

## **Impact**

*A regulatory impact analysis must accompany every economically significant federal rule or regulation. The Office of Policy Development and Research performs this analysis for all U.S. Department of Housing and Urban Development rules. An impact analysis is a forecast of the annual benefits and costs accruing to all parties, including the taxpayers, from a given regulation. Modeling these benefits and costs involves use of past research findings, application of economic principles, empirical investigation, and professional judgment.*

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# **The Impact of Limiting Sellers Concessions to Closing Costs**

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*The views expressed in this article are those of the author and do not represent the official positions or policies of the Office of Policy Development and Research or the U.S. Department of Housing and Urban Development.*

## **Summary of Impact Analysis**

The National Housing Act requires the U.S. Department of Housing and Urban Development (HUD) to adjust program standards and practices to operate the Mutual Mortgage Insurance Fund (MMIF) on a self-sustaining basis. In a recent revised notice, “Federal Housing Administration Risk Management Initiatives: Revised Seller Concessions” (HUD, Office of the Assistant Secretary for Housing, 2012), the Federal Housing Administration (FHA) placed a ceiling on the closing cost concessions that sellers can make to borrowers. The set of actions outlined in the revised notice will reduce the FHA’s net losses resulting from high rates of insurance claims. The total gain to FHA is expected to range from \$60 to \$70 million annually. The additional social benefits from preventing foreclosures, which are positively associated with seller concessions, are estimated at \$25 million. The combined compliance cost for homebuyers and sellers could range from \$21 to \$97 million and depends a great deal on the rate of capitalization of concessions into sales prices.

## Need for Policy Change

The immediate purpose of the policy change is to achieve the statutorily mandated 2-percent minimum capital reserve ratio. The broader purpose, however, is to preserve both the historical role of the FHA in providing a home financing vehicle during periods of economic volatility and HUD's social mission of helping underserved borrowers. FHA loans are in greater demand as a result of the failure or withdrawal of private investors from the mortgage market. FHA's share of new single-family mortgages was about 17.0 percent (33.0 percent for all home purchase mortgages) in fiscal year (FY) 2010, up from 3.4 percent in FY 2007. The dollar volume of insurance written jumped from \$77 billion in FY 2007 to \$319 billion in FY 2010. The growth in the MMIF portfolio over that 3-year period coincided with a set of difficult economic conditions, namely, continued housing price declines and increasing unemployment levels. Together, these external conditions increased the risk of additional losses to FHA.

An independent actuarial study (IFE, 2009) showed that the MMIF capital ratio had fallen to less than its statutorily mandated 2-percent threshold. The study reported that FHA would likely sustain significant losses from mortgage loans made before 2009 because of the high concentration of seller-funded downpayment assistance mortgage loans and declining real estate values nationwide. The capital ratio of the MMIF remains at 0.5 percent, less than the critical level (HUD, 2010).

## Description of the Revised Notice for Reducing Seller Concessions

The revised notice<sup>1</sup> revises the proposed cap on the amount of seller concessions that can be considered as offsets to actual closing costs rather than as inducements to purchase.<sup>2</sup> Seller concessions include any payment toward a borrower's closing costs and other fees by any other party with an interest in the transaction, including the seller, builder, developer, mortgage broker, lender, or settlement company. This notice makes the following changes to seller concessions on FHA mortgages:

- It limits the acceptable uses of seller concessions to (1) payments toward borrower closing costs, (2) prepaid items, (3) discount points, (4) the FHA upfront mortgage insurance premium, and (5) any interest rate buydown. Under this revised definition, seller payment supplements for homeowners or condominium association fees, mortgage interest payments, and mortgage payment protection plans are unacceptable to FHA.

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<sup>1</sup> FR-5404-F-04.

<sup>2</sup> The proposed notice of July 15, 2010 (HUD, Office of the Assistant Secretary for Housing, 2010), consisted of three risk-management initiatives directed at underwriting (McFarlane, 2010). The revised notice and this impact analysis address seller concessions specifically, whereas the regulatory impact analysis for the proposed notice focused primarily on guidelines for credit scores and loan-to-value ratios.

