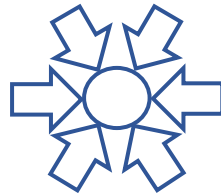


# **Concentration in Residential Mortgage Intermediation: Systemic, Structural, Market Integrity, and Consumer Welfare Challenges Posed by the ICE/Black Knight Merger**



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## Key Points

- Mortgages are most Americans' largest financial obligation and their home is their greatest source of wealth accumulation.
- The proper functioning of the residential-mortgage market depends on technologies used by lenders and servicers to create, service, price, transfer and offer mortgage loans, with all of these functions in turn dependent on vast troves of consumer data.
- Evidence shows that this technology marketplace is already unduly concentrated, adding significant cost to each mortgage that is largely passed on to borrowers.
- ICE is a dominant provider of critical mortgage services. If allowed to acquire BKI, it is likely to gain unrivalled power to control the prices set on each mortgage, the terms on which credit is provided, the lenders offered the most advantageous terms, and the extent to which home ownership is available on affordable, equitable terms in rural, urban, and majority-minority communities.
- ICE's stated plans to monetize consumer data in part by licensing access creates potential network effects with far reaching monopoly risk as well as threats to consumer privacy and the ability of small mortgage finance companies to compete or even survive.
- The U.S. mortgage market stands at \$11.7 trillion and is the second largest fixed-income market in the nation, surpassed only by the U.S. Treasury market.
- By virtue of its power controlling one critical, complex global financial market (CDS), ICE already poses systemic risk certified by the U.S. Government. If granted controlling power also across residential mortgage infrastructure, its systemic risk will rise because mortgage finance would also be at grave risk from central counterparty resolution and systemic risks. Conversely, risks in the U.S. mortgage market could quickly spread into core wholesale finance sectors, threatening financial stability around the world.
- The ICE/BKI merger should be rejected by the FTC.
- If it is accepted and even if this is accompanied by certain constraints, then the Financial Stability Oversight Council should quickly designate ICE as a whole as a systemically important financial institution and bring the full scope of its activities across the global financial market and U.S. residential mortgage finance under safety-and-soundness, resolvability, and consumer protection regulation.

## Abstract

This paper assesses the pending merger of Intercontinental Exchange, Inc. with Black Knight, Inc. to evaluate the systemic, market integrity, and consumer welfare implications of a merger that would, as is also shown, provide the combined firm with dominant market share due to substantially less competition in an array of processing, pricing, servicing, and consumer facing functions in the U.S. residential mortgage market. Because ICE is already a dominant, and in one case even a systemically designated, provider of complex and high-risk capital market products and services (e.g., credit default swaps, foreign exchange), this paper also assesses the extent to which market power and systemic risks within ICE could migrate from the firm's capital markets activities to mortgages and vice versa. This paper also describes how ICE's mortgage market scale in concert with its nonmortgage exposures could create critical infrastructure weaknesses in which operational interruptions or failures become acute liquidity and/or credit risk not only for private entities, but also the GSEs and federal agencies active in mortgage finance. As shall also be shown, this acquisition raises precedent-setting concerns since it is both a vertical and horizontal merger largely outside the reach of safety-and-soundness, resolution, and privacy regulation in the mortgage market critical to systemic stability, macroeconomic growth, and consumer welfare.

This analysis also assesses ICE's avowed plans for new mortgage products and services that would leverage its dominant capital market activities in ways that likely heighten systemic risk as well as pose additional antitrust concerns. These plans may prove particularly problematic because, following the Black Knight merger, ICE would not only have a dominant market share in many critical mortgage market functions, but also control an entity on which many lenders and investors now rely to price their offerings, even as the firm plans to compete directly against them. The firm's plans to also monetize exclusive access to a wide array of consumer data in concert with this pricing power combined with a strategy premised on still greater mortgage and capital markets businesses could, as the company expressly hopes, result in a dominant position across the life of every U.S. residential mortgage and each borrower's decisions for existing and new loans. Pricing mistakes or decisions based on ICE's competitive advantage could have dramatic systemic, macroeconomic, and consumer welfare implications.

The remedies to avert the risks resulting from this market power analyzed in this paper include denial or significant modification of the proposed merger by antitrust authorities in a manner consistent with their statutory authority and quantitative and qualitative policy objectives. But, should the merger proceed, then a vital remedy for financial stability, macroeconomic, and competitive impact along with consumer protection should come via systemic designation for ICE's new mortgage operations. Like ICE's current systemic designation for certain derivatives clearing activities, this can be readily implemented because the new ICE mortgage operations would be still more vital to effective residential market transaction completion, warranting designation under U.S. law as a financial market utility.

However, as this paper also demonstrates, even these designations within ICE are likely insufficient because of significant contagion risk on an intragroup basis and, following that, a systemic one. As a result, U.S. authorities should also quickly consider designating ICE as a whole as a systemically important financial institution, bringing it under Federal Reserve safety-and-soundness authority and ensuring regulatory discipline that curtails the market power heightened by exemptions from costly safety-and-soundness and operational-resilience regulation.\*

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\* This paper was funded by an entity for which this transaction has raised competition concerns. Anonymity for this party has been assured due to the market power ICE's mortgage activities already wield and that to come. Federal Financial Analytics retained full editorial and methodological control over this paper and it reflects the firm's views based on the research and analysis presented herein.

One of the lessons of the 2007-09 Great Financial Crisis (GFC) is the vital importance of what has come to be called critical financial infrastructure. Now we have learned the very hard way that it is not just the ability to take deposits and then lend them out that can blow up financial systems and economies when conducted with undue risk and too little capital or liquidity. Traditional transaction flows – known as financial intermediation – are the fuel that powers the financial system and broader economy, but the firms that provide the payment, settlement, clearing, pricing, valuation, servicing, and other operational functions are the pipes through which this fuel flows. When they blow, the damage can and has been catastrophic.

If the potential corporate structure of entities that build, maintain, and control access to these pipelines is unduly concentrated, then market resilience is at grave risk even as undue market power redefines winners and losers in favor of the firm that has its hand on the financial access valve. If these infrastructure firms providing structural intermediation services gather troves of consumer data across their platforms and then monetize them without consumer knowledge or consent, then access and prices to equality- and economy-essential financial services is endangered much as it is when consumer search inquiries distort products offered and prices paid. Although antitrust issues germane to Taylor Swift's concert have recently preoccupied public attention, there is grave risk if policymakers take their eyes off the challenges of undue concentration in critical financial infrastructure, especially that vital to products such as residential mortgages that are essential to financial stability, macroeconomic growth, and economic equality.

