

## **Competition and Consumer Protection in the 21st Century Hearings, Project Number P181201**

### **Comments of Knowledge Ecology International**

#### **6. Evaluating the competitive effects of corporate acquisitions and mergers;**

There are three areas where the FTC or DOJ evaluation of acquisitions and mergers falls short.

##### **6.a. Free software.**

The FTC and DOJ have not appreciated the role of free software in protecting the public from anticompetitive practices including but not limited to high prices and lack of interoperability.

For example, the Oracle acquisition of Sun Microsystems was opposed by several parties, on the grounds that Oracle faced competition from MySQL, a relational database program that had a very large and growing user base for Internet-based platforms. The development of MySQL was supported through a dual licensing model that included a free version, licensed under GPL, and a proprietary version. The developers of MySQL were able to charge a small number of users fees for making custom changes to MySQL, and this revenue was used to support the continued improvement of the free version, which had rapidly become a standard for many small and large web pages and web applications. KEI, the Open Rights Group and Richard M. Stallman set out objections to this merger in a letter found here:

<https://www.keionline.org/24887>.

DOJ rejected our analysis, on the grounds that the MySQL revenues were small, compared to the primary database competitors from Oracle and Microsoft, but this argument entirely missed the point, given the massive number of MySQL users and the fact that MySQL was providing an important alternative to relational database software provided by both Oracle and Microsoft, which also disciplined prices of the Oracle and Microsoft software. As we predicted, after the acquisition Oracle effectively changed the pace and direction of the development of the free version of MySQL, so that it posed less of a threat to the more costly Oracle software. This led to greater work on other free software programs, but at significant costs in terms of delays in providing improved security, features and performance for existing installations and programs that were designed to work with MySQL.

The two lessons are (1) that importance of free software cannot be measured by its revenues, but rather by its use by and utility to users, and (2) the business model for supporting the

continued development of a free software platform can be unconventional, but important and responsible for significant public benefits.

### **6.b. Collaborations between competitors.**

A standard market concentration index such as the Herfindahl-Hirschman index (HHI) or four firm concentration index focuses on the market shares of the merging or acquired entities, in terms of services or products sold in a relevant market. In some fields, this leads to a misleading assumption that sufficient competition exists among firms post market entry. One set of facts that is often ignored in the analysis are the collaborations among firms in a market. Most important of these are joint production, transportation or marketing agreements, and licensing of intellectual property rights, including patent rights. There are many examples where such agreements are important, such as in the oil industry, where companies are often partners in the operation of oil pipelines, developing oil fields under unitisation agreements, where oil and/or gas development of a field is operated by a single company on behalf of multiple owners of individual tracts of land. Other examples where such agreements are important are among companies that cross license patents for various information technology services, software and devices, and in the area of biomedical inventions, where patents may be licensed to different parties in different geographic areas or across similar products or services.

In merger and acquisition reviews the FTC should examine and share with the public data on the extent to which firms in relevant markets have relevant joint ventures and licensing agreements that would require the companies to be partners and collaborators as well as competitors. For example, a modified HHI or four firm concentration could be an average or a weighted average of the traditional HHI or four firm indexes, and a modified one could treat firms that were collaborators as the same firm.

### **6.c. Pipeline products.**

On February 20, 2018, the U.S. FTC approved the Celgene acquisition of Juno, without requiring divestitures, despite the fact that both firms were developing promising and potentially competing CAR T treatments for multiple myeloma. KEI's objection to the acquisition is available here: <https://www.keionline.org/26456>

The Celgene acquisition of Juno allowed one company to control two competing candidates for CAR T B-cell maturation antigen (BCMA) targeted CAR T treatments for multiple myeloma. The two previous CAR T technologies approved by the FDA had initial prices of \$475,000 (Kymriah) and \$373,000 (Yescarta), apparently not including additional services relating to the treatment.

Both technologies that are now controlled by Celgene have benefited enormously from NIH funding. The merger significantly reduced the odds there will be robust price competition for

CAR T multiple myeloma treatments, and there were zero benefits in allowing Celgene to acquire the competing BCMA CAR T treatment, given the intense investor interest in CAR T.

It is far simpler to prevent an anti-competitive acquisition than to remedy the monopolist abuses that follow. It is our understanding that the FTC is unwilling to consider pipeline products as sufficiently important to block a merger or require a divestiture. This is a mistake that the FTC needs to correct, particularly given the procedures adopted by the FTC regarding approvals of novel treatments for particularly severe illnesses.