- It reduces the amount of seller concessions permitted as offsets to actual closing costs to 3 percent<sup>3</sup> or \$6,000,<sup>4</sup> whichever is greater, but not to exceed the borrower's actual costs. This reduction in concession allowances does not apply to HUD homes or the Neighborhood Stabilization Program, for which the allowance remains at 6 percent.<sup>5</sup>

## Default Risk and Seller Concessions

Sellers do not generally provide concessions without increasing the price of housing by a fraction of the seller concessions. The increase in the sales price to the homebuyer, however, does not mean that the property is worth more. The increase in the loan-to-value (LTV) ratio raises FHA's exposure to default risk. Consider the role of seller concessions on loan size in the following illustrative example.

Suppose that someone wishes to buy a \$350,000 home and that the required downpayment is at least 3.5 percent (the minimum downpayment FHA allows), or \$12,250. Suppose that closing costs are \$14,132, comprising a fixed cost of \$4,000 and a variable cost of 3.0 percent of the size of the loan.<sup>6,7</sup> If the potential buyer has only \$12,250 of cash on hand to close the deal, the seller could assist the buyer by paying the closing costs.

The concession is not a simple donation, however; for every 1 dollar of seller concession, the seller may elect to raise the price of the home by 1 dollar. In this particular example, the final sales price to the buyer would be \$364,132 for a home with a market value of \$350,000 and a 100-percent capitalization rate. The final LTV ratio would be 100.5 percent, rather than 96.5 percent. The LTV ratio increases because the market value does not change, but the price paid by the buyer increases.

A higher LTV ratio increases the risk of default and eventual foreclosure. To prevent excessive risk, conventional mortgage lenders have capped allowances for seller concessions at 3 percent of the sales price on loans with LTV ratios similar to those of FHA loans.

In general, default and foreclosure typically arise when (1) homeowners have negative equity (the value of the home is less than the outstanding principal balance on the mortgage) and (2) homeowners experience a reduction in income and wealth because of job loss or an event such as a medical emergency that renders making monthly mortgage payments difficult (HUD PD&R, 2010). This difficult situation is often known as a *double trigger*.

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<sup>3</sup> The percentage is based on the lesser of sales price and appraised value.

<sup>4</sup> To address potential future increases in closing costs, the \$6,000 cap this notice establishes will be indexed to a measure of inflation. The dollar limit may increase annually and at the same percentage rate as the FHA national loan limit floor.

<sup>5</sup> In mathematical terms, the limitation on concessions is—Minimum of [closing cost, maximum of (\$6,000, 3 percent of property value)], where property value = minimum of (sales price, appraised value).

<sup>6</sup> Total closing costs vary by a wide set of parameters such as the loan amount, sales price, and interest rate. In this article, I choose to characterize closing costs as varying with loan amount.

<sup>7</sup> The interaction among the variables is slightly more complex, especially if any of the variables depend on the sales price of a home. See HUD PD&R (2011a) for a more in-depth treatment.

Most observers argue that the level of negative equity must exceed some threshold before default and foreclosure become a possibility (Bhutta, Dokko, and Shan, 2010). Strategic default is uncommon for several reasons (HUD PD&R, 2010). Households always need shelter, and defaulting induces search costs and the disruption of established patterns of living. Families also often expect that housing values will rebound and thus interpret a relatively small negative equity situation as temporary. Nonetheless, raising the LTV ratio increases the exposure to risk. For example, Bhutta, Dokko, and Shan (2010) found that the median borrower does not strategically default but rather defaults only after equity falls to -62 percent of the home's value, yielding a 162-percent LTV ratio. On balance, prevailing evidence suggests that negative equity alone (except in extreme cases) is unlikely to trigger foreclosure.

The effect of seller concessions on the riskiness of a loan varies over the life of the loan. In the short run, seller concessions reduce the borrower's housing expense because of the large lump sum payment made to the borrower (Cotterman, 1992). Over time, however, the net effect of seller concessions will be to increase the probability of default and foreclosure. To confirm this finding, Cotterman (1992) found that FHA's default experience was worse on loans with seller contributions. Woodward (2008) found that foreclosures are more frequent when seller contributions are higher.

In the revised notice (HUD, Office of the Assistant Secretary for Housing, 2012), HUD provided statistical data illustrating a greater incidence of home loss for borrowers who received seller concessions in excess of 3 percent. The notice provided further evidence of the relationship between default risk and seller concessions, for loans originated in 2009. The defining metric is a failure rate, which includes all loans that resulted in an insurance claim (by March 31, 2011), are presently in foreclosure processing, or have gone through the foreclosure process but the insurance claim has not yet been filed or processed. Such failures are directly associated with losses to FHA insurance operations.<sup>8</sup>

Credit risk, within each loan amount category, is highest for loans with larger closing costs and with larger concessions.<sup>9</sup> Credit risk rises faster and higher for loan amounts greater than \$240,000 than for lower loan amounts, because closing costs and concessions each exceed 3 percent of property value. Exhibit 1 (Table F of the revised notice) shows that, although the lowest risk loans are those in the greatest loan amount category (greater than \$360,000) when no concessions are present, the highest risk is for the same category of loans when concessions are more than 4 percent of property value and especially when they are more than 5 percent of property value.