This paper thus investigates one pending mortgage market infrastructure consolidation – that of Intercontinental Exchange, Inc. (ICE) and Black Knight, Inc. (BKI) – to assess the extent to which it poses systemic risks and/or undermines market integrity and consumer welfare due to attributes such as undue pricing power and unparalleled access to consumer data outside the scope of safety-and-soundness, resilience, resolution, and consumer protection regulation.

Another costly lesson of the GFC is the critical importance of the U.S. residential mortgage finance system. The impact of mortgage finance distress was then so systemic that, when the 2020 Covid pandemic struck, U.S. regulators decided to rescue it in numerous ways, including by supporting the secondary mortgage market and allowing millions of taxpayers to postpone or even reduce their mortgage debt via massive, costly government forbearance programs that relied on mortgage servicers and thus all the software on which they rely for prompt, effective implementation ahead of what otherwise might have been a foreclosure wave.<sup>1</sup>

Taxpayers would have been at grave risk had there been a mortgage infrastructure failure because this could have threatened the federal government via Ginnie Mae and the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac. Another GSE, the Federal Home Loan Bank System, would also have been endangered even though its function is to fund, not purchase, these loans. These trillions are direct or indirect taxpayer obligations as well as a source of significant systemic risk.

Failure in mortgage market critical infrastructure thus poses particularly acute risk to financial stability resulting from the negative feedback loop between operational failure in critical infrastructure that weakens public and private financial institutions – many of them of systemic or near-systemic magnitude on their own – that then threatens housing, on which the U.S. economy itself depends.

As demonstrated by this history and the policies that financial crises spawned, the ICE/BKI transaction presents significant challenges to financial stability that warrant careful advance review with regard to

both the acquisition and, should it be approved, subsequent systemic, safety-and-soundness, pricing, innovation, efficiency, and consumer protection safeguards.

As reiterated in a letter from the Chair of the House Financial Services Committee opposing this acquisition,<sup>2</sup> these structural risks are clearly within the ambit of those which the U.S. antitrust authorities can and should review. The Department of Justice (DOJ) and Federal Trade Commission (FTC) have rightly posited the vital importance of considering merger approval in light not only of traditional price-based measures of market concentration, but also with regard to a proposed acquisition's nonprice implications for "innovation, quality, potential competition, or any 'trend toward concentration'."<sup>3</sup>

FTC Chair Khan has also pointed to a critical consideration with regard to this transaction: "A lack of competition also appears to have left segments of our economy more brittle, as consolidated supply and reduced investment in capacity can render us less resilient in the face of shocks."<sup>4</sup> The Department of the Treasury has also expressed grave concerns about market power in response to the President's request for analyses of financial technology (fintech) and giant technology platform firms in this sector (bigtech).<sup>5</sup>

Finally, this paper will recommend remedies to the risks we identify. These include the FTC denying ICE's request to acquire BKI or approve it only following advance commitments by ICE to divest significant BKI activities that compound ICE's market power and ability to monetize consumer data.<sup>6</sup>

Further, absent any such significant restructuring of the combined company, the Financial Stability Oversight Council (FSOC) can and must review the extent to which ICE – already deemed a systemic risk by virtue of one of its activities – would pose still greater hazard to the national financial system and macroeconomy following the acquisition of Black Knight. At the least, the mortgage structural intermediation powerhouse resulting from this merger should also be systemically designated.

However, taken together with ICE's other, massive structural intermediation, data-gathering, and infrastructure services, the transaction may well warrant overall systemic designation of ICE as a whole. This would end its many exemptions from safety-and-soundness, operational resilience, cybersecurity, data privacy, resolvability, and related rules now applied to like-kind financial companies core to other systemic-scale operational activities. A firm with ICE's demonstrable systemic risk and market power outside the scope of all of the rules proven yet again in 2020 to be essential safeguards would give ICE still more market dominance by virtue of its ability to operate at lower cost, less restraint, and greater leverage than even the largest competing firms.

## I. ICE/BKI Acquisition Considerations

Prior to recommending remedies, it is of course important to establish the extent to which the ICE/BKI transaction raises systemic risk, market integrity, and/or consumer welfare concerns by virtue of the firm that would result should the acquisition be approved as proposed without restrictions or control.

The following table demonstrates the scope of the consolidated firm by virtue of core mortgage infrastructure activities and resulting market share:

Activity	Product Line	Market Share	Function
<b>Mortgage Servicing</b>	MSP	63%*7	MSP supports loans from boarding to disposition, enables compliance support, and offers a customer-side app for accessing data.
<b>Mortgage Origination</b>	Encompass	44% <sup>8</sup>	Encompass processes online mortgage applications, facilitates engagement between loan officers and consumers, and offers e-signing of documents. It also includes a loan officer tool to take applications, order services, compare loan scenarios, and send eligibility letters. It also has third-party originator management software and automated one-to-one marketing.
	Empower	Around 10%-15% <sup>9</sup>	Empower is an integrated point of sale system that features digital application processing, a loan officer platform accessible from any device, integrated PPE (product and pricing engine), a real time transaction fee database, automated compliance tests, fully digital closing, pre-integration with Black Knight's "Exchange" network with over 25,000 service providers, and seamless API integrations.
<b>Registry</b>	MERS	A monopoly	A national electronic registry of U.S. mortgages that tracks changes in mortgage servicing rights and beneficial ownership interests in loans secured by residential real estate.
<b>Product and Pricing Engine</b>	Optimal Blue	35% <sup>10</sup>	Optimal Blue gathers documents, income, assets, and general information on buyers. For lenders it offers scenario-specific pricing, real-time price comparisons, product support for 8 different kinds of mortgages (conforming, government, construction-only, etc.), and best pricing scenarios from six mortgage insurance providers. For brokers, it offers real-time rate displays, integrated access to over 120 wholesale investors, real-time price displays on user's website, and third-party technology integration.
<b>Mortgage Marketing</b>	Surefire	No public data available	Surefire is an indirect retail marketing platform. It distributes leads, tracks them to application, enables communication with borrowers throughout the application and funding process and provides omnichannel outreach post-close to capture repeat business.
	Velocify	No public data available	Velocify is a direct-to-consumer marketing platform that is call center oriented. It retrieves mortgage leads from over 1,400 integrated lead sources, distributes new leads and reassigns unworked leads, and can create customized sales workflows.
<b>Home Listing</b>	Paragon	28% <sup>11</sup>	Paragon is a Multiple Listing Service that facilitates communication between agents, buyers, and sellers. It displays relevant information on the property and neighborhood.
*63% for first lien mortgages and 26% for second lien mortgages, combined market share is 56%			

The letter from the Chair of the House Financial Services Committee also highlights that the combined firm would provide technology services covering two-thirds of all U.S. mortgages.<sup>12</sup> As detailed below, ICE now also controls the critical mortgage registry containing consumer data on virtually all residential mortgages. As this letter also notes, this dominant position may well give the firm a unique perch from which to control consumer data as well as block new vendors.

