Economists Incorporated

Economists INK

A BRIEF ANALYSIS OF POLICY AND LITIGATION

SPRING 2021

Online Privacy and Antitrust

Keith Waehrer

EI Principal Keith Waehrer has analyzed merger and monopolization claims across numerous industries. This article is based on his paper titled "Online services and the analysis of competitive merger effects in privacy protections and other quality dimensions."

The policy debate over the role of online privacy in antitrust enforcement has been going on for years. Under the new administration, the profile of online privacy issues is likely to increase. Much of the policy debate concerns consumer preferences for privacy and whether privacy can be considered another measure of quality. While quality itself might be difficult to measure, competitive effects on quality, or more specifically privacy, in merger reviews can be quantified through calculations similar to upward pricing pressure ("UPP") analyses.

Some proponents for an aggressive enforcement stance on privacy in merger reviews argue that consumers pay for monetarily free online services with their data, and thus, any decrease in privacy (or increased use of their data) could be viewed as a price increase of sorts. However, those on the other side of the debate argue that consumers are not uniform in preferring more privacy to less and that consumer data allow online services to offer consumers better and more targeted offerings.

While not necessarily settled, there is a growing consensus that consumer privacy is a characteristic of the quality of online service. However, difficulty in measuring changes in quality (and privacy) remains an important perceived issue for antitrust enforcement. One possible approach to overcoming this issue of measurement involves applying a strategy similar to that applied in UPP analyses.

Consider a merger between two competitors that offer online services to consumers for free. In this example, companies attract consumers away from competitors by offering higher quality service. Thus, the merger will tend to reduce the incentive of the merging firms to incur the cost of offering higher quality. Just as in price-based UPP analyses, it is possible to quantify the incentive to reduce quality from a merger by measuring the size of the incremental efficiency cost necessary to eliminate the incentive to reduce quality. This approach does not require that quality itself be measured. Instead, the inputs for this approach are the same as those used in a price-based UPP calculation, diversion ratios and pre-merger margins. However, the diversion ratio that matters is that induced by a change in quality rather than price, and it likely can be measured similarly to diversion ratios using price – with market shares, switching data, or natural experiments.

Therefore, even if a product is offered to consumers for free, reductions in competition can harm consumers. These harms can be measured with UPP-type analyses, even when the effects take the form of a reduction in quality or privacy.

Also In This Issue

Antitrust Fines in China

Su Sun discusses the formula for calculating fines proposed in China's draft Antitrust Fining Guidelines ("AFG"). Dr. Sun applies these proposed fines to historical data on non-merger case decisions issued by China's antitrust agencies and then compares these predicted fines to actual fines. A comparison shows that predicted fines are significantly higher than actual fines imposed by the agencies. However, this difference has decreased over time, reflecting an enforcement that has become stronger and more in line with the draft AFG.

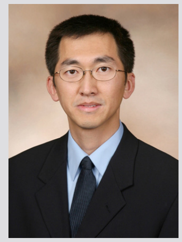
The Transition from LIBOR to SOFR

Stuart D. Gurrea and Jonathan A. Neuberger discuss the planned transition from the London Interbank Offered Rate ("LIBOR") to the Secured Overnight Financing Rate ("SOFR"). LIBOR is expected to be discontinued by the end of 2021. Dr. Gurrea and Dr. Neuberger highlight the methodological shortcomings for constructing LIBOR, including market manipulation, and describe the effort to transition to a market-based reference rate such as SOFR. There are significant differences between SOFR and LIBOR, and the transition from LIBOR to SOFR will require redefining the terms of existing financial instruments linked to LIBOR that will remain outstanding after 2021 ("legacy contracts"). There will be challenges associated with adjusting the terms of these legacy contracts to SOFR, and the Paced Transition Plan developed by the Alternative Reference Rates Committee ("ARRC") may not fully alleviate the uncertainty associated with switching from LIBOR to SOFR.

Antitrust Fines in China

Su Sun

China has become an important jurisdiction in the global antirust arena. With private antitrust litigation still developing, fines issued by the antitrust agencies are the main deterrence to non-merger anticompetitive conduct. Since 2013, China's antitrust agencies have published a large number of non-merger antitrust investigation decisions, and these decisions indicate that China's antitrust agencies have fined hundreds of companies, both domestic and foreign. Although general principles regarding confiscation of illegal gains and antitrust fines are provided in China's Antimonopoly Law, the enforcement agencies have been drafting Antitrust Fining Guidelines ("AFG") to institutionalize the perceived best practice and to provide more detailed guidance to market participants. Applying the proposed formulas in the draft AFG to historical cases investigated by China's antitrust agencies and comparing the predicted fines to actual fines imposed by the agencies in those cases offers insights into the direction of China's antitrust enforcement using fines.



