so unexpected K-pop wave 'sustainable'? Will it be a hype limited to a narrow niche of the vast entertainment world, as it is so often the case in this industry? Or will it nurture more Korean waves in other entertainment sectors? Finally, would some public policies help for ensuring K-pop sustainability?

From the outset, it should be stressed that nothing in entertainment and art is sustainable: neo-classicism, baroque, impressionism, etc. have all peaked and then left the room to other artistic movements. 'Change' is the rule. As a result, the sustainability question should be rephrased as the question on 'how to change'.

#### **3.1. Change by 'deepening'**

A first way to change is to 'deepen' what is currently done in terms of production processes and contents. This is already happening in terms of processes with the 'internationalization' of K-pop: bands integrate performers from other Asian countries or create 'twin' K-pop bands with the same name but two languages (Exo-K and Exo-M); firms have an increasing recourse to songwriters and choreographers from all over the world; there is an increasing number of events outside Korea, etc.



This internationalization process should not present major challenges to the Korean DS firms. These firms rely on firm-specific skills (in-house academies, songwriters, etc.) embedded in a vertically integrated structure surrounded by sub-contractors and immersed in competitive markets. Such features make difficult for competitors to mimic quickly the Korean DS firms (it took two to three decades for the non-Japanese car producers to absorb the lessons of the Japanese car producers). That said, it remains to be seen whether this internationalization process will keep the ‘Koreanness’ (see the conclusion) feature of the current K-pop wave. Some Korean DS firms may opt for carefully keeping the ‘K’ of K-pop while others may put aside this feature in an effort to become simply ‘pop’ firms.

On the contents side, ‘deepening’ is ongoing for the visual part of the K-pop, with frequent innovations in the ways bands dance and music videos are created. Another obvious ‘deepening’ option would be to write lyrics on topics other than love stories among young people. This option is still largely uncharted by the current K-pop wave, but it looks both attractive and pressing because the first generation of K-pop stars and of their fans is now well in their early thirties—facing a range of new challenges and emotions in their life.

### **3.2. Change by ‘diversifying’**

Another way to change is to turn to other activities. Figure 1 shows a long list of alternatives: musical comedies, ballads, music of all kinds (electro, R&B...), etc. There are already plenty of examples of such diversifications in the wake of the K-pop wave. Some of them are given by K-pop performers who, for instance, interpret pieces of classical European music with their K-pop spirited guitar or with a mix of Korean traditional instruments and B-boying. Others examples involve Korean performers who do not pertain to the K-pop wave, such as U-Angel-Voice, a male group singing traditional Korean and European songs. Once again, all these options are not equally easy for Korean performers: some options (singing) are crowded and prone to substantial ‘natural’ barriers (language).

But, there are many other diversification options than those listed in Figure 1. In fact, all the activities intensive in images—in which dancers have a huge advantage—are candidates: movies, TV dramas and shows, advertising, fashion, etc. There are already plenty of examples of such diversifications—from individual cases (movie actors such as Kim Hyon Joong, Kim Joon, Rain, etc.) to Korean DS firms (SM and its subsidiaries devoted to satisfy every possible desire of the fans of its bands, YG and its links with the fashion world, etc.).

The success of the diversification process relies heavily on the capacity of the current K-pop wave to create a larger and wider stock of capital of artistic talents by developing and widening the skills of the current K-pop stars. History suggests that this process of capital accumulation is usually slow and limited.<sup>30</sup> It remains to be seen whether the in-house academies and vertical integration which characterize the K-pop wave will produce better results. Anecdotic evidence (based on the number of Facebook hits) shows that six out of the ten most popular Korean actors in early 2013 are coming from K-pop bands, a sign that the diversification and capital accumulation process is actively ongoing.<sup>31</sup>

### **3.3. A role for public policies?**

As deepening and diversifying are not easy processes, is there a role for public policies? Available evidence cautions strongly against a recourse to public policies.

First, the previous sections have stressed the absolutely decisive role of the Korean DS firms in the K-pop wave. Similar market and price conditions would not have delivered the same tidal wave in the absence of the Korean firms' strategy—their choice of a neglected niche, their building of skills, their reliance on vertical integration, etc. And, this K-pop wave which has a much wider reach than Korean TV dramas has benefited from insignificant public support.

Second, the high level of patronage in Europe from the 10<sup>th</sup> to the 19<sup>th</sup> centuries needs to be correctly interpreted. Popes, kings and princes have spent lavish fortunes on painters, musicians, architects, etc. during all these centuries. But all these rulers were not modern states. Each of them was an individual who risked his/her personal fortune, reputation and pride as a better 'art connoisseur' than his/her pairs. Modern states do not share this essential feature of patronage, hence have a high propensity to be captured by vested interests ultimately detrimental to the 'culture' they claim to defend [Cocq and Messerlin 2004].