The vital importance of these structural intermediation services is also detailed in Treasury's recent report.<sup>13</sup> As it notes, the types of services detailed above have become critical to the ability of banks and other financial intermediators to undertake the credit underwriting, transaction processing, digital transformation, and – what many consider the most important business relationship – consumer facing services essential across a wide range of products including mortgage banking.

However, it is important to note that ICE/BKI's product suite includes one service not considered by Treasury because it is unusual, if not unique, across the array of third-party core processing services. This ICE product provides banks, securitizers, investors, traders, and other entities not only with vital structural intermediation services, but also with loan and related pricing. The ability not only to affect pricing by virtue of market power, but also to set pricing then charged by entities that might otherwise be competitors raises particularly thorny safety-and-soundness, consumer welfare, and antitrust challenges that will be addressed at length in the body of this paper.

We will also consider the extent to which concentration of this scale in functions so essential to residential mortgage finance meet the criteria now used by U.S. and global regulators to identify systemically important institutions and infrastructure entities. These systemic criteria only indirectly take market power into account, but market power is embedded in these factors because one entity will not reach the size necessary to trigger systemic risk if its size is small in comparison with a financial sector as a whole.

Similarly, the extent to which a company's stress can be absorbed without systemic risk due to replacement providers – i.e., the firm's substitutability – is a reflection of market power. Other systemic considerations buttress these market power factors – for example, the extent to which a company may threaten stability is also judged by its interconnections with other entities of potentially systemic scale or scope. If, for example, a company's infrastructure services are essential to major financial institutions or government agencies, then its activities have systemic consequence because of this market power.

Even if its market share seems manageable in terms of traditional measures of market power, a company or entity may be systemic if its counterparties depend on it, and they are stability-critical. For example, a company that serves only Fannie Mae and not also Freddie Mac and Ginnie Mae might be seen to have only a 33 percent market share, but its sudden inability to serve Fannie Mae or a decision simply not to do so and Fannie Mae's resulting distress could undermine mortgage market resilience and thus threaten financial stability and macroeconomic prosperity.

As discussed below, another systemic criterion is complexity. The table above makes it clear that ICE upon consummation of BKI's acquisition would have complex, overlapping, and opaque intra-group risks within its mortgage activities. However, these pale when considered in the broader context of ICE's overall corporate structure. This not only includes one entity posing so much systemic risk as to be so designated by U.S. regulators, but also some of the most important equity, bond, foreign-exchange and other financial instrument platforms across the globe. The extent to which risk in one ICE entity in one or another nation could come to threaten systemic activities in the U.S. mortgage market is currently not known to any prudential regulator or apparent from careful review of ICE public documentation regarding its overall U.S. operations or the ICE/BKI transaction.

However, even without the data necessary to evaluate the impact of ICE/BKI compounding ICE's existing systemic footprint, intergroup risks across ICE in the wake of BKI acquisition demonstrate the combined firm has a dominant market share in key structural intermediation services. To take just one example, ICE plans to integrate the transaction pricing power provided by BKI's Optimal Blue subsidiary with its large interest-rate risk identification and management business with a new product setting the interest rates at which lenders would offer mortgages. Building on its futures businesses – extensive across an array of asset classes – ICE also plans to create a mortgage rate futures market.<sup>14</sup> If any of these products misprices mortgages or the hedges taken to protect lenders and investors, the residential mortgage market could become suddenly unaffordable or, conversely, rates could be set so low as to cause significant stress and even systemic shock in this vital sector. Mispricing is always a risk in all business decisions, but it is considerably more likely when a price-setter's objectives are complicated by its own ability to profit at different points across a structural intermediary's origination, trading, hedging, and processing operations.

ICE also plans to take on a role akin to Fannie Mae, Freddie Mac, and Ginnie Mae after it acquires BKI by integrating all of its mortgage products with all those others it owns or controls across the financial and capital markets to create what it calls a "loan exchange" in the secondary market.<sup>15</sup> The extent to which pricing is set at different points in the mortgage life cycle has a direct impact on the liquidity and depth of secondary markets, creating yet another incentive for ICE/BKI not only to price mortgages, but also numerous other services to enhance its role in secondary-market infrastructure and – for the first time – apparently also direct intermediation.

The sheer scope of ICE/BKI's mortgage activities also poses a concentration risk of particular concern in mortgage finance. As shall be detailed later in this paper, extensive research finds that the U.S. mortgage market is already highly concentrated with regard not only to lenders, but also providers of core processing, servicing, underwriting, and pricing services. This concentration is judged not only by traditional market power measures, but also by one unique to the residential mortgage sector: contractual coordination within the flow of funds through origination, aggregation, and securitization. This network is described as a "small world" that is on its own a new source of systemic risk.<sup>16</sup> When this network of mortgage transactions relies on the same processing and analytical technology, risks are still more tightly concentrated and systemic risk becomes a still more significant concern because critical underwriting, risk management, loss mitigation, and pricing inputs come from the same source. If it is wrong in key respects or if its operational resilience is challenged, then the residential mortgage sector would be subject to acute and immediate stress above and beyond that associated with direct credit risk on mortgage-related obligations.

These risks are exacerbated by the fact that ICE/BKI would enjoy this market power without the discipline demanded of the safety-and-soundness, operational resilience, and revocability regulation applied to all other systemically important participants in the U.S. financial system that are not direct agencies of the U.S. Government. As noted, this transaction is both a horizontal merger – ICE is buying a significant competitor to some of its own existing activities – and a vertical one by virtue of the new activities BKI would bring to complete ICE's long sought control of customers over the life of a mortgage and at all times a consumer seeks housing finance.

The role of regulation is critical to effective antitrust policy even though studies demonstrate that it is rarely considered due to the focus on sectors such as technology where there is little regulation or on telecommunications, where regulation is now generally limited to spectrum and related considerations. However, a recent study assessing the role of regulation in vertical mergers concludes that regulation is a critical factor determining the extent to which a merger does or does not provide anticipated public welfare benefits.<sup>17</sup> This study thus argues that competition analysis in regulated sectors cannot effectively



anticipate the impact a merged entity will have on its market unless it takes account of how the merged entity is or could be governed to prevent anti-competitive behavior.