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<sup>8</sup> HUD recognizes that not all loans for which a foreclosure process begins will result in the loss of the borrower's home and a claim payment from FHA. The various rates at which foreclosure actions have been initiated, however, do provide a valid measure for differentiating credit risk across groups of loans.

<sup>9</sup> See tables E, F, and G of HUD, Office of the Assistant Secretary for Housing (2012).

## Exhibit 1

### To-Date Percentage Failure Rates by Loan Amount and Seller Concession Rates, 2009 Loan Originations

Loan Amount (\$ thousands)	Seller Concessions (% of Property Value <sup>a</sup> )								
	0 <sup>a</sup>	≤ 1	2	3	4	5	6	> 6	All
≤ 180	0.72	1.12	1.01	1.03	1.18	1.41	1.58	2.15	<b>1.04</b>
181–240	0.62	0.67	0.73	0.87	1.04	1.09	1.45	1.71	<b>0.79</b>
241–360	0.70	0.79	0.82	1.03	1.48	1.85	1.51	2.27	<b>0.88</b>
> 360	0.58	0.91	0.76	1.15	1.53	2.24	6.70	0.00 <sup>b</sup>	<b>0.93</b>
<b>All</b>	<b>0.66</b>	<b>0.77</b>	<b>0.80</b>	<b>0.94</b>	<b>1.14</b>	<b>1.32</b>	<b>1.66</b>	<b>2.02</b>	<b>0.89</b>

<sup>a</sup> Any amount up to \$500 is considered 0. Other categories represent amounts greater than the next lower limit, up to the percentage listed. Rows add to 100 percent.

<sup>b</sup> Only 19 loans are in this cell.

Notes: Foreclosure action is completed and a claim filing is pending. Data as of March 31, 2011.

Source: U.S. Department of Housing and Urban Development, Office of Evaluation

## Economic Impact of Regulatory Change

Reducing the number of claims to FHA by limiting risky loans will contribute to restoring FHA's fiscal integrity and meeting the required 2-percent capital ratio. Quantifying the benefit of doing so involves the problematic tasks of measuring the extent to which this notice increased FHA's probability of survival and multiplying this change in probability by an estimate of the public benefit of FHA endorsement activities. Other effects of the notice are easier to measure.

A government agency's net revenue increase is usually treated as a transfer, because governments traditionally raise revenue through taxes and fees. In the case of the seller concessions restriction, the increase in FHA revenue occurs as the result of more rigorous underwriting practices that reduce the number of claims. FHA cannot alter the price it charges, but it can control costs through risk management practices. The lower costs can be considered a benefit to FHA. The gain to FHA is an eventual transfer to other parties. Reducing the number of the riskiest loans will enable FHA to insure more loans at the same cost or return excess revenues to the U.S. Treasury. Additional social benefits of reducing foreclosures are not captured in the estimated gain to FHA.

Compliance costs associated with this regulation include a higher loan cost for affected borrowers and possibly a higher cost for affected homesellers. First, borrowers who experience a reduction in seller concessions also experience an increase in the cost of their loans. Second, sellers who offer concessions as an incentive to potential buyers will face a compliance cost.

### Expected Impact of the Notice on the Number and Value of Loans

The revised notice is not expected to reduce the number of mortgages originated. The regulatory impact analysis (RIA) of the July 15, 2010 proposed notice, however, assumed that risk management initiatives would exclude some households from the benefits of homeownership. In the proposed version of the notice (HUD, Office of the Assistant Secretary for Housing, 2010), the denial of access to homeownership was primarily because of the introduction of a minimum credit score and maximum LTV ratio for FHA single-family mortgage insurance. A ceiling on seller concessions, which

is the subject of the revised notice, likely will not have a significant effect on mortgage origination. Some commenters on the July 15, 2010 proposed notice disagreed with the proposition that limiting seller concessions would not diminish access to homeownership. These commenters wrote that many FHA borrowers require the seller’s contribution to proceed with the purchase of the home.