Last, a quick look of what happened to J-pop (Japanese pop music, much fashionable in the 1990s in East Asia) and to 'F-pop' suggests that excessive regulations (intellectual property rights in Japan or France, music broadcasting in France) and public subsidies (movies in France) have slowly but surely smothered the creativity and the desire of the

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<sup>30</sup> For instance, there are very few diversification successes in the French pop music, the most notable being Yves Montand who was first a backdancer, then a singer (with little dance again since the technology of the 1970s and 1980s could not reward this skill) and finally an internationally known actor.

<sup>31</sup> However, these six actors represent only 47 percent of the total hits for the ten most popular actors. Based on <http://koreanartistsnews.blogspot.fr/2011/09/10-most-popular-korean-stars-2011.html>, February 2013.

Japanese and French performers to go abroad and to deliver a message of ‘Japanness’ and ‘Frenchness’ to the rest of the world. For instance, the French traditional pop music has reached its peak in the 1950s-1970s, but since then has almost completely disappeared from the world stage despite increasing public support. Meanwhile, the ‘French Touch’ (groups or individuals such as Daft Punk or David Guetta) is flourishing with an internet-based strategy very similar to K-pop and with no public support (the French Touch is using electronic instruments as a source of comparative advantages).

That said, there may be one exception to this non-interference of public policies in entertainment. As evoked above, Korea’s peculiar price structure may reflect the use of ‘limit pricing’ by the internet providers and their telecom owners with the intention to eliminate potential competitors. A thorough analysis of this situation—of its costs and benefits—would be welcome, and the best institution to do so in an economically sound manner is the competition authority.

#### **CONCLUSION. BEYOND ECONOMICS: ON THE ‘KOREANNESS’ OF THE K-POP WAVE**

While the world is looking with amazement to this totally unexpected K-pop wave, Koreans wonder whether K-pop is sending some profound messages from and about Korea to the rest of the world. This conclusion examines briefly this issue.

#### ‘Koreanness’

What follows uses the notion of ‘Koreanness’ rather than Korean culture for several reasons:<sup>32</sup>

- today, the term ‘culture’ is often opposed to business and entertainment. This opposition is very recent (it was unknown until the late 19<sup>th</sup> century) and it does not fit well the European art reality of the past centuries.<sup>33</sup> In fact, today Korean DS firms have many similarities with the European painters’ studios of the 14<sup>th</sup>-19<sup>th</sup> centuries:

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<sup>32</sup> Similarly, one would prefer to use the term ‘Frenchness’ to French culture, for instance.

<sup>33</sup> For instance, most European painters of the 15<sup>th</sup>-19<sup>th</sup> centuries have run large, highly profitable studios, with many “assistants” specialized in landscape, flowers, animals, etc. Raphael or Rubens had several dozen assistants each, with some of them becoming later as famous as their former ‘masters’ (Romano in the case of Raphael or van Dyck in the case of Rubens). Moreover, many of these famous artists were heavily involved in official positions, such as special envoys to other princely Courts.

in-house training, vertical integration, loose (by today much criticized OECD standards) intellectual property rights, and the use of the artists (painters in the past, K-pop stars today) in quasi-official (ambassadorial) positions.

- the term ‘culture’ is limited to the ‘physical assets’ that a country has inherited from its past: books, music, paintings, architecture, etc. It ignores the country’s ‘human assets’, namely the individual attitudes that today citizens of the country in question follow in public and that are so critical for delivering the messages from a country.
- art history shows that it is not rare that foreigners capture and/or shape better the essence of a country than its own nationals. For instance, Chopin (a Pole) or Haendel (a German) are essential in French and British music, respectively.<sup>34</sup>

For all these reasons, the notion of Korean culture seems too narrow. It almost inevitably focuses on the Confucian heritage from the Korean upper class under the Joseon Dynasty, and leads inevitably to the conclusion that K-pop channels no ‘Korean’ message to the rest of the world: *‘The Korean Wave in general and K-pop in particular is naked commercialism [..]. It would be too much [..] to regard this as having anything to do with traditional Confucian, Korean culture.’* [Lie 2012 page 362].

### The two Korean heritages of the K-pop wave

In sharp contrast, the Koreanness approach opens a wider perspective which suggests that indeed, the K-pop wave is the recipient of two Korean heritages—not one.<sup>35</sup>

First, there is the heritage from the rural popular Namsadang dances which has little to do with the Confucian heritage: there could not be stronger contrast than the one between the Joseon very slow moving Court dances and the agitated K-pop dancers. But, this first heritage channels two profoundly Korean feelings which are extremely attractive to modern European audiences:

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<sup>34</sup> For their title ‘*Catch Me*’, TVXQ has visual effects very similar to the traditional Korean ‘Fan Dance’. If this parenthood is correct, then it would be interesting to know whether the choreographer is Korean, or not.

<sup>35</sup> A ‘double’ heritage is not unusual in the world art history. A parallel can be made with the Dutch painting school of the 16-17<sup>th</sup> centuries which has been so influential in Europe. A large segment of this school focuses on the daily life of ordinary Dutch people with a fascination for its rude aspects (cats and dogs competing with dirty kids for food, explicit love scenes, drunk people, etc.) which have little to do with the other main ‘branch’ of Dutch paintings focusing on aristocratic values, gods and goddesses, etc. But, both branches are essential to get a great sense of ‘Dutchness’, as well as a sense of universality.

