Fair Isaac Corporation
181 Metro Drive
San Jose, CA 95110 USA
T +1 408 535 1500
F +1 408 452 1023
www.fico.com

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Via Federal eRulemaking Portal (http://www.regulations.gov)
and e-mail (RegComments@fhfa.gov)

Alfred M. Pollard, General Counsel
Attention: Comments/(RIN) 2590 AA95
Federal Housing Finance Agency
400 7th Street SW, 8th Floor
Washington, D.C. 20219

RE: Proposed Rule on Enterprise Regulatory Capital Framework

Fair Isaac Corporation ("FICO") submits this letter in response to the Federal Housing Finance Agency's ("FHFA") proposed rule published June 30, 2020 on the regulatory capital framework for Fannie Mae and Freddie Mac (together, the "Enterprises"). FICO appreciates the opportunity to offer input on this important topic. We applaud the FHFA for its efforts to solicit and consider input on this subject from all interested stakeholders.

FICO supports the FHFA's efforts to establish regulatory capital requirements to ensure that the Enterprises have sufficient capital to operate in a safe and sound manner and continue to fulfill their statutory mission to serve as reliable sources of liquidity for the $11.2 trillion housing finance market. It is essential that the Enterprises are able to fulfill this statutory mission across the economic cycle, particularly during and after an economic downturn.

FICO encourages the FHFA to consider the benefits of advanced consumer credit data analytics in adopting a final rule on the regulatory capital framework for the Enterprises. FICO believes that the FHFA's determination of adequate capital requirements for the Enterprises would be informed and refined by advanced data analytics, which can help ensure that the Enterprises are well positioned to meet their statutory mission during future periods of severe economic stress.

FICO (NYSE: FICO) is a leading analytics software company, helping businesses predict consumer behavior and make better decisions that drive higher levels of growth, profitability, and customer satisfaction.[1] Founded in 1956 and based in Silicon Valley, FICO is best known for

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[1] FICO's groundbreaking use of Big Data and mathematical algorithms to predict consumer behavior has transformed entire industries. FICO provides analytics software and tools used across multiple industries to

pioneering credit scoring in the 1950s, which led to the development of the FICO® Score, the standard measure of consumer credit risk in the US. The Enterprises have relied upon the FICO Score for conforming mortgage loans since 1995. The Enterprises currently use Classic FICO Score for eligibility, loan pricing, and financial disclosure purposes.

Since the first release of the FICO® Score in 1989, FICO has continued to develop, improve, and monitor multiple generations of FICO Scores through the economic cycle, spanning a number of recessions and expansions, and various economic climates in between. FICO continues to develop new and innovative consumer credit risk tools by leveraging its innovative analytic techniques invented by its industry-leading data scientists.

The latest innovation from FICO, the FICO® Resilience Index ("FRI"), introduces a new analytic to capture consumer credit risk linked to economic disruption.[2] FRI is designed for use in combination with and to complement the industry standard FICO Score, by enabling the rank-ordering of credit files within FICO Score bands according to their resilience to an economic downturn. FRI was developed by measuring payment performance for comparable sets of consumers during a stable economy compared to the Great Recession. The difference in outcomes is reflected as a consumer's resilience to economic stress. FRI converts information available at the nationwide consumer reporting agencies (CRAs) into a numeric index that is indicative of higher risk for delinquent payment behavior in the event of severe economic stress. FRI analyzes in detail the credit information found in a consumer's credit file at a CRA, including tradelines (credit accounts) and inquiries. FRI is scaled to the range 1 to 99 with lower values indicating greater resilience and higher values indicating greater risk in the event of a severe economic downturn.

FRI can provide the Enterprises with important consumer credit risk management insight which can be used to help ensure safe and sound operation even during periods of economic decline. During periods of extreme economic stress, two factors in the mortgage market are critical to preserving capital. First, and most intuitively, loss avoidance through properly restrictive credit policy stems the impairment of capital on new business. Second, continued strong new loan originations on sustainable credit cohorts generates capital to offset losses on legacy loans. Properly balancing these two factors can dampen a downturn, fuel a quicker recovery and continue to provide housing access to well qualified borrowers.

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manage risk, fight fraud, build more profitable customer relationships, optimize operations and meet strict government regulations. Many FICO products have reached industry-wide adoption. Today, the company offers products on the forefront of artificial intelligence and data science technologies.

[2] *See* White Paper: Measuring Consumer Resilience to Economic Stress Using the FICO® Resilience Index, *available at* https://www.sifma.org/resources/general/measuring-consumer-resilience-to-economic-stress-using-the-fico-resilience-index/; The FICO® Resilience Index: Addressing Volatility in Credit Risk Management, Mercator Advisory Group 2020 Report, *available at* https://www.fico.com/sites/default/files/upload_files/Mercator-FRI-Paper.pdf.

Traditionally, credit policy sets broad underwriting standards. Underwriting standards are tightened once economic stress appears and loosened once a recovery is well established. Both the tightening and loosening generally occur too late, increasing losses and falling short of providing capital to bolster recovery. These reactions are not irrational. Market participants know that more downturns are predicted than actually occur so they are reluctant to pull back with widespread tightening until the stress has become self evident. As losses mount and capital is depleted, market participants are reluctant to put their diminished capital at risk until they are certain the recovery is firmly underway. While rational, this behavior is also strongly pro-cyclical, leading to larger than necessary losses and keeping well qualified potential homeowners out of the market.

In order to temper this pro-cyclicality, credit and capital management policy can benefit from even finer instruments than changes in credit scores, LTV and DTI levels. Historical evidence indicates that even under the worst economic stress, more than 80% of lower credit score cohorts of fully underwritten loans with proper income documentation and appropriate ability to pay standards pay off as scheduled. Nonetheless, reasonable levels of capital cannot sustain losses of up to 20% on these cohorts. The key to dampening pro-cyclicality involves better segmentation of borrowers within these cohorts.