## II. Structural Intermediation Systemic Risk and Regulation

Prior to the GFC, financial regulators and antitrust authorities largely focused on the input into a financial transaction (e.g., deposit or other funding) and its output (e.g., mortgage loans and securitization) – without regard to the processes and procedures in between input and output essential to rapid, sound, accurate, and final transaction completion. This financial intermediation is generally understood to be liquidity or maturity transformation processes such as turning deposits into loans. These intermediation processes are principally transaction-based and accomplish the vital economic function of transforming a dollar deposited in a checking account into a dollar invested in a thirty-year mortgage that, through more intermediation, is then turned into an instantly liquid mortgage-backed security (MBS). Too much risk in this intermediation process creates hazard for depositors if a lender makes too many high risk mortgages and goes broke or depositors take their funds from a lender so suddenly that it and/or the entity intending to purchase mortgage loans for the secondary market ceases operation.

However, systemic risk can also and still more quickly arise if seemingly administrative functions associated with financial transactions such as servicing or custody collapse or the financial system's transaction-processing plumbing suddenly runs dry or breaks down. Structural intermediators include the clearinghouses that turn a request to make a payment into a payment received or, as with ICE, that clear equities for all investors and execute or facilitate complex derivative transactions between financial institutions and end-users.

Prior to the GFC, infrastructure risk was largely seen as operational – i.e., the equivalent of someone accidentally pulling a plug critical to the smooth operation of a payment clearinghouse. During the GFC, it became clear that many forms of market-critical infrastructure – e.g., the companies that cleared and settled over-the-counter (OTC) derivatives – could not meet the margin calls designed to absorb clearing-and-settlement risk, leaving end-users without the funds necessary to honor their own obligations and causing a systemic cascade of failed payments. In response, global regulators and those in the U.S. decided to move as much OTC trading as possible to central counterparties (CCPs).

As shall be discussed in detail below, ICE is now either the platform for many market-critical CCPs or a market-critical CCP in its own right. As a result, its exposure to margin-related risks is extensive due to all the systemic level trading, pricing, and data infrastructure it now provides across a wide array of financial instruments in the global markets.

To take just one example, ICE is the dominant provider of trading and hedging services in the European oil-and-gas sectors. These experienced so much price volatility earlier this year that traders sought central bank rescue windows.<sup>18</sup> Global regulators have now heightened their fears about CCP resolvability under stress to an “urgent” matter requiring rapid attention.<sup>19</sup> ICE is also a major participant in the foreign-exchange market; here, the central bank for central banks known as the Bank for International Settlements recently identified a grave systemic risk due to as much as \$65 trillion of off-balance sheet foreign-exchange exposures.<sup>20</sup>

Little-noticed but system-essential intermediation services are also integral to the nation's \$11.7 trillion residential mortgage market.<sup>21</sup> In turn, mortgage finance is essential to national prosperity, equaling as it does 74 percent of gross domestic product.<sup>22</sup>

## ***Systemic Regulatory Construct***

As noted, one of the costliest lessons of the GFC was the necessity of regulating firms providing critical financial infrastructure services to ensure resilience under stress. As in any house, the financial system may collapse if plumbing meant to carry vital resources is clogged or breaks. As a result, the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) created the Financial Stability Oversight Council (FSOC) within the Treasury Department comprised of the nation's principal financial regulators.<sup>23</sup> The FSOC is authorized, among other things, to designate systemically-important financial institutions (SIFIs).<sup>24</sup> Upon SIFI designation, a nonbank falls under the purview of the Federal Reserve, which then crafts capital, liquidity, internal-control, governance, and resolution requirements tailored to its activities.<sup>25</sup> SIFIs are also subject to regular Federal Reserve examination and resulting governance.

Congress also found in 2010 that, "proper functioning of the financial markets is dependent upon safe and efficient arrangements for the clearing and settlement of payment, securities, and other financial transactions," with designation of "financial market utilities" (FMUs) proceeding from this finding in Title VIII of the Dodd-Frank Act.<sup>26</sup> The law differentiates FMUs critical to the securities and derivatives markets for regulation by the Securities and Exchange Commission (SEC) or Commodity Futures Trading Commission (CFTC) and those focused on payment, settlement, and clearing governed by the Federal Reserve Board (FRB).

In general, FMUs active in payment, settlement, or clearing activities are those found to pose systemic risk in financial transactions related to funds, securities, clearing, or other instruments (e.g., mortgages). FMUs may also be designated if they manage the risks or activities associated with continuing financial transactions (e.g., servicing). The Treasury Department now plans to reinvigorate the systemic designation construct for SIFIs and activities along with retaining that for FMU designation and regulation.<sup>27</sup>

## ***Current ICE Systemic Risk Profile***

Given this framework, we turn now to an analysis of ICE's current systemic designation, its rationale when declared in 2012, events since that time that heighten the systemic risk feared a decade ago, and the impact of ICE's market-power in mortgage finance following this transaction would have on these risks. We also address the extent to which ICE upon acquisition of BKI should trigger additional systemic risk regulation within the FMU construct and/or at the parent company level as a designated nonbank SIFI.

In 2012, the FSOC designated ICE Clear Credit LLC as an FMU.<sup>28</sup> As indicated by the FSOC in its designation, ICE Clear Credit is a CCP that clears the majority of U.S. credit default swaps (CDS), derivatives that permit financial institutions and their end-user customers to hedge or even speculate in the credit risk of companies, countries, and many other entities. This is clearly a systemic arena – as of the most recent data, the total gross notional value of outstanding CDS was \$11.9 trillion.<sup>29</sup>

CCPs were intended to resolve risks in the over-the-counter derivatives market evident in the 2008 crisis, but 2020 showed that centralizing derivatives transactions in these CCPs and their resulting market power may well equal or perhaps surpass the OTC risk these reforms sought to reduce. If margin requirements protect CCPs at the expense of end-users and dealers, then critical commodities,

foreign-exchange, and financial markets may well collapse. If CCPs accept lower margin requirements, then they are at direct risk because they lack the capital, liquidity, risk management, and other buffers demanded of banks, broker-dealers, futures commission merchants, and the GSEs. If CCPs thus falter due to the lack of these built-in buffers, they may well fail with significant and adverse systemic impact because – again in sharp contrast to banks – they are not covered by resolution planning requirements nor do they have access to Federal Reserve emergency liquidity absent Fed rescues such as that in 2020.