- it expresses sorrow and frustration (*'han'*), a frequent feeling among today distressed (especially young) Europeans. This sorrow is deeply embedded in the Korean people because of Korea's long and turbulent history.<sup>36</sup>
- it is 'fighting' this sorrow by developing an intense energy.<sup>37</sup> This energy is familiar to the Europeans to the extent that it has some affinity with African-based Western music, including with its capacity to lead to situations close to 'trance' [Lee Oi-soo 2013]. But, this energy is also totally new to the Europeans because it tries hard to bring back joy and cheer—whereas most of today Western performers deliver an oppressing sense of inertia, darkness and doom.

The second heritage of the K-pop bands is plain Confucian. It is not shown on the stage but it is revealed by the public behavior of the K-pop stars during their interviews and other events with their fans. Almost systematically in such public appearances, the K-pop performers deliver a sense of modesty and restraint, insist on working hard and learning more (in-house academies have a definitively Confucian touch), and show the K-pop bands run as families with a sense of hierarchy (the senior, the junior, the pairing of members, the one who does the dishes, etc.). All these attitudes are in sharp contrast with those of the vast majority of European (and US) pop stars who insist on their right to have no restraint, don't talk much on the need and benefits of hard work, and emphasize their individuality.<sup>38</sup>

The public attitudes of the K-pop stars are so different from those of the Western performers that they raise among their non-Korean fans the desire to know more about what pushes the K-pop stars to act like this—hence about what 'Korea really is' and what 'Korea has to tell them'.

Two pieces of evidence reveal this curiosity. First, the K-pop wave has clearly triggered in Europe the recent boom in learning Korean.<sup>39</sup> Second, when interviewed on the reasons for being attracted by K-pop, Europeans (teens or their parents, recent immigrants or long-lasting

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<sup>36</sup> Korea's history exhibits frequent internal feudal wars until the 11<sup>th</sup> century, fragmented ruling elites after the 12<sup>th</sup> century, several destructive invasions from Japan, Mongolia and China (16th-17th centuries), the 'unequal treaties' with the Western powers (late 19<sup>th</sup> century), thirty five years of Japanese colonial rule (1910-1945), and three years of a partly fratricide Korean War (1950-1953) which have nothing to envy, in terms of chaos and devastations, to the worst years of the Second World War in Europe.

<sup>37</sup> The term 'fighting' is an expression that Koreans love to use in almost all circumstances. It echoes traditional Pumba, the singing beggars who show that cheering is possible even in poverty.

<sup>38</sup> Europeans seem to have a different perception of the K-pop performers than South East Asians. In South East Asia, the dominant perception of the K-pop stars is based on identity—the K-pop performers are the spoke-persons of some kind of 'Asianness'. In Europe, the dominant perception seems to be based on 'difference'—the K-pop performers are the spoke-persons of 'new values'.

<sup>39</sup> This boom exists even if one takes into account the high rate of drops-out after one or two years. Such a drop-out rate reflects partly the difficulty to learn an Asian language which does surprize many Europeans, accustomed to learn much easier (because often related) other European languages.

citizens) often say that the K-pop offers ‘other values’ than the ones to which they are exposed in Europe. When asked to explain what they mean by ‘new values’, Europeans often cite respect, modesty, kindness [Arirang 2013]. Universal, these values are at the core of the Confucian message that is thus channeled by K-pop performers’ in their day-to-day attitudes with their fans and public.

Crucial for foreign fans, this Koreanness dimension of K-pop is not very visible for most Koreans, if only for a simple reason: such public attitudes are expected in Korea, making difficult for Koreans to perceive their novelty in the rest of the world. But, there may be two deeper reasons behind Koreans’ doubts.

First is the fear that foreigners will not go beyond fleeting emotions triggered by four-minutes dances or songs. In fact, K-pop should be best seen as a ‘door’ to what is Korea and to what past and present Koreans have to say. Its worldwide success shows that this door *per se* is very attractive to vast non-Korean crowds. And if the pool of talents accumulated by the K-pop wave will progressively spread to and succeed in other entertainment and art sectors, it will deliver increasingly deeper and richer messages from Korea.

Since the first version of this paper, the music video ‘*Unbreakable*’ by Kim Hyun Joong, featuring Jay Park, has been released. It offers an excellent illustration of this ‘door’ function of K-pop. In two minutes and half (the last minute is typical K-pop pure energy in dance, echoing Rain’s MV “Rainism”) this video presents no less than eight aspects of traditional Korean popular culture—from Korean dancers with sangmo hats to Korean drums to Salpuri and calligraphy. For Koreans, these quick references may not deliver an impression of Koreanness. But, there is little doubt that these references have triggered the curiosity of many non-Korean watchers of the video who have then gone to internet in order to know more about these aspects of Korean traditions (in less than three months, this video has received 2.5 million clicks).