*EI Senior Vice President Su Sun has worked on a number of cases before Chinese antitrust agencies and has submitted expert reports to and testified before several Chinese courts. Dr. Sun's co-written article on China's antitrust fines is forthcoming in the **Journal of Antitrust Enforcement**.*

> *"These findings suggest that enforcement decisions concerning fines were increasingly aligned with the drafted AFG..."*

According to the current draft AFG, the Chinese antitrust enforcement agency will consider the nature and duration of the illegal conduct in determining fines. The draft AFG provide formulas for determining fines for horizontal and vertical agreements and for abuse of dominance cases. The draft AFG set different base fines that depend on the nature of the illegal conduct and also consider aggravating or mitigating factors to adjust these base fines. The base fine is defined as a percentage of the offender's relevant revenue in the previous year. The draft AFG also stipulate that the base fine is increased by one percentage point for each additional year of the duration of the antitrust offense.

For horizontal agreements, the draft AFG stipulate that companies engaging in horizontal agreements on pricing, production, capacity, and market division receive the highest base fine of three percent, while companies engaging in other horizontal agreements such as restraints on technology development receive a base fine of two percent. Companies engaging in vertical agreements receive a base fine of one percent. These different base fines reflect the recognition that cartels tend to harm competition with little or no offsetting consumer benefits, while vertical agreements may have some efficiency reasons.

When defining base fines for abuse of dominance cases, the draft AFG make a distinction based on the source of market dominance. The base fine is set at three percent if the dominance was obtained as a result of laws and administrative regulations, while it is set at two percent if the dominance was obtained through market competition. The likely rationale for this distinction is that dominance established through laws and regulations may be indicative of higher barriers to entry and more stringent restrictions on competition, and thus larger anticompetitive effects.

After the base fine is determined, the AFG stipulate that the Chinese antitrust agency will consider aggravating factors and mitigating factors. Aggravating factors include whether an offender played a leadership role in a conspiracy, was involved in multiple offenses, and/or pushed for the administrative agencies and organizations to exclude competition. Each aggravating factor increases the base fine by one percentage point. For example, an offender that participated in both price fixing and a division of customers may be assessed with two aggravating factors, and the base fine increased by two percentage points. Additionally, a company that continues to engage in the anticompetitive conduct despite an order to stop faces a half percentage point increase of the base fine. Mitigating factors include when an antitrust offender was coerced by others, was forced by an administrative body, cooperated with the enforcement agency, and/or voluntarily took actions to eliminate harm. Each mitigating factor reduces the base fine by one percentage point. Additionally, voluntarily taking actions to reduce harm, providing evidence to another investigation, and other mitigating factors, would lead to a half percentage point reduction of the base fine for each of these factors. Although the confiscation of illegal gains from an antitrust offense has no upper limit, total antitrust fines are capped at ten percent.

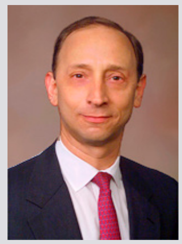
Most of the decisions published by China's antitrust agencies provide sufficient details to project the level of fines companies would have received based on the above formulas provided in the draft AFG. Data from 202 fine recipients in 46 antitrust investigations that occurred between 2013 (when the agencies started publishing such decisions) and September 2019 were analyzed. These data include 20 abuse

continued on page 4

The Transition Away from LIBOR to SOFR

Stuart D. Gurrea and Jonathan A. Neuberger

EI Principal Stuart D. Gurrea has extensive experience in financial economics and the estimation of economic damages in the context of contract disputes.



EI Principal Jonathan A. Neuberger specializes in finance, damages and valuation.

LIBOR, the London Interbank Offered Rate, is the most referenced short-term interest rate index and serves as a benchmark to adjust rates on hundreds of trillions of dollars' worth of financial contracts and securities, including adjustable-rate mortgages, consumer loans and corporate debt. After the 2008 financial crisis, the integrity of LIBOR and other indices was undermined by alleged manipulation. In response, a global reform effort began to transition interest rate benchmarks towards more robust market-based indices. LIBOR, in particular, is expected to be discontinued by the end of 2021. For dollar denominated instruments, the recommended alternative to LIBOR is the Secured Overnight Financing Rate ("SOFR"), which is being managed by the Alternative Reference Rates Committee ("ARRC") convened by the Federal Reserve Board and the Federal Reserve Bank of New York. This transition away from LIBOR presents significant challenges.