In addition to its CDS clearing activities, ICE is also a major financial-market presence outside its CDS clearing activities, controlling as it does the New York Stock Exchange (NYSE) and numerous other equity, foreign exchange, commodity, and bond market platforms in the U.S., U.K., and other nations. The U.K. has also named an ICE unit, ICE Clear Europe, as systemic financial market infrastructure (the global FMU equivalent).<sup>30</sup> ICE is indeed so important in so many markets that its concerns about implementing the Russian oil-price cap decided upon by G-7 heads of state has threatened its implementation in the European Union.<sup>31</sup>

As noted above, CCP resolution is now a top priority concern of global bank, securities, and insurance regulators.<sup>32</sup> FDIC Chairman Martin Gruenberg also recently reiterated<sup>33</sup> that the lack of CCP resolvability is a source of significant systemic risk. CCPs are also a critical systemic risk identified again in the Federal Reserve’s most recent semiannual financial stability assessment.<sup>34</sup>

### **III. BKI Acquisition Systemic Implications**

Given that ICE is currently a systemic threat, there are at least two potential ramifications of ICE’s proposed BKI acquisition first to the resulting company and then to the financial market as a whole and the macroeconomy that depends on it:

- contagion risk due to stresses that spread from CDS, equity, bond or other markets in which ICE plays a critical role to mortgages or vice-versa that then threaten ICE/BKI liquidity, solvency, and/or operational resilience resulting from joint ownership and unregulated activities; and/or
- systemic risk inherent in core financial infrastructure outside the scope of prudential regulation and resolvability standards in a market as critical to financial stability and macroeconomic growth as U.S. residential mortgages.

We take each of these considerations in turn.

#### ***Capital/Mortgage Market Contagion Risk***

In its 2012 finding that weakness at ICE Clear Credit could prove systemic, FSOC concluded that:

An ICE Clear Credit failure or disruption of its services could directly pose credit and liquidity risk to other financial market infrastructures, which include depositories, other clearinghouses, custodians, DCMs [designated contract markets], trade repositories, and swap execution facilities. Since many of ICE Clear Credit’s clearing members are G-SIFIs [i.e., global banks and nonbanks], a disruption or failure could indirectly pose credit and liquidity issues to every major

market in the United States, every significant market participant in the United States, and all significant financial market infrastructures in the United States.<sup>35</sup>

Given the scale of disruption resulting from ICE Clear Credit stress, it is very likely that ICE as a whole would also face immediate threats to its own liquidity and, thereafter, to its solvency. To the extent ICE's capital markets activities stand firm, this would only be because, in the absence of resolution planning, it will have transferred its risk to large dealer banks and end-users as happened in 2020 when global central bankers were forced to support CCP functioning.

In the absence of another central-bank (i.e., taxpayer) backstop, stresses absorbed by ICE would then thus surely transmit to ICE's mortgage intermediation services, posing operational, liquidity, solvency, and resolvability vulnerabilities sure to threaten the parent company. The FSOC order to some extent reflects this contagion risk, but the company's meteoric growth over the past decade makes it inevitable that stress at one CCP under ICE's control would quickly spread to others as counterparties would fear doing business with them. This would essentially be a CCP "run," a phenomenon never seen before at CCPs but one evident in financial markets and thus anticipated in the regulatory calls for urgent action noted above.

And, unlike 2012, stress at ICE Clear Credit would surely also transmit to the U.S. mortgage market, posing not just immediate threats to financial stability, but also to the economy as a whole. BKI's activities once folded into ICE would surely come to depend on the parent's overall technology platform, capital, and funding sources – if this were not to be the case, then the economies of scale and scope that provide the acquisition's rationale would be sharply diminished, if not eliminated. Indeed, as detailed in ICE's descriptions of this transaction,<sup>36</sup> the company expects it to be accretive in year one by virtue of many new customers for newly "rationalized" services.

Further, to the extent an entity with the mortgage footprint detailed in the table above is threatened, its counterparties would face the same challenges FSOC identifies in the capital markets. These mortgage counterparties are not only the same G-SIFIs cited above – i.e., the global systemically important banks and other major nonbank financial institutions active across the spectrum of residential mortgage finance – but also Fannie Mae and Freddie Mac, firms that between them hold \$7.5 trillion in assets.<sup>37</sup> The Federal Housing Administration and Veterans Administration are taxpayer-owned mortgage entities that would also experience severe shock, threatening the \$2.3 trillion Ginnie Mae MBS market.<sup>38</sup> Federal Home Loan Banks provide advances (i.e., loans) to banks and credit unions collateralized by mortgages. If the market weakens, the value of these loans and thus their liquidity could be threatened, putting the \$1 trillion of Home Loan Bank System consolidated obligations (i.e., debt) at risk.<sup>39</sup>

ICE/BKI distress and/or failure would of course not threaten the extent to which taxpayers indirectly and directly back Fannie Mae, Freddie Mac, Ginnie Mae, and the Home Loan Banks. However, these taxpayer-backed entities could face significant operational risk even if vital intermediation systems dim for only a short period of time. For example, payments due to the GSEs and government agencies could go missing and lead to immediate and significant liquidity disruption. If ICE/BKI's loan origination or pricing methodologies prove faulty, then the GSEs and agencies – not to mention the entire mortgage investment sector – could experience severe losses for which some entities may be insufficiently capitalized.

This would be not only a direct and immediate systemic risk in financial markets, but also a severe and manifold threat to taxpayers. It is worth recalling that the U.S. Treasury was forced not only to support an immediate conservatorship of Fannie Mae and Freddie Mac in 2008 due to a liquidity crisis, but also to provide them with a line of credit that at its height totaled \$445 billion.<sup>40</sup> Treasury authorized

this enormous backstop because any hint of weakness at the GSEs threatens global financial system stability no matter the GSEs' nominal status as entities without a full-faith-and-credit guarantee from the U.S. Government.

It is thus clear that shocks in the CDS market for which ICE Credit Clear is critical could quickly transmit through the parent company to the global financial system by virtue not only of ICE Clear Credit's indispensable role in the credit derivatives market, but also because it is most unlikely that stress at so vital a subsidiary would stay ring-fenced in that subsidiary given the absence of CCP resolution and safety-and-soundness buffers. Any contagion risk within the ICE corporate empire would surely destabilize ICE/BKI mortgage intermediation activities and thereby the global mortgage market and financial system.