The second source of Koreans’ doubts is the fear that the Korean culture of the grandparents’ or parents’ of the K-pop generation is too much receding in front of an amorphous, often corrosive ‘modern’ culture.<sup>40</sup> This fear is not specific to Koreans. It is shared by many people: the above quoted Europeans have a very similar fear. They feel that, during the few last decades, the universal values mentioned above (respect, modesty, kindness, etc.) have

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<sup>40</sup> In this respect, the debate on Psy’s ‘*Gentleman*’ is interesting. Some of ‘*Gentleman*’ music video images have been seen as too ‘un-Confucian’ by some Koreans (for instance, the music-video has been banned on KBS). In this respect, the K-pop wave has probably lessons to learn from Korean TV dramas. A recent study [Song 2012] shows that the world audience has some specific expectations from Korean dramas *per se*: less sexuality and violence, more focus on family relationships (between parents and children and amongst children) on children born outside the family, etc.

been deeply eroded in Europe—hence their profound aspiration to re-introduce them, as well captured by European scholars.<sup>41</sup>

Such an aspiration is unlikely to be appealing to young Europeans if it is only based on nostalgia or thinking. Young Europeans may be much more attracted and convinced by the double Koreanness of a lively K-pop—intense raw energy on stage and restrained Confucian public attitude out of the stage. This flamboyant contrast has the great privilege to make the aspiration to these essential values a new, colorful and cheerful start—not the restoration of an old order.

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<sup>41</sup> See the work of philosophers such as Comte-Sponville [2001] in France.

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## ANNEX 1. The K-pop concerts in Taiwan (March 2009 ~ December 2012)

This list deserves two observations. First is the huge number of concerts, including for the most famous K-pop bands. On average, there is 1.5 K-pop concert per month over this period. And, for instance, SuperJunior alone has had 5 concerts during this brief period of three years and nine months. Second, there is an almost identical number of concerts reserved to fans and of ‘regular’ concerts open to everybody.

Bands	Number of	
	Regular Concerts	Concerts for Fans
2AM	-	1
2PM	1	-
Andy	1	1
BEAST	1	2
Boyfriend	-	1
CN Blue	1	1
F.cuz	-	1
F.T Island	2	1
Girls Generation	2	-
Jay Park	1	-
JUNJIN	-	1
JYJ	1	-
KARA	-	1
Kim, Hyung-jun	-	3
Kim, Kyu-jong	-	1
Lee, Jun-ki	1	-
Park, Jung-ming	-	1
Rain	2	-
Shin, Hye-sung	1	2
SHINee	1	1
SHINHWA	1	-
SS501	1	1
SuperJunior	3	2
TEENTOP	-	1
The Boss	-	1
TVXQ	-	1
U-KISS	-	1
Various Artists	4	-
<b>Total</b>	<b>24</b>	<b>25</b>

*Source:* Authors based on Liu [2012].

## ANNEX 2. Data description as reference data for Table 5

Tables 5A and 5B in the text present the summary statistics of the concentration in terms of titles, bands and Korean DS firms for five music markets. What follows gives the detailed data and the main information on the sources.

Data for the five music markets CDs, Downloads, Streaming, and YouTube at the level of unit song by singer for January 2010~March 2013 has been compiled by the authors from the Gaon Chart and YouTube website which is publicly available at <http://www.gaonchart.co.kr/> and <http://www.youtube.com/>. Data for CD hits (Top 1 and Top10) are on a monthly basis while for Downloads, Streaming, and YouTube hits (Top 10) are on annual basis.

These data offer a good picture of the markets: generally the 11<sup>th</sup> hit is less than 3 percent of the aggregated number of hits from Top 1 to 10 for all cases. As a result, it is assumed that the sum of the Top 10 of each music hits is large enough to represent the whole market. In other words, the number of CDs, downloads, streaming, and YouTube sold for all the titles not included in the Top10 list is assumed to be too small to modify substantially the estimates of the level of concentration in the Korean DS markets.

It should be stressed that prices are substantial for the CDs, small for the downloads and Streaming, nil for YouTube.

### A. Concentration from the K-bands (final consumers) perspective

Table 5A-1. Concentration of monthly CD #1 hits, by K-pop bands

Bands	Firms	Hits	Share	No. of Titles	Titles shares	Sex	Band birth	HHI (5bis)
Super Junior	SM	1,087,927	23.4	4	5.8	M	2005	0.055
Girls' Generation	SM	1,006,265	21.6	5	4.3	F	2007	0.047
Big Bang	YG	511,848	11.0	4	2.8	M	2006	0.012
TVXQ	SM	396,537	8.5	2	4.3	M	2003	0.007
G-G dragon	YG	302,430	6.5	2	3.3	M	2009	0.004
SHINee	SM	271,446	5.8	2	2.9	M	2008	0.003
JYJ	JYJ	230,718	5.0	2	2.5	M	2010	0.002
Rain	Rain	208,322	4.5	1	4.5	M	2007	0.002
2NE1	YG	179,839	3.9	2	1.9	F	2009	0.001
Kim Hyun Joong	Key East	100,433	2.2	1	2.2	M	2011	0.000
Beast	CUBE	90,000	1.9	1	1.9	M	2009	0.000
BoA	SM	64,131	1.4	1	1.4	F	2000	0.000
Kim Sung Gyu	Woollim	62,958	1.4	1	1.4	M	2012	0.000
Exo K	SM	61,333	1.3	1	1.3	M	2012	0.000
MBLAQ	J-TUNE Camp	51,087	1.1	1	1.1	M	2009	0.000
Shin Hyesung	Liveworks	24,102	0.5	1	0.5	M	2005	0.000
Sum		4,649,376	100.0	31				0.1361
Average					2.6			