LIBOR rates are intended to reflect current and expected future financial market conditions. A panel of contributing banks submits daily interest rates in response to the question: "[a]t what rate could you borrow funds, were you to do so, by asking for and then accepting interbank offers in a reasonable market size just prior to 11:00 GMT?" LIBOR submissions can be based on both actual transactions data and "expert judgment," the latter to be used when the respondent bank has limited actual data on which to base its submission.

"There are significant differences between SOFR and LIBOR."

The shortcomings in the methodology for constructing LIBOR became apparent after the 2008 financial crisis. The widespread availability of central bank liquidity after the crisis and a general reassessment of interbank risk led to lasting reductions in the volume of interbank lending. As a result, fewer LIBOR submissions were made by contributing banks, and those that were made became more heavily reliant on expert judgment, rather than on actual market transactions. The fundamental weaknesses in the construction of LIBOR culminated in numerous instances of LIBOR manipulation through deliberately distorted submissions.

In response to these challenges, in 2014 the Intercontinental Exchange Benchmark Administration took over the management of the LIBOR process and implemented numerous reforms. Among other changes, an improved submission methodology was adopted (the "Waterfall Methodology") that prioritizes transaction-based data and transaction-derived data, and reduces reliance on expert judgment. This approach balances the desire to favor transactions data with the need to provide a broad range of rate benchmarks. Implementation of this new methodology, however, did not overcome the lack of market data for certain currencies and tenors, resulting in continued heavy reliance on expert judgment.

LIBOR's methodological shortcomings, and concerns about the integrity of interest-rate benchmarks more generally, led to a global effort to transition to market-based reference rates and to a phasing out of LIBOR by the end of 2021. For dollar denominated instruments, the recommended alternative to LIBOR is SOFR. SOFR is a measure of the cost of borrowing cash overnight secured by U.S. Treasury securities. The rate is derived from overnight repurchase agreement (or repo) transactions and is published daily at 8:00 AM. Eastern Time. SOFR is calculated as a volume-weighted median rate – the rate at the 50th percentile of the dollar volume – and was first published in 2018. As such, SOFR is built on an active market and relies on transactions data that enhance the integrity of the index.

There are significant differences between SOFR and LIBOR. First, SOFR is based solely on directly observable transactions data and is thus less susceptible to manipulation. LIBOR, in contrast, relies on both market data and the expert judgment of the submitter and can be more easily manipulated. Second, SOFR is based on borrowing secured by U.S. Treasury securities and thus is a risk-free rate that fails to account for interbank credit risk. LIBOR rates, on the other hand, measure the cost of unsecured borrowing

continued on page 4

Antitrust Fines in China

of dominance investigations, 19 horizontal agreement investigations, and 7 vertical agreement investigations. These data show that the average actual fine percentage is three percent, while the average projected fine percentage is almost six percent. This suggests that, overall, the fines would have been significantly higher on average if the draft AFG had been in place throughout this time period and strictly followed. However, the difference between the projected fines and actual fines decreased over time. For example, the average actual fine was one percent in 2013, but the average projected fine is approximately six percent. In contrast, the average actual fine was five percent in 2019, which is slightly higher than the average projected fine of 4.2 percent. One exception is in 2018, when three former antitrust agencies were combined into one single enforcement agency under the newly created State Administration for Market Regulation. These findings suggest that enforcement decisions concerning fines were increasingly aligned with the drafted AFG, even though these guidelines are not finalized and official.

Deterrence of anticompetitive conduct is a major goal of antitrust enforcement, and punishment such as fines is an important mechanism for Chinese antitrust enforcers to achieve the desired deterrence. Properly formulated and implemented fining guidelines should help improve the predictability and transparency in China's future antitrust enforcement fines.

LIBOR to SOFR

and thereby reflect interbank credit risk. Third, SOFR is an overnight backward-looking rate calculated at the end of a borrowing period, whereas LIBOR rates are prospective and assessed for a variety of forward-looking terms. LIBOR thus reflects a term structure of forward-looking interest rates that can be applied to financial contracts. While past SOFR rates can be used to compute a term structure in arrears, this type of arrangement lacks the certainty afforded to counterparties by a forward-looking term structure. As an alternative, forward-looking SOFR rates can be developed from actively-traded SOFR derivatives markets, which depend on sufficiently large trading volumes to be robust and reliable.