### ***Direct ICE/BKI Systemic Risk Factors***

Even if none of these systemic consequences of an ICE/BKI merger result from contagion risk across the parent company, the mortgage intermediation services ICE would control upon its acquisition pose the systemic risks Congress sought to contain by direct instructions to regulators regarding systemic FMU designation for entities providing critical financial infrastructure and, should a company's activities fit into infrastructure as Congress stipulates, then also for systemic designation of the firm on its own.<sup>41</sup> Here, Congress states that the FSOC is directed not only to identify bank holding companies (BHCs) and nonbanks that may threaten financial stability, but also to promote market discipline and enhance "the integrity, efficiency, competitiveness, and stability of the U.S. financial markets."<sup>42</sup> The Act also stipulates that nonbank SIFIs are to be designated if their financial distress or failure threatens financial stability or if their activities have the potential to do so.

As discussed in more detail below with regard to consumer welfare, the law also directs FSOC to consider SIFI designation if a company's activities threaten vulnerable consumers or households.<sup>43</sup> Here, the law states with regard to consumer and social welfare that:

[For purposes of systemic designation], the Council shall consider the importance of the company as a source of credit for low-income, minority, or underserved communities in the United States, and the impact that the failure of such company would have on the availability of credit in such communities.<sup>44</sup>

ICE/BKI has yet to suggest it would be a direct provider of mortgage credit. However, as noted, its role as a provider of structural intermediation services with significant market power makes it a critical engine for credit that might not be extended in the absence of its products and services. In time, other service providers could offer essential origination, servicing, pricing, and consumer facing services. But, during the time it takes for these providers to gain the scale and scope necessary to replace ICE/BKI's systemic role, significant shortages in mortgage credit availability are likely, especially for higher risk borrowers.

Thus, if antitrust regulators allow the ICE/BKI transaction, then the FSOC will need to consider not only if the combined entity should join ICE Clear Credit as a designated FMU, but also if ICE as a whole now includes so many systemic subsidiaries, affiliates, and activities in so many markets in so many countries with systemic risk and credit availability implications as to warrant SIFI designation on size, non-substitutability, complexity, interconnectedness, and other statutory grounds.

## IV. Market Integrity and Consumer Welfare Considerations

Now, we turn to another statutory prescription for financial and antitrust authorities: the requirement that they also judge the extent to which a company upon consolidation undermines market integrity – i.e., the ability of the market to innovate, operate efficiently, and ensure fair access and pricing to all potential customers and end-users. As discussed below, these market integrity considerations also have demonstrable, direct impacts on consumer welfare, with each a vital consideration for both antitrust and regulatory authorities.

To the extent market integrity and consumer welfare tests are not met, regulators must undertake systemic designation and/or prevent undue consolidation of market power. This is most directly and quickly done by antitrust authorities in advance of a problematic market power consolidation. As we shall show, the ICE/BKI merger is likely to pose significant market integrity and consumer welfare risk. Antitrust authorities have ample statutory power with which to deny or limit this merger.

But should they not do so, the company must then receive careful, advance consideration for both additional FMU or SIFI designation at the mortgage activity level within the consolidated company or as a whole for the parent company pursuant to the statutory requirements for nonbank SIFI designation. As demonstrated above, Congress clearly intended that any financial entity with the ability to dominate a systemic-critical sector or adversely affect markets and/or consumers must be subject to Federal Reserve rules limiting the extent to which any such company could use its market power to prevent fair and free competition that ensures systemic resilience as well as sound, efficient, innovative financial services.

### *Market Power and Mortgage Pricing*

A key attribute of the ICE/BKI combination is pricing power. As noted above, the combined firm would control products designed to retain customers for the life of any mortgage they may come to have and throughout the entire life cycle of each loan's origination, pricing, servicing, hedging, and securitization. The firm would control a company known as Optimal Blue which offers what it describes as "scenario-specific pricing," real-time price comparisons, "product support," "best-pricing for private mortgage insurance," real-time rate and price displays, and technology integration.<sup>45</sup> And, as noted, ICE plans to integrate all this mortgage-specific pricing power with its formidable presence in the derivatives markets to craft new futures and secondary-market products with significant market power at still greater systemic risk.

Pricing power has long been understood as the most formidably destructive effect of undue market power. To the extent a company is able by virtue of its integrated structure and resulting cross-subsidies to undercut pricing in core products, it is able to drive out competitors, further consolidating its own market power and enabling it over time to price all offerings to meet its own return-on-investment objectives. Even before ICE proposed its acquisition, Black Knight was cited in one antitrust action as forcing its customers to "pay extraordinarily high prices and fees for an underperforming and antiquated product."<sup>46</sup>

Concentrated pricing power also directly threatens financial stability because distress at one single provider could plunge a market- or economy-critical sector such as residential mortgages into acute dysfunction. This becomes increasingly likely as core intermediation services move outside the purview of federal regulation with the significant pricing edges afforded by the absence of costly rules such as mandatory capital requirements, contingency planning, systems redundancy, and stress testing. Further, market power adversely affects market discipline because there is no competition

to contain exploitation or inefficiency even as concentrated systemic-impact considerations heighten the extent to which the consolidated provider is viewed as too big to fail by its own counterparties.

Finally, pricing driven by one company's demands rather than by market forces is sure to adversely affect consumers and put key products out of the reach of low-and-moderate income households – a consequence with dire implications not only for consumer welfare, but also the public good given the vital importance of equitable access to affordable homeownership.

### *Analytical Considerations*

The President in his executive order on U.S. competition policy observed that, "In the financial-services sector, consumers pay steep and often hidden fees because of industry consolidation."<sup>47</sup> Much research also substantiates concerns with consolidated market power related to mortgage finance, especially with regard to structural intermediation services such as those ICE/BKI would provide.

Although the uniformity and interchangeability of most U.S. mortgages defines product offerings, the competitive landscape in U.S. mortgage finance is local, not national. For example, one recent academic study finds that mortgage pricing is based on local-market concentration.<sup>48</sup> In these areas, mortgage interest rates may be the same, but credit availability varies dramatically at considerable disadvantage to minorities and their communities. Loans in concentrated markets also generally have lower loan-to-value ratios and are extended to higher-score borrowers. Further, mortgage market concentration increases upfront fees by about 35 basis points or a \$1,200 hike in initial mortgage cost for average loan size.<sup>49</sup> All of these concentration effects are found to result in a significant public welfare cost given that mortgages are generally the largest financial obligation for U.S. households and their home is their largest asset and thus a critical source of long-term wealth accumulation and economic equality.