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5A-2. Concentration of monthly CD #10 hits, by K-pop bands

Bands	Firms	Hits	Share	No. of Titles	Titles shares	Sex	Band birth	HHI (5bis)
Super Junior	SM	937,298	13.61	10	3.7	M	2005	0.019
Girl's Generation	SM	679,500	9.87	7	2.6	F	2007	0.010
Big Bang	YG	640,410	9.30	9	3.3	M	2006	0.009
TVXQ	SM	637,708	9.26	8	3.0	M	2003	0.009
Infinite	Woollim	363,717	5.28	9	3.3	M	2010	0.003
SHINee	SM	358,108	5.20	5	1.9	M	2008	0.003
CNBLUE	FNC Music	348,709	5.07	8	3.0	M	2010	0.003
JYJ	C-JeS	303,048	4.40	4	1.5	M	2010	0.002
Beast	Cube	260,459	3.78	6	2.2	M	2009	0.001
T-ara	Core Contents	225,536	3.28	11	4.1	F	2007	0.001
G-Dragon	YG	212,361	3.08	5	1.9	M	2009	0.001
Kim Hyun Joong	Key east	209,370	3.04	3	1.1	M	2011	0.001
KIM JaeJoong	C-JeS	202,795	2.95	3	1.1	M	2013	0.001
Teen Top	TOP Media	184,406	2.68	6	2.2	M	2010	0.001
Kara	DSP Media	183,071	2.66	4	1.5	F	2007	0.001
XIA	C-JeS	177,000	2.57	2	0.7	M	2012	0.001
F.T Island	FNC Music	167,915	2.44	5	1.9	M	2007	0.001
B1A4	WM	163,477	2.37	6	2.2	M	2011	0.001
MBLAQ	Jtune Camp	149,885	2.18	7	2.6	M	2009	0.000
IU	Loen	144,663	2.10	6	2.2	F	2008	0.000
4Men		7,224	0.10	1	0.4			0.000
Kim Taewoo		7,098	0.10	1	0.4			0.000
Sum		6,884,495	100	270				0.0715
Average					0.011			

*Note:* Due to the limitation of space, sample of 66 artists between IU and 4Men, and compilation CD albums by various artists are omitted even if they are included in the data analysis, and shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5A-3. Concentration of monthly Downloads #10 hits, by K-pop bands

Bands	Firms	Hits	Share	No. of Titles	Titles shares	Sex	Band birth	HHI (5bis)
T-ara	Core Contents	10,878,973	11.22	3	0.10	F	2009	0.0126
Sistar	Starship	9,554,942	9.86	3	0.10	F	2010	0.0097
Bing Bang	YG	6,705,146	6.92	2	0.07	M	2006	0.0048
miss A	JYP	6,594,605	6.80	2	0.07	F	2010	0.0046
Girl's Generation	SM	6,349,547	6.55	2	0.07	F	2007	0.0043

Psy	YG	3,842,109	3.96	1	0.03	M	2001	0.0016
GG	iMBC	3,625,939	3.74	1	0.03	M/F	2011	0.0014
2NE1	YG	3,467,674	3.58	1	0.03	F	2009	0.0013
Busker Busker	CJ E&M	3,399,202	3.51	1	0.03	M	2011	0.0012
2AM	JYP	3,352,827	3.46	1	0.03	M	2009	0.0012
Davichi	Core Contents	3,285,936	3.39	1	0.03	F	2008	0.0011
Ailee	YMC	3,227,917	3.33	1	0.03	F	2012	0.0011
Heo Gak	A Cube	3,101,481	3.20	1	0.03	M	2011	0.0010
4Men	YWHO Enterprise	3,093,483	3.19	1	0.03	M	2013	0.0010
Leessang	Jungle	3,081,880	3.18	1	0.03	M	2002	0.0010
Sagging Snail	iMBC	3,081,488	3.18	1	0.03	M	2011	0.0010
Lyn	Pan	3,025,492	3.12	1	0.03	F	2001	0.0010
IU	LOEN	3,008,795	3.10	1	0.03	F	2008	0.0010
KARA	DSP Media	2,977,898	3.07	1	0.03	F	2007	0.0009
CNBLUE	FNC Music	2,959,800	3.05	1	0.03	M	2010	0.0009
10cm	Nega Network	2,830,335	2.92	1	0.03	M	2010	0.0009
Wonder Girls	JYP	2,790,298	2.88	1	0.03	F	2007	0.0008
MC Mong	CJ E&M	2,698,185	2.78	1	0.03	M	1998	0.0008
Sum		96,933,952	100	30				0.0553
Average					0.043			

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM , YG, and JYP).