The transition away from LIBOR not only involves identifying a robust new benchmark for new contracts, but also redefining the terms of existing financial instruments linked to LIBOR that will remain outstanding after 2021 ("legacy contracts"). Legacy contracts account for approximately $35 trillion in financial instruments. Adjusting the terms of such contracts post- LIBOR presents significant challenges. An alternative benchmark, for example, may imply bigger or smaller payments than under LIBOR and require establishing terms to maintain the valuation of the financial instruments at issue. As a risk-free rate, SOFR is generally lower than LIBOR, and the transition of contracts from LIBOR to SOFR will require compensation to maintain the valuation through a one-time payment or an adjustment to spreads. Adjusting SOFR rates via an estimated credit risk premium derived from market yields may not be a practical solution as a lack of liquidity in certain markets is a reason for the transition away from LIBOR. To address these challenges, ARRC developed a Paced Transition Plan that delineates a timeline to foster adoption. This plan includes a recommended SOFR plus-a-spread adjustment as a statutory fallback.

Overall, the goal of the transition is to provide some certainty in the event of LIBOR cessation by providing a statutory non-LIBOR alternative that approximates the terms of the initial agreement. However, the migration away from LIBOR to SOFR may still result in uncertainty and give rise to significant legal disputes.

EI News and Notes

Energy Economists Join EI

Natalie Shen and Jeffrey J. Opgrand have joined EI's energy practice. Ms. Shen's areas of expertise include cost-of-service ratemaking, energy market structures, and policy formation. Ms. Shen was previously an expert witness with the Federal Energy Regulatory Commission (FERC) Office of Administrative Litigation. Ms. Shen also served as a Policy Advisor to a FERC Commissioner. Dr. Opgrand was formerly an economist in the Office of Energy Policy and Innovation at FERC and has worked on issues affecting wholesale electric markets, including financial transmission rights and capacity markets. Dr. Opgrand also previously worked at Monitoring Analytics, the independent market monitor for the PJM Interconnection.

FERC Approves Entergy's Acquisition of the Hardin County Peaking Facility

The Federal Energy Regulatory Commission (FERC) recently approved Entergy Texas, Inc.'s acquisition of the Hardin County Peaking Facility from the East Texas Electric Cooperative. Entergy Texas submitted a market power study with a Delivered Price Test authored by EI Principal John R. Morris.

Su Sun Testifies in Chinese Trade Secret Case with Record Breaking Damages Award

In *Zhonghua Chemical et al v. Wanglong Group et al*, China's Supreme People's Court handed down the country's largest-ever damages award in a trade secret case – RMB 159 million, or close to $25 million. EI Senior Vice President Su Sun submitted an economic report on behalf of the plaintiffs and testified in the first instance of this case. The Court referenced Dr. Sun's damages estimate in determining the final award. Plaintiffs were represented by Fairsky Law Office.

Music Industries Economic Impact Report published by Robert Stoner and Jéssica Dutra

EI Principal Robert D. Stoner and EI Senior Economist Jéssica Dutra's published their report *The U.S. Music Industries: Jobs & Benefits*. The report finds the music industry creates $170 billion in value annually to U.S. GDP, supports 2.47 million jobs across a wide range of professions, and accounts for $9.08 billion in export sales, among other benefits

Keith Waehrer publishes *Three Things You Might Not Have Known About Sprint/T-Mobile Merger Litigation*

In this recent *Antitrust Chronicle* article, EI Principal Keith Waehrer and co-author Dr. Nitin Dua describe three lessor known aspects of the Sprint/T-Mobile merger litigation -- the court's exclusion of Mobile Virtual Network Operators (MVNOs) as participants in the relevant market, T-Mobile's estimation of standalone marginal costs and merger efficiencies, and the remedy that required dismantling of a fully operating network and building of a brand new network to replace it.

Economists
INCORPORATED

OFFICES:

2121 K Street, NW
Suite 1100
Washington, DC 20037
phone: (202) 223-4700
fax: (202) 296-7138

101 Mission Street
Suite 1000
San Francisco, CA 94105
phone: (415) 975-5510
fax: (415) 281-9151

215 South Monroe Street
Suite 701
Tallahassee, FL 32301
phone: (850) 558-6030

www.ei.com

President
Jonathan L. Walker

Editor
Stephanie M. Mirrow