One might say that this study's conclusions are inapplicable to ICE/BKI because they are based on lenders, which is one mortgage-related service the firm has yet to undertake despite its dominant position in loan origination software. However, by virtue of its structural intermediation services, ICE/BKI defines essential parameters of local market conditions.

Upon merger approval, ICE/BKI would control 63 percent of the market-critical loan servicing software for first-lien obligations. It would also control 35 percent of the market used expressly for pricing. Given the demonstrable fact that concentrated mortgage origination markets increase costs and heighten disparities in credit availability, still more concentrated market power in the key inputs into these pricing decisions can only increase the market power of dominant providers, including ICE/BKI.

Further, even if it could be demonstrated that upfront fee and credit origination decisions are uniquely the result of lender behavior independent of any of the software or third-party pricing models they purchase, another new study demonstrates the direct and adverse impact of concentrated market power in structural intermediation. This study first finds that the cost of intermediation as a fraction of the loan amount is already surprisingly high – i.e., on average 142 basis points from 2008 to 2014.<sup>50</sup> The passthrough of intermediary costs to borrowers is found to be almost complete, but volatile over time based on mortgage market demand. Although markets have recently cooled as the Fed has raised rates, it seems likely that intermediation costs have been considerably above this paper's estimate during the period of unprecedented demand after 2020. Even in 2014, the rate of intermediation cost passthrough was high compared to other consumer finance markets, which the paper concludes was likely because most of these other markets are considerably more competitive.

Two recent studies in fact directly attribute high mortgage processing costs to uncompetitive market factors. While exogenous factors such as GSE guarantee fees played an important role early in the 2010s in driving up costs set without regard to market interest rates, data show that processing costs rose as the number of mortgage market originators and related servicers sharply declined after the GFC.<sup>51</sup> A recent paper from the Federal Reserve looks specifically at the varying rate of refinancing demand as a guide to constrained processing capacity, also confirming the results that concentrated markets reduce credit availability for higher-risk borrowers.<sup>52</sup>

Importantly, both papers show that market power factors affecting mortgage pricing undermine the impact of the Fed's quantitative-easing monetary policy in which the Fed purchased trillions of agency MBS in hopes of reducing the cost of mortgage borrowing and thus stimulating the overall economy. These objective studies thus show considerable market integrity and consumer welfare challenges as mortgage intermediation power grows, challenges with broad and adverse implications not only for consumers – especially the most vulnerable among them – but also the economy as a whole.

### ***Market Efficiency Considerations***

Concentrated markets in mortgage-related structural intermediation thus have demonstrable and adverse implications for market integrity and consumer welfare as a result of moral hazard, higher borrowing costs, reduced credit availability to higher-risk and minority borrowers, and the ability to frustrate the FRB's monetary policy objectives. While product commoditization and the role of the U.S. Government and its agencies contributes to concentrated market power, it is exacerbated by the same reliance on a few providers of other critical infrastructure services that poses significant systemic risk and does so – unlike other structural infrastructure entities – outside the reach of regulation that not only reduces systemic risk, but also promotes effective competition. When a few providers concentrate market power without regulatory restrictions, their ability to harness the efficiencies of network effects is unconstrained and the likelihood of new entrants providing competing software, pricing, servicing, and customer facing products is sharply diminished.

### ***Consumer Data Rights***

In addition, allowing one provider to control consumer data across each borrower for each loan at every point over the life of the loan – a core proposition of the ICE/BKI merger<sup>53</sup> – would make the mortgage market's ongoing operational resilience dependent on a single entity's ability to ensure its data systems are secure from cyberattacks, natural hazards, and many other risks. Banks are subject to extensive regulation governing information technology and processing resilience;<sup>54</sup> as an unregulated intermediary, ICE/BKI would be exempt from these resilience standards in all aspects of its operations other than ICE Clear Credit as a result of that entity's systemic FMU designation.

Further, the President's competition order stresses the vital importance of consumer rights to determine how their data are used and to control personal information in order to maintain the ability to choose freely among competing consumer finance providers.<sup>55</sup> Congress also demanded action to ensure these rights, with provisions in the Dodd-Frank Act<sup>56</sup> requiring CFPB rules in this arena now moving towards final action.<sup>57</sup> The FTC also has a broad agenda of work under way to enhance consumer data rights.<sup>58</sup> Approving the ICE/BKI transaction as proposed in the midst of this work could have dramatic and adverse consequences for consumer data rights with regard to residential-mortgage finance.



Once a dominant firm has all these consumer data, it is most difficult to force divestiture of problematic activities upon a subsequent FTC determination that data are being used for dominance. The agency may be able retroactively to force ICE/BKI to divest an affiliate or subsidiary, but once data are owned, they are a long-lasting source of value that cannot be readily dissipated.

Indeed, ICE acknowledges this in describing the BKI transaction,<sup>59</sup> saying that it plans upon acquisition to go beyond its business of selling data to mortgage market companies to licensing these consumer data – i.e., controlling it for lengthy periods of time. Any lender or other mortgage entity unwilling to accept ICE/BKI licensing terms could find itself frozen out of key markets even if some of the data derive from its own customers and activities. Allowing this power to reside in a single dominant provider would also be a severe blow to U.S. households since, as noted above, mortgages are their principal financial obligations and often their main source of wealth accumulation and family financial security.

ICE/BKI's power over consumer data is already formidable to the point of being problematic. In 2018, it acquired control of MERS, a national utility containing all of the data on every homeowner necessary to make it – not the homeowner – the borrower of record for purposes of all mortgage servicing transactions and data exchanges. This powerful position over the marketplace as a whole was previously controlled by an industry consortium that took over MERS after Fannie and Freddie – which had it up to that point – were deemed to have exercised undue market power by virtue of all these data. Indeed, MERS under the GSEs was sanctioned in 2011 by the FRB, Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation, Federal Housing Finance Agency, and Office of Thrift Supervision for “deficiencies and unsafe or unsound practices,” including failures to “exercise appropriate oversight, management supervision and corporate governance” and the failure to establish “adequate internal controls, policies, and procedures, compliance risk management, and internal audit and reporting requirements.”<sup>60</sup>

In addition to having data on the borrowers of every U.S. mortgage to facilitate servicing, ICE plans to use the data it gains via BKI to assess borrower economic status on a real-time basis.<sup>61</sup> Based on these data, lenders could quickly offer refinancings or new products to mortgage borrowers or quickly reduce the amounts available to an increasingly risky borrower under a home-equity line of credit.