Table 5A-4. Concentration of monthly Streaming #10 hits, by K-pop bands

Bands	Firms	Hits	Share	No. of Titles	Titles shares	Sex	Band birth	HHI (5bis)
Sistar	Starship	71,986,535	8.07	2	0.07	F	2010	0.0065
IU	LOEN	64,994,879	7.29	2	0.07	F	2008	0.0053
Busker Busker	CJ E&M	63,515,226	7.12	2	0.07	M	2011	0.0051
T-ara	Core Contents	55,831,892	6.26	2	0.07	F	2009	0.0039
2NE1	YG	53,872,780	6.04	2	0.07	F	2009	0.0036
Big Bang	YG	53,237,548	5.97	2	0.07	M	2006	0.0036
Psy	YG	43,032,180	4.83	1	0.03	M	2001	0.0023
miss A	JYP	37,315,823	4.18	1	0.03	F	2010	0.0018
2AM	JYP	34,166,742	3.83	1	0.03	M	2009	0.0015
Girl's Generation	SM	33,038,894	3.70	1	0.03	F	2007	0.0014
4Men	YWHO	30,279,518	3.40	1	0.03	M	2013	0.0012
MC mong	CJ E&M	29,818,457	3.34	1	0.03	M	1998	0.0011
Seo in guk & Jeong eun jee	Jellyfish & A Cube	29,486,793	3.31	1	0.03	M/F	2012	0.0011
KARA	DSP Media	28,603,338	3.21	1	0.03	F	2007	0.0010

Wonder Girls	JYP	28,504,554	3.20	1	0.03	F	2007	0.0010
CNBLUE	F&C Music	27,564,498	3.09	1	0.03	M	2010	0.0010
Ailee	YMC	27,059,904	3.03	1	0.03	F	2012	0.0009
Park Bom	YG	26,999,841	3.03	1	0.03	F	2011	0.0009
Kim Bumsoo	iMBC	26,960,351	3.02	1	0.03	M	1999	0.0009
Girl's Day	Dream Tea	26,022,780	2.92	1	0.03	F	2010	0.0009
f(x)	SM	25,846,718	2.90	1	0.03	F	2009	0.0008
Secret	TS	25,168,101	2.82	1	0.03	F	2009	0.0008
G.NA	Cube	25,070,108	2.81	1	0.03	F	2010	0.0008
Beast	Cube	23,362,586	2.62	1	0.03	M	2009	0.0007
Sum		891,740,046	100	30				0.0480
Average					0.042			

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM , YG, and JYP).

Table 5A-5. Concentration of monthly YouTube #10 hits, by K-pop bands

Bands	Firms	Hits	Share	No. of Titles	Titles shares	Sex	Band birth	HHI (5bis)
Psy	YG	1,112,096,230	62.12	3	0.15	M	2001	0.3859
Big Bang	YG	172,490,821	9.63	5	0.25	M	2006	0.0093
2NE1	YG	121,337,345	6.78	1	0.05	F	2009	0.0046
Girls' Generation	SM	72,364,924	4.04	1	0.05	F	2007	0.0016
Super Junior	SM	62,211,500	3.47	2	0.10	M	2005	0.0012
Hyuna	Cube	53,396,569	2.98	1	0.05	F	2010	0.0009
KARA	DSP	43,248,376	2.42	1	0.05	F	2001	0.0006
f(x)	SM	36,200,745	2.02	2	0.10	F	2009	0.0004
Taetiseo	SM	31,939,213	1.78	1	0.05	F	2012	0.0003
Hyuna & Hyunseung	Cube	30,508,913	1.70	1	0.05	F/M	2011	0.0003
SISTAR	Starship	28,986,016	1.62	1	0.05	F	2010	0.0003
Wonder Girls	JYP	25,508,492	1.42	1	0.05	F	2007	0.0002
Sum		1,790,289,144	100	20				0.4055
Average					0.083			

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM , YG, and JYP).

## Concentration from the K-firms (upstream contributors) perspective

Table 5B-1. Concentration of monthly CD #1 hits, by K-firms

Firms	Hits	Share	No. of Titles	Titles shares	No. of bands	Average per band	Share 5 HHI	Titles 6 HHI
SM	2,887,639	62.1	15	4.1	6	10.4	0.3857	0.2341
YG	994,117	21.4	8	2.7	2	10.7	0.0457	0.0666
C-JeS	230,718	5.0	2	2.5	1	5.0	0.0025	0.0042
RAIN	208,322	4.5	1	4.5	1	4.5	0.0020	0.0010
Key East	100,433	2.2	1	2.2	1	2.2	0.0005	0.0010
CUBE	90,000	1.9	1	1.9	1	1.9	0.0004	0.0010
Woollim	62,958	1.4	1	1.4	1	1.4	0.0002	0.0010
JTUNE	51,087	1.1	1	1.1	1	1.1	0.0001	0.0010
Shinhwa	24,102	0.5	1	0.5	1	0.5	0.0000	0.0010
Sum	4,649,376	100.0	31		15	6.7	0.4371	0.3111
Average				2.3				