HUD recognizes that an across-the-board reduction in concession allowances could have a large negative impact on the ability of low- and moderate-income households to purchase moderately priced homes (lower loan amounts). As Tables A, B, C, and D from the revised notice show, however, the impact of any change to seller concessions would not be great. For example, 80 percent of all loans have seller concessions not greater than 3 percent of home value. Table A of the notice, however, highlights how fixed-cost factors (for example, appraisals, title services, inspections, and flood and lien certifications) tend to create percentage amounts that are greatest for small-balance loans. More than 70 percent of loans of up to \$180,000 have closing costs in excess of 3 percent of the property value.

The \$6,000 limitation is generous to borrowers with loan amounts of up to \$180,000. In that loan value range, \$6,000 is greater than the 90th percentile threshold of all borrower closing costs (see Table D of the final notice). Thus, less than 10 percent of borrowers with loan amounts of less than \$180,000 would have concession allowances that are less than their actual closing costs. For borrowers in the next loan amount category (\$180,000 to \$240,000), \$6,000 nearly reaches the 75th percentile of closing costs. The binding limit for borrowers with loan amounts of \$195,000 or greater is not \$6,000. In that higher range, 3 percent of the property value is greater than \$6,000 and becomes the amount to compare with actual closing costs to determine maximum allowable concessions.

Exhibit 2 shows the actual effects of the proposed limitation when applied to the 2009 and 2010 loan originations this analysis uses.<sup>10</sup> Overall, the limitation would have affected just 13.4 percent of home purchase loans. The dollar amount of the resulting excess contributions appears in exhibit 2. For the lowest loan amount group, the median effect is less than \$1,000; for the highest loan amount group, it is more than \$4,000.

**Exhibit 2**

**Proposed Concessions Limitation, Effects by Loan Size Category, 2009–10 FHA-Insured Loans**

Loan Amount (\$ thousands)	Loans Affected (N)	Loans Affected (%)	Median Reductions at Various Percentiles, Affected Loans Only (\$)				
			5th	25th	50th	75th	95th
≤ 180	43,592	9.7	86	480	988	1,670	3,018
181–240	114,726	15.3	116	664	1,434	2,562	4,900
241–360	30,499	15.0	150	1,001	2,247	4,106	8,160
> 360	8,819	12.7	327	1,850	4,138	7,541	14,635

FHA = Federal Housing Administration.

<sup>10</sup> See tables J and K of HUD, Office of the Assistant Secretary for Housing (2012).

Of borrowers receiving an FHA guarantee, 82 percent make the 3.5-percent minimum required downpayment. HUD must therefore ensure that the notice adjusts allowable mortgage amounts appropriately for what may actually be inducements to purchase. This notice may or may not affect borrowers who make more than the minimum 3.5-percent downpayment.

Although HUD does not expect a ceiling on concessions to reduce the number of mortgages originated, I do expect a decrease in the dollar amount of the affected mortgage loans. The median reduction in concessions ranges from \$86 for the bottom 5th percentile of the smallest category of loans to \$14,635 for the top 95th percentile of the largest category of loans. Exhibit 2 illustrates that the median reduction in concessions for the most common loan amount category (\$181,000 to \$240,000) is \$1,434. Median reductions for the higher categories of loan amounts are \$2,247 and \$4,138.

### **Gain to FHA From More Rigorous Underwriting**

The effects on FHA of the revised notice will be to shift borrowers into groups with lower failure rates on average and decrease the number of loans with a greater share of concessions. For example, most loans characterized by seller concessions equal to 6 percent of value will move to a lower seller concessions category, except for the lower value loans, which are allowed a ceiling of \$6,000. In general, the proportion of loans with seller concessions will increase 3 percent or less. Combining the projected change in the distribution of loans with the distribution of the failure rate of loans can predict how the notice will affect failure rates of loans. The overall failure rate would fall from 0.89 to 0.86 percent. From this average decline, it is possible to deduce the decline in the affected group, which represents 13.4 percent of the total. If the failure rate of the unaffected group did not change, then the failure rate of the affected group would have to fall by 0.22 percentage points  $((0.86-0.89)/0.134)$ . HUD measured the failure rate of the affected group at 1.10 percent before the implementation of the notice. The post-notice failure rate would be 0.88 percent, which represents a 25-percent decline of failure rates. This result is consistent with Cotterman (1992), who finds that seller concessions increase default rates by 25 to 60 percent.