Did ICE's acquisition of MERS result in any benefits that outweigh risks to consumer privacy? This does not appear to have been the case with regard to a key criterion – registration costs. In 2018 when ICE acquired MERS, this cost was \$11.95; now, it is \$24.95.<sup>62</sup> This may seem a small amount and indeed it is, but giant companies promise efficiency as a benefit offsetting market power; here, whatever efficiency has been gained accrues solely to ICE.

ICE is also in the position of guiding borrowers to possible homes they may wish to purchase by virtue of its control of a major national real-estate listing service, Paragon. The firm has asked investors to “think about the opportunities of now combining data from consumer behavior to home listings all the way to loan performance” and access to the secondary market in which it also plans to compete.<sup>63</sup> As noted, ICE plans not only to sell these data, but also to license them, essentially taking control over a vast trove of personal consumer data with a wide range of opportunities to cross-sell, market, and even reduce exposures to borrowers across the entire home purchase, mortgage origination, refinancing, and equity extraction sectors. In describing the benefits of the BKI transaction regarding data, ICE executives noted that, “we think it's [i.e., all the new data] really just kind of tip of the spear when we think about how we can monetize that data.”<sup>64</sup>

As noted, ICE/BKI would be a dominant and even exclusive provider of structural intermediation services in this sector and each and every one of the products detailed above depends in its entirety on the ability to obtain, hold, process, and transmit personally identifiable consumer data as well as to collate, contain, and transform these data to maximize the intermediary's efficiency, pricing power, and market position.

## **Innovation**

As noted, antitrust regulators now consider the extent to which an acquisition affects innovation. Details of ICE/BKI's operations with regard to technology and contractual commitments are closely held, but litigation in 2019 provides an insight based on the information available to and belief of one of the nation's largest mortgage companies, Pennymac.<sup>65</sup> In this case, Pennymac argued that BKI, apparently not then involved in merger discussions with ICE, engaged in both closed-source and contractual requirements that sharply constrained innovation related to mortgage servicing. Mortgage servicing is a vital systemic-infrastructure function acknowledged by FSOC in several recent reports as a significant systemic concern.<sup>66</sup>

Specifically, Pennymac alleges that BKI requires clients to make contractual commitments that make it very difficult for customers to transfer to a new mortgage servicing technology provider. Among these contractual requirements is one that gives BKI a claim over client-developed software interacting with its products, making it difficult if not impossible for servicing clients with competing providers who may well have more efficient and less expensive servicing platforms that better accommodate growing regulatory demands for rapid action in response to consumer inquiries.<sup>67</sup>

An additional accusation by Pennymac that bears consideration is BKI's practice of bundling products and services in an "all or nothing" manner. Upon notification of its intent to terminate its contract for Black Knight's MSP platform in 2019, Pennymac expressed its intent to use ancillary products including LendingSpace and certain LoanSphere products. On May 3, 2019, Pennymac formally notified BKI that it would not renew its license for MSP but intended to continue licensing other applications from BKI. On July 31, 2019, BKI sent written notices of termination that were set to automatically renew and which Pennymac had previously identified as not part of its termination of MSP.<sup>68</sup> Market participants including lenders, servicers, GSEs, affordable housing stakeholders, and regulators cannot hope to encourage mortgage-technology innovation if a dominant market participant uses contractual terms and product bundling to discourage or even prohibit use of new and better technological solutions.

## **V. Conclusion: Policy Options to Remedy Systemic, Market, and Consumer Risk**

Analysis of the widely recognized systemic risks now posed by ICE, implications for still more risk following the proposed acquisition of BKI, current systemic risks and limited regulatory reach, and emerging market integrity and consumer welfare risks demonstrate powerfully that allowing ICE to gain a dominant role in mortgage market structural intermediation poses embedded hazards not easily remedied if this merger is allowed to proceed as planned. Although the FTC after merger consummation could at some future date seek to unravel the transaction, the best prophylactic against undue market power is simple acquisition denial. Once BKI is integrated into ICE, divestiture would be a complex regulatory undertaking that might permit considerable arbitrage and evasion.

To the extent the transaction proceeds without substantive remediation, then FSOC can and indeed must consider the extent to which so large a mortgage market role makes ICE still more systemic and thus makes the designation of only one capital markets affiliate an insufficient buffer against financial instability, macroeconomic shocks, and reduced homeownership for low-and-moderate income households.

At the least, the FSOC would need to designate the business activities covering mortgages across the entire ICE company to be a systemic financial market utility or institution. However, this would prove difficult if, as noted above, ICE quickly integrates BKI into its operations on an entire or selected basis.

Even if mortgage market activities are differentiated in a legally distinct corporate entity within ICE that can be separately designated, doing so would not necessarily limit the contagion risk within ICE as a whole due to its significant market power in derivatives, the broader capital market, certain high-risk trading arenas, and residential mortgage markets. As a result, designation of ICE also as a whole as a systemically important financial institution can and should be quickly considered should the Black Knight acquisition be approved.

As a firm principally engaged in financial activities, ICE is clearly subject to FSOC authority. Upon designation, its entire network of financial intermediation, trading, data, and technology services would come under Federal Reserve regulation. It would thus be required to hold sufficient capital and liquidity to absorb risks, ending its current status as a major source of systemic risk deemed by market participants to be too big to fail given its exemption from resilience buffers and resolvability requirements. Similarly, the Fed would ensure that ICE has enterprise-wide risk management suitable to this scale and scope along with effective internal controls to prevent mortgage market and consumer data or systems from being threatened by operational or other risks elsewhere in the ICE network. The scale and scope of consumer data monetization clearly and expressly predicated in this transaction warrant particular scrutiny given the absence of regulatory oversight and coverage by the data privacy standards applicable to banking organizations.<sup>69</sup>

However, SIFI designation for ICE – desirable though it is – should not be considered as an alternative to FMU designation for the firm’s combined mortgage market operations. Direct operational and safety-and-soundness regulation of ICE’s sweeping mortgage activities is necessary much as the largest bank holding companies are regulated at both the parent-company level and separately for all banking operations by the FRB, OCC, and/or FDIC. Direct regulation of systemic-scale activities as well as those posing risk to taxpayer-backed entities such as the GSEs and Ginnie Mae is essential to ensure that concentrated mortgage market power does not allow undue use of consumer data and intragroup cross-selling or pricing policies that puts borrowers, traders, investors, competitors, the financial system, or economy at risk.

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