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5B-2. Concentration of monthly CD #10 hits, by K-firms

Firms	Hits	Share	No. of Titles	Titles shares	No. of bands	Average per band	Share 5 HHI	Titles 6 HHI
SM	3,196,364	33.2	45	0.74	9	3.69	0.1102	0.0278
YG	1,202,843	12.5	27	0.46	9	1.39	0.0156	0.0100
C-JES	682,843	7.1	9	0.79	3	2.36	0.0050	0.0011
FNC Music	516,624	5.4	13	0.41	2	2.68	0.0029	0.0023
Woollim	466,691	4.8	13	0.37	3	1.62	0.0023	0.0023
Cube	410,035	4.3	11	0.39	4	1.06	0.0018	0.0017
JYP	321,963	3.3	12	0.28	6	0.56	0.0011	0.0020
Core Contents	225,536	2.3	11	0.21	1	2.34	0.0005	0.0017
Key East	209,370	2.2	3	0.72	1	2.17	0.0005	0.0001
DSP	196,372	2.0	5	0.41	2	1.02	0.0004	0.0003
T.O.P	184,406	1.9	6	0.32	1	1.92	0.0004	0.0005
LOEN	182,565	1.9	9	0.21	4	0.47	0.0004	0.0011
TS	173,625	1.8	10	0.18	2	0.90	0.0003	0.0014
WM	163,477	1.7	6	0.28	1	1.70	0.0003	0.0005
J.Tune Camp	149,885	1.6	7	0.22	1	1.56	0.0002	0.0007
Starship	133,007	1.4	8	0.17	3	0.46	0.0002	0.0009
CJ E&M	129,005	1.3	4	0.33	1	1.34	0.0002	0.0002
Hook	76,308	0.8	3	0.26	1	0.79	0.0001	0.0001
Sidus HQ	73,841	0.8	1	0.77	1	0.77	0.0001	0.0000

Stardom	58,001	0.6	4	0.15	1	0.60	0.0000	0.0002
Why Who	7224	0.1	1	0.08	1	0.08	0.0000	0.0000
Soul Shop	7098	0.1	1	0.07	1	0.07	0.0000	0.0000
Sum	9,628,828	100	270		82		0.1439	0.0639
Average				0.244				

*Note:* Due to the limitation of space, sample of 24 firms between IU and 4Men, and compilation CD albums by various artists (thus, by various firms) are omitted even if they are included in the data analysis. Shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5B-3. Concentration of monthly Downloads #10 hits, by K-firms

Firms	Hits	Share	No. of Titles	Titles shares	No. of bands	Average per band	Share 5 HHI	Titles 6 HHI
YG	14,014,929	14.5	4	3.61	2	7.23	0.0209	0.0178
JYP	12,737,730	13.1	4	3.29	2	6.57	0.0173	0.0178
Core Contents	10,087,024	10.4	3	3.47	1	10.41	0.0108	0.0100
Starship	9,554,942	9.9	3	3.29	1	9.86	0.0097	0.0100
LOEN	7,086,680	7.3	2	3.66	1	7.31	0.0053	0.0044
iMBC	6,707,427	6.9	2	3.46	2	3.46	0.0048	0.0044
SM	6,349,547	6.6	2	3.28	1	6.55	0.0043	0.0044
CJ E&M	6,097,387	6.3	2	3.15	2	3.15	0.0040	0.0044
YMC	3,227,917	3.3	1	3.33	1	3.33	0.0011	0.0011
A Cube	3,101,481	3.2	1	3.20	1	3.20	0.0010	0.0011
YWHO	3,093,483	3.2	1	3.19	1	3.19	0.0010	0.0011
Jungle	3,081,880	3.2	1	3.18	1	3.18	0.0010	0.0011
Pan	3,025,492	3.1	1	3.12	1	3.12	0.0010	0.0011
DSP Media	2,977,898	3.1	1	3.07	1	3.07	0.0009	0.0011
F&C Music	2,959,800	3.1	1	3.05	1	3.05	0.0009	0.0011
Nega Network	2,830,335	2.9	1	2.92	1	2.92	0.0009	0.0011
Sum	96,933,952	100	30		20		0.0850	0.0822
Average				3.27				

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5B-4. Concentration of monthly Streaming #10 hits, by K-firms

Firms	Hits	Share	No. of Titles	Titles shares	No. of bands	Average per band	Share 5 HHI	Titles 6 HHI
YG	177,142,349	19.9	6	3.31	4	4.97	0.0395	0.0400
JYP	99,987,119	11.2	3	3.74	3	3.74	0.0126	0.0100
CJ E&M	93,333,683	10.5	3	3.49	2	5.23	0.0110	0.0100

