

## Substitutability of Demand for Online and Offline Services (Summary)

This report carried out surveys about the substitutability of demand for offline and online services of books, CDs, records, DVDs, films and other products. As a result, with respect to the structure of demand in Japan related to the online market, such as the distribution of electronic books and music via the Internet, as of the time of the surveys in 2011, there was no clear substitutability with the offline market, such as paper books and music CDs, unlike the market in the United States, in which there are generally substitution relationships. Based on this, this report proposes that it is important to forecast the timing and speed of changes in the demand structure as accurately as possible, and engaging in these forecast activities will make it possible to accurately evaluate the competition in the online and offline markets and enable reasonable judgments as to whether to take action from competition policy perspectives on vertical restraints, merger and acquisition and other issues.

## 1. Outline of interview surveys with companies and other organizations

Interviews were held with companies and other organizations (three publishers, one copyright management operator, four music distributors, one platform operator, one book seller and one expert in electronic publishing and copyright). The main results were as follows.

## (1) Books

Online and offline prices of paper media and electronic books are linked in certain parts, and they are not linked in other parts because expenses unique to electronic books (digitalization expenses for achieving compatibility with formats and terminals) are taken into account.

## (2) Music

Based on the preconditions of collecting expenses incurred during production processes and on the grounds that it is not appropriate from the perspective of cultural values to set different prices for each song, prices do not vary by the degree of popularity of artists.

## (3) Videos

Offline sales of old products have been declining due to the effects of online distribution. Consequently, it is considered that online contents and offline contents are in a substitutable relationship.

## 2. Overview of overseas previous research

A number of results of the analysis of previous research that was carried out mainly in the U.S., European, Korean and Chinese markets in each field, such as books, newspapers, magazines, music and images, suggest that there is overall substitutable relationships between offline and online services (for example, if specific titles are available either as

paper books or electronic books, and if the other conditions are the same, the less expensive products are purchased).

### 3. Effects of electronic books on paper media

Targeting three sectors, namely, the overall book market, comic books and comic magazines that are categorized as books, and comic books by title, an analysis on structural changes in the paper media book market was undertaken through the time-series analysis method. In this way, examinations were carried out to confirm whether or not the introduction of electronic books has affected the paper media market.

As a result, it was found that, for example, in the overall book market, a structural change whereby the number of books sold started to decline instead of rising took place in the early 1980s, a time before the Internet became popular. Consequently, it is judged that statistically, the introduction of electronic books has not significantly affected the overall book market, and no substitutable relationships have been confirmed.

### 4. Comparison and analysis of online content services in Japan and the U.S. from the perspective of demand

In Japan and the U.S., ultra-high-speed broadband is in widespread use mainly through optical fiber in Japan and cable television in the U.S., while in mobile communications, smartphones and tablet terminals are also used by a large number of people. In this way, considering that the two countries have similar infrastructure environments, the level of preference of the consumers in the two countries in terms of online content was analyzed.

As a result, in terms of the difference in the rates of purchasing and using online content between Japan and the U.S., it was found that there was only a small difference between the preferences of consumers in Japan and the U.S. in relation to the rates of purchasing and using books and the rates of purchasing and using music and videos. It was also found that the supply activities of producers in Japan were possibly a factor that causes disparity.

### 5. Suggestions for competition policy

The demand structure in Japan in relation to the online market, such as the distribution of electronic books and music via the Internet, is different from the market in the U.S. in which there are generally substitutable relationships between the online market and the offline market. In Japan, as of the time of the survey in 2011, the substitutability of the online market with the offline market, such as paper books and music CDs, was not clear. In fact, in the fields such as books, music and videos, a demand structure in which the online market and the offline market are mutually complementary can be observed, and it is appropriate to conclude that the markets are independent of each other.

The background to this is a variety of restrictions on the supply side. In the online market, for example, it is possible to point out that the fact that attractive contents are not

sufficiently provided against the backdrop of restrictions, such as copyright handling and the existence of a number of standards and formats, is an important factor. When forecasting the demand structure in the future, it is necessary to focus on the extent to which these restrictions as a bottleneck of the supply side will affect demand.

The landscape of business models related to online and offline businesses tends to change in a dynamic manner over the course of several years. It is therefore necessary to refrain from making a simple prejudgment about the whole concept of the demand structure in the future. However, if bold forecasts are allowed and if attractive contents start to be actively provided online, the substitutable aspect in the demand structure is, in the same manner as in the U.S., likely to gradually grow in the future.

The important policy viewpoint is to forecast the timing and speed of changes as accurately as possible. Only when actions are taken based on such forecast activities does it become possible to accurately evaluate the competition in the online and offline markets and enable reasonable judgments as to whether to take action from competition policy perspectives on vertical restraints, merger and acquisition and other issues.