

period of time until the cause of the losses can be remedied, thereby reducing the risk of failure. The Act requires OFHEO to establish, by regulation, risk-based capital standards for the Enterprises. The regulation will describe a risk-based capital stress test (stress test) that OFHEO will develop and implement to determine for each Enterprise the amount of capital² necessary to absorb losses throughout a hypothetical ten-year period marked by severely adverse circumstances (stress period).

Use of a stress test will enable OFHEO to tailor carefully the Enterprises' capital standards to the specific risks of the Enterprises' businesses. It also will provide a structure for incorporating interrelationships among different types of risk (prepayments, for example, relate to both credit and interest rate risk).

Statutory Requirements

The Act specifies a risk-based capital standard for each Enterprise. This standard establishes the amount of capital necessary to withstand simultaneously adverse credit and interest rate risk scenarios during the stress period plus an additional amount to cover management and operations risk, as follows:

Credit Risk

The Act establishes a credit risk scenario based on a regional recession involving the highest rates of default and loss severity experienced during a

period of at least two years in an area containing at least five percent of the total U.S. population. The stress test will apply these default and loss rates, with any appropriate adjustments, over the ten-year stress period on a nationwide basis to the Enterprises' books of business.³

Interest Rate Risk

The Act presents two interest rate risk scenarios, one with rates rising and the other with rates falling. The Act further describes the path of the ten-year Constant Maturity Treasury (CMT) yield for each scenario and directs OFHEO to establish the yields of other financial instruments during the stress period in a reasonably consistent manner. The stress test for each Enterprise incorporates the scenario with the most adverse impact.⁴

In the rising rate scenario, the ten-year CMT yield increases during the first year of the stress period and then remains constant at the greater of (a) 600 basis points above the average yield during the preceding nine months or (b) 160 percent of the average yield during the preceding three years. The Act further limits the increase in yield to a maximum of 175 percent of the average yield over the preceding nine months.⁵

In the falling rate scenario, the ten-year CMT yield decreases during the first year of the stress period and then remains constant at the lesser of (a) 600 basis points below the average yield during the preceding nine months or (b) 60 percent of the average yield during the preceding three years. The Act further limits the decrease in yield to not more than 50 percent of the average yield in the preceding nine months.⁶

New Business and Other Activities and Considerations

Initially the stress test assumes that the Enterprises conduct no additional new business once the stress period begins, except for the fulfillment, in a manner consistent with recent experience and the economic characteristics of the stress period, of contractual commitments to purchase mortgages and issue securities.⁷

The stress test must take into account distinctions among mortgage product types, different loan-to-value ratios (LTVs), and any other appropriate factors.⁸ OFHEO determines the appropriate consideration and treatment of all other factors, activities, or characteristics of the stress period not explicitly identified and/or treated in the Act—such as mortgage prepayments, hedging activities, operating expenses, dividend policies, etc.—on the basis of available information, in a manner consistent with the stress period.⁹

Management and Operations Risk

Finally, to provide for management and operations risk, after determining the amount of capital an Enterprise needs to survive the stress test, the Act requires OFHEO to increase that amount by 30 percent to set the required risk-based capital level for each Enterprise.¹⁰

Philosophy Guiding Stress Test Development

The mission of OFHEO is to ensure that the Enterprises are adequately capitalized and operating in a safe and sound manner, consistent with the achievement of their public purposes. The principal objective of risk-based capital standards is protection of the taxpayer from potential Enterprise insolvency. However, effective capital standards should also permit the Enterprises to fulfill their public purposes while pursuing prudent business practices and strategies. Although the stress test produces a single capital requirement, it effectively creates marginal capital requirements—incremental requirements for each additional dollar of business—for every type of product the Enterprises guarantee or hold in portfolio. Marginal capital requirements for mortgages held in portfolio will vary depending on the risk, as reflected in the stress test, of an Enterprise's funding strategy. These marginal capital requirements will have significant bearing on how the Enterprises choose to conduct their businesses.

OFHEO will seek to design the stress test so that the incentives it creates closely reflect the relative risks inherent

² For purposes of the ANPR, the term "capital" means "total capital" as defined under section 1303(18) of the Act (12 U.S.C. 4502(18)) to mean the sum of the following:

- (A) The core capital of the [E]nterprise;
- (B) A general allowance for foreclosure losses, which—
 - (i) shall include an allowance for portfolio mortgage losses, an allowance for nonreimbursable foreclosure costs on government claims, and an allowance for liabilities reflected on the balance sheet for the [E]nterprise for estimated foreclosure losses on mortgage-backed securities; and
 - (ii) shall not include any reserves of the [E]nterprise made or held against specific assets.
- (C) Any other amounts from sources of funds available to absorb losses incurred by the [E]nterprise, that the [Director of OFHEO] by regulation determines are appropriate to include in determining total capital.

The term "core capital" is defined under section 1303(4) of the Act (12 U.S.C. 4502(4)) to mean the sum of the following (as determined in accordance with generally accepted accounting principles):

- (A) The par or stated value of outstanding common stock.
- (B) The par or stated value of outstanding perpetual, noncumulative preferred stock.
- (C) Paid-in capital.
- (D) Retained earnings.

The core capital of an [E]nterprise shall not include any amounts that the [E]nterprise could be required to pay, at the option of investors, to retire capital instruments.

³ Section 1361(a)(1) (12 U.S.C. 4611(a)(1)).

⁴ Section 1361(a)(2) (12 U.S.C. 4611(a)(2)).

⁵ Section 1361(a)(2)(C) (12 U.S.C. 4611(a)(2)(C)).

⁶ Sections 1361(a)(2)(B) (12 U.S.C. 4611(a)(2)(B)).

⁷ The Act states that OFHEO may consider the impact of new business conducted during the stress period after taking into consideration the results of studies conducted by the Congressional Budget Office and the Comptroller General on the advisability and appropriate forms of new business assumptions. The studies must be completed within the first year after the issuance of the final risk-based capital regulation. OFHEO may incorporate new business into the stress test four years after the

regulation is issued. Section 1361(a)(3)(C) and (D), (12 U.S.C. 4611(a)(3)(C) and (D)).

⁸ Sections 1361(b)(1) and (d) (12 U.S.C. 4611(b)(1) and (d)). The Act uses the phrase "differences in seasoning of mortgages" which is equivalent to differences in LTVs. The term "seasoning" is defined as the change over time in the ratio of the unpaid principal balance of a mortgage to the value of the property by which such mortgage loan is secured. Section 1361(d)(1) (12 U.S.C. 4611(d)(1)).

⁹ Sections 1361(b) and (d)(2) (12 U.S.C. 4611(b) and (d)(2)).

¹⁰ Section 1361(c)(2) (12 U.S.C. 4611(c)(2)).