Starship	71,986,535	8.1	2	4.04	1	8.07	0.0065	0.0044
LOEN	64,994,879	7.3	2	3.64	1	7.29	0.0053	0.0044
SM	58,885,612	6.6	2	3.30	2	3.30	0.0044	0.0044
Core Contents	55,831,892	6.3	2	3.13	1	6.26	0.0039	0.0044
Cube	48,432,694	5.4	2	2.72	2	2.72	0.0029	0.0044
YWHO	30,279,518	3.4	1	3.40	1	3.40	0.0012	0.0011
Jellyfish & A Cube	29,486,793	3.3	1	3.31	1	3.31	0.0011	0.0011
DSP Media	28,603,338	3.2	1	3.21	1	3.21	0.0010	0.0011
F&C Music	27,564,498	3.1	1	3.09	1	3.09	0.0010	0.0011
YMC	27,059,904	3.0	1	3.03	1	3.03	0.0009	0.0011
iMBC	26,960,351	3.0	1	3.02	1	3.02	0.0009	0.0011
Dream Tea	26,022,780	2.9	1	2.92	1	2.92	0.0009	0.0011
TS	25,168,101	2.8	1	2.82	1	2.82	0.0008	0.0011
Sum	891,740,046	100	30		24		0.0938	0.0911
Average				3.26				

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).

Table 5B-5. Concentration of monthly YouTube #10 hits, by K-firms

Firms	Hits	Share	No. of Titles	Titles shares	No. of bands	Average per band	Share 5 HHI	Titles 6 HHI
YG	1,405,924,396	78.5	10	7.85	3	26.18	0.6167	1.0000
SM	202,716,382	11.3	4	2.83	4	2.83	0.0128	0.1600
Cube	83,905,482	4.7	3	1.56	2	2.34	0.0022	0.0900
DSP	43,248,376	2.4	1	2.42	1	2.42	0.0006	0.0100
Starship	28,986,016	1.6	1	1.62	1	1.62	0.0003	0.0100
JYP	25,508,492	1.4	1	1.42	1	1.42	0.0002	0.0100
Sum	1,790,289,144	100	2	2.95	12		0.6328	0.3200
Average				3.26				

*Note:* Due to the limitation of space, shorter names for firms are used (e.g. SM Entertainment, YG Entertainment, JYP Entertainment are shortened as SM, YG, and JYP).



### ANNEX 3. Detailed data and description for Table 6

#### Differences between Korean prices and prices in the rest of the world for song (i.e the price for MP3 downloading)

Country	Unit Price of Song		Exchange Rate	Remarks (Source)
	Korean Won: KRW	Original Currency		
U.K	₩1,339 ~ 1,678	GBP 0.79 ~ 0.99	GBP 1 = 1,695 Won	Source: <a href="http://www.officialchart.com">www.officialchart.com</a>
Australia	₩1,843	AUD 1.69	AUD 1 = 1,091 Won	Source : <a href="http://www.ariachart.com">www.ariachart.com</a>
France	₩ 2,138	EUR 1.49	EUR 1 = 1,435 Won	Source: <a href="http://www.fr.7digital.com">www.fr.7digital.com</a> , <a href="http://www.Amazon.fr">www.Amazon.fr</a>
Germany	₩ 1,421	EUR 0.99		Source: <a href="http://www.Amazon.de">www.Amazon.de</a>
U.S	₩ 991 ~ 1,436	USD 0.89~ 1.29	USD 1 = 1,114 Won	Source: <a href="http://www.Amazon.com">www.Amazon.com</a>
Canada	₩ 1,552	CND 1.43	CND 1 = 1,085 Won	Amazon Canada does not provide price of song as MP3, but only of Album price. Note: unit price calculated based on price of CD at retail (eg. <i>HMV</i> : CND 20.08/14 songs)
Japan	₩ 2,718	JPY 250	JPY 1 = 10.87 Won	Sale price set by domestic distributors (eg. <i>Mora</i> , <i>Dwango</i> , <i>Oricon ME</i> , and etc)
Korea	₩ 105	Case A	--	Sold as a package (100 or 150 songs) designed by domestic service providers (eg. <i>Melon</i> , <i>Soribada</i> and <i>M-net</i> )
	₩ 600	Case B		For songs in newly released album (the <i>Hold-back</i> system** applies)
	₩ 1,102 ~ 1,436	Case C (USD 0.99~1.29)	USD 1 = 1,114 Won	Price of MP3 downloading at Amazon Source: <a href="http://www.Amazon.com">www.Amazon.com</a>
China	₩ 182	CNY 1	CNY 1 = 181.6	In practice, downloading song is free. However, single unit of song can be sold at this rate when consumer wants song with a high quality sound.
	₩ 1,816	CNY 10		Sold as a monthly package for unlimited number of downloads (eg. <i>QQ</i> , <i>Baidu</i> , and etc)

Source: Authors based on MP3 sale-price of one song on the Amazon, iTunes and various sources from the domestic internet service providers.

Note: For comparison, exchange rate (April 2013: 1\$ = ₩ 1,113.5) is applied to transform original currency into Korean won.

\* The practice of free downloading for MP3 file through the shared websites prevails over most developing countries. iTunes controls the price of songs through the locational access where you are connected to. For example, country's software of iTunes becomes invalid when using it through the access of other countries' internet connection.