The effect of the revised notice will be to reduce the default rate and thus decrease the claim rate, which results in significant transfers to FHA. HUD bases its budget accounting on forecasts of claim and prepayment rates calculated using the forecasting model from the independent actuarial study of the MMIF (IFE, 2010). The actuarial models rely on 30 years of actual FHA experience and are calibrated to produce loan-performance outcomes using forecasts of future economic conditions. The following equation represents the expected net claim expense associated with any given loan in any given year:

$$\text{Expected claim amount} = \text{claim rate} \times \text{loss rate} \times \text{unpaid loan balance.} \quad (1)$$

The notice will affect the claim rate and loan balance for the group of borrowers affected by the notice. The claim rate is the number of claims during a particular period divided by the total number of loans endorsed when an annual insurance cohort was underwritten. The most recent budget forecasts an 8.11-percent cumulative claim rate for all mortgages (IFE, 2010).

The loss rate is the net loss after property sale recoveries, as a percentage of the unpaid balance on the defaulting loan. Exhibit E-1 of the actuarial review (IFE, 2010) provides a time series of loss rates. Loss rates were as low as 32 percent at the beginning of the 2000s but reached 61 percent by 2009. Integrated Financial Engineering's estimates of the loss rate for 30-year mortgages originated in 2011 range from 32 percent in the first year to 48 percent in the 30th year (IFE, 2010).

The revised notice has two expected consequences: (1) the balance of the affected loans will decline as allowable seller concessions decline, and (2) the claim rate on affected loans will fall as the LTV ratio declines. In the RIA of the notice (HUD PD&R, 2011a), PD&R calculated that the loan balance will decline from \$176,500 to \$175,000<sup>11</sup> and that the cumulative claim rate over 30 years of the affected loans will decline from 10.04 to 8.03 percent.<sup>12</sup> PD&R calculated that the present value of expected claims will fall to \$2,764, the present value of premium revenue will fall to \$5,785, and the net expected revenue to FHA will rise to \$3,022. The notice results in an approximately \$645 gain per loan to FHA when the discount rate is 3 percent.

An increase of net revenue from the subject loans provides a direct benefit to the financial status of the MMIF. Over time, this increase of FHA revenue might also lead to transfers to remaining FHA-insured borrowers through lower premium rates. The annual aggregate benefits would be approximately \$69 million when the size of the group affected is 107,200 (13.4 percent of 800,000 FHA loans endorsed annually). When the social discount rate<sup>13</sup> is 7 percent, the per-loan transfer is \$562 and the aggregate transfers are \$60 million.

## Benefit of Regulatory Change: Preventing Foreclosures

One indirect benefit of the notice would be to diminish the resource losses from foreclosures. Foreclosures cause sizeable losses, which borrowers, lenders, property markets, and local governments bear. An estimate of the loss from a foreclosure net of all transfers can contribute to a more comprehensive benefit-cost analysis. The estimate of the deadweight loss from a foreclosure could include transaction costs, some portion of the distress discount on the sale of foreclosed property, the negative effect of foreclosure on the value of surrounding properties, the loss to local government, and some loss in the welfare of borrowers.

The lender may incur significant losses from a foreclosure, which is given by

$$\text{Lender loss} = \text{loan balance} + \text{interest costs} - \text{sales price of foreclosed property} + \text{transaction costs.} \quad (2)$$

<sup>11</sup> The average FHA purchase loan originated in 2010 was \$175,000 (HUD PD&R, 2011b). Assume a perfect capitalization and an impact on seller concessions of \$1,500. A change in seller concessions of \$1,500 is approximately equal to the median decline of \$1,434 for home values of \$181,000 to \$240,000, a category that corresponds to the loan size of \$175,000. Using \$175,000 as our original loan balance and adding \$1,500 in capitalized concessions yields \$176,500.

<sup>12</sup> The post-notice claim rate of the affected loan is expected to be 0.99 (0.88/0.89) of the current claim rate. Given that the cumulative claim rate over 30 years is 8.12 percent, this change will represent a decline from 10.04 to 8.03 percent.

<sup>13</sup> To compute the net present value of the impact of a notice, it is necessary to discount future economic impacts. The higher the discount rate, which is an estimate that provides the time value of money, the lower the present value of future impacts.



Loss severity typically ranges from 30 to 50 percent of the current loan amount, depending on the state of the market and the size of the loan. For example, an average loss severity ratio (40 percent) and a standard loan size (\$175,000) would yield a lender loss of \$70,000. A large part of the lender loss comprises pure transfers, however. The goal of this discussion is to separate the real costs of a foreclosure from transfers in which one party's loss is another's gain.