The key opportunity for the Enterprises is to be able to identify borrowers, within a particular credit and collateral profile, who can best handle economic stress. Identification of resilient borrowers allows credit risk managers to fine tune their policy changes. As concerns about impending stress grow, risk managers can continue to make credit available to the resilient borrowers even as they pull back on risk in general. This allows them to reduce risk without dramatically cutting off volume. Thus, underwriting tightening can occur earlier than usual, but at a lower magnitude, decreasing ultimate losses that occur should the high stress materialize.

Once severe stress has occurred and elevated losses start to impact capital, lenders want to increase volume as soon as it is safe to do so and to as many resilient borrowers as possible in order to generate new income to help offset losses. Simply loosening credit without clear indication of recovery would be imprudent. Deeper analytics which help identify more resilient consumers allow lenders to extend credit in order to test the strength of any nascent recovery. This increased lending, by itself, may actually help fuel an earlier and more robust recovery.

Investors benefit as well from more advanced measures of consumer credit risk. As the credit risk transfer market has expanded, bond and reinsurance investors have looked for more detailed information on the performance of deals under stress. Their need is, in some ways, even more acute than the requirements of credit policy risk managers. First, investors are the long term holders of risk and are thus more exposed to long term economic trends than originators who generally offload the bulk of their exposure. Second, in the credit risk transfer market, profitability is determined by differentiating between stress and non-stress credit risk performance.

Currently, investors must assume that all borrowers with a particular credit and collateral profile will perform similarly under stress. However, access to information that differentiated consumers according to their resilience under stress would give investors the opportunity to

request specific sub-cohort pooling to fit their risk/return expectations. This would result in tighter spreads for deals with a higher than average proportion of resilient borrowers. Likewise, deals with lower than average resilience would command wider spreads. This market pricing would reinforce the counter cyclicality described above with reference to credit policy. As perceived risk of economic downturn increased, investors would move marginally towards more resilient borrowers without having to abandon lower credit cohorts entirely.

Better consumer level information also helps investors even in the absence of imminent stress. As has happened over the past several years, spreads on credit risk transfer deals narrow significantly when investors' perception of risk decreases. The narrower spreads leave less room for error in pricing the deals. Therefore, more sharply focused differentiation of credit risk at the consumer level helps investors properly identify relative value based on portfolio composition.

FICO analysis has quantified the significant benefits of FRI when applied to a sample of mortgages originated in 2007—a period where consumers were about to experience substantial financial stress.[3] FICO used a random sample of 10 million depersonalized credit records in this analysis. Consistent with Enterprise loan eligibility and pricing guidance, FICO examined the impact of FRI at FICO® Score cutoffs of 680 and 720. FICO compared a credit risk strategy based solely on Classic FICO Score with a dual matrix strategy including both Classic FICO Score and FRI. The focus of the strategy was to hold approval volumes constant—so some records with low FRIs (indicating borrower resilience) and just below cutoff FICO Score were swapped in, and some records with high FRIs (indicating greater sensitivity to economic stress) and just above cutoff FICO Score were swapped out.

At a FICO® Score cutoff of 680, layering FRI into the credit risk strategy resulted in a decrease in subsequent default rate from 4.27% to 4.04%—**a relative reduction in the new mortgage default rate of over 5% (5.3%).** With the dual Classic FICO Score/FRI strategy, roughly 3.3% of the new mortgage population "swapped in." In other words, **over 3% of the total new mortgage population would receive more beneficial terms (approval vs decline, or better APR) with the use of FRI** in addition to FICO Score, relative to simply using a FICO Score cutoff of 680.

The use of FRI showed even more benefit at a FICO® Score cutoff of 720. Layering FRI into the credit risk strategy resulted in a decrease in subsequent default rate from 3.06% to 2.77%—**a relative reduction in the new mortgage default rate of roughly 10% (9.5%).** With the dual Classic FICO Score/FRI strategy, roughly 5.3% of the new mortgage population "swapped in." Stated another way, **over 5% of the total new mortgage population would receive more**

[3] Analysis by Tom Parrent, former chief risk officer for Genworth Financial, shows that from 2010 to 2015, nearly 600,000 additional mortgages could have been originated to consumers with FICO® Scores between 680 and 699, had FRI been available to lenders at the time. In a white paper (*see* footnote 2 above), Mr. Parrent calls FRI "a significant step forward in consumer credit modeling" and "a significant addition to the toolkits used by risk managers, portfolio managers, loan servicers, originators and regulators," with a wide range of use cases for the mortgage industry, ranging from stress testing to risk-based pricing to loan servicing.

beneficial terms (approval vs decline, or better APR) with the use of FRI in addition to FICO Score, relative to simply using a FICO Score cutoff of 720.

By studying past recessions, we know that in a down economy credit criteria tightens and access to credit shrinks as lenders try to mitigate credit risk. FRI can be helpful to monoline organizations such as the Enterprises in navigating through changing economic cycles. All market participants would benefit from a system that is even more precise in assessing consumer credit risk, and less prone to broad credit restrictions and undifferentiated risk pricing, which can tighten the flow of credit during an economic downturn.

FICO again appreciates the opportunity to provide comments on the important topic of the regulatory capital framework for the Enterprises. FICO will continue to support the FHFA, the Enterprises, and the mortgage finance industry participants to help maintain a resilient and liquid credit market. If you have any questions or would like additional information from FICO, please contact me directly at 734-239-4890 or joannegaskin@fico.com.

Sincerely,

/Joanne M. Gaskin/

Joanne M. Gaskin
Vice President, Scores and Analytics
FICO