The Regulatory Impact Analysis of this notice (HUD PD&R, 2011a) finds that the total deadweight loss is \$40,730 (approximately three-fifths of the lender loss). For one cohort, the decline in foreclosures is only 10 in the first year, with a peak of 320 in the fourth year, to total 1,280 foreclosures avoided over a 30-year period. The discounted present value over 30 years of the avoided externalities is \$47 million at 3 percent and \$41 million at 7 percent. The per-loan public benefit averages \$437 at a 3-percent social discount rate or \$385 at a 7-percent social discount rate over the 107,200 loans affected.

### **Reduction in Borrowers' Welfare: Increasing the Cost of Homeownership**

Seller concessions enable the borrower to allocate more of his or her funds toward the downpayment instead of for closing costs. Seller concessions alleviate some burden of upfront costs and facilitate an intertemporal transfer for the borrower. Thus, seller concessions permit the borrower to leverage the purchase of housing. The multiplier effect of seller concessions on housing consumption will increase with the maximum required LTV ratio. Not all borrowers, however, will find seller concessions advantageous. The increase in the size of the loan, and possibly the mortgage interest rate (as the probability of default increases with the size of the loan), may outweigh the benefit of reducing upfront costs. Overall, the limitation on seller concessions is estimated to affect only 13.4 percent of the home purchase loans analyzed. Exhibit 2 shows the dollar amount of the resulting excess contributions.

The regulation will distort the consumption of borrowers affected by the ceiling. A borrower who otherwise would have accepted a higher level of seller concessions will lose from a ceiling that restricts the amount of seller concessions that he or she may accept. Although seller concessions come at the price of a larger loan and higher mortgage payments, the assistance provides an opportunity that the borrower would not have without the concessions. A restriction on the size of seller concessions will affect borrowers who both (1) have a strong preference for housing versus non-housing consumption and (2) discount the future heavily. The optimal level of housing expenditure may be greater than what the borrower can afford without significant debt because of a household's demand for public services, home size, or desired length of commute. Such households will be more likely to demand debt to finance their housing consumption. Households that the regulation does not affect either spend less on housing or save to finance a greater portion of the upfront costs of a home purchase.

One means of estimating the magnitude of the impact of a ceiling on concessions would be a cost-effectiveness approach: to estimate the present value of the cost (mortgage payments and upfront costs of the loan) of providing the same level of housing at different levels of seller concessions. A reduction in seller concessions will increase the upfront costs but reduce the loan balance and thus reduce future mortgage payments. Whether the borrower loses will depend to a large extent on the

size of a borrower's discount rate relative to the mortgage interest rate. Borrowers with low discount rates are not likely to take advantage of seller concessions unless they are severely liquidity constrained. For a borrower with a 7-percent subjective discount rate and a 30-year fixed-rate mortgage at 5 percent,<sup>14</sup> however, decreasing seller concessions by \$1,500 will raise the present value of the cost of the mortgage loan by approximately \$200.<sup>15</sup> The aggregate loss to buyers would thus be \$21 million (13.4 percent X 800,000<sup>16</sup> X \$200). The cost of reducing seller concessions would be lower when the mortgage interest rate is higher because the corresponding reduction in mortgage payments would be lower. The recent history of interest rates of less than 5 percentage points (see HUD PD&R, 2011b) would suggest that the previous estimate of 5 percent is a reasonable one (that is, closer to what a borrower would pay than the Office of Management and Budget's (OMB's) estimated 7-percent private cost of capital).

Buyers have at least three potential responses to minimize the harm from reducing seller concessions: (1) reduce or postpone housing purchase, (2) find a less expensive loan, and, similarly, (3) ensure that they receive the full benefit of the seller concessions they receive. Thus, the \$270 estimated loss per borrower loss is a maximum.

### **Cost of Regulatory Change: Effects of Restrictions on the Seller**

The simplest way of thinking of a seller concession is as a transfer from the seller (or lender) to the borrower. For the purposes of an economic impact analysis, however, that characterization may not be completely accurate. Although the seller concession is literally a transfer from the seller to the buyer, it is also a mutually beneficial transfer. Seller concessions, when sellers use them properly, will make the difference between closing a home sale and losing one. In other words, an experienced seller will set seller concessions so that the expected loss from losing the sale is equal to the concession itself. The financial loss to the seller would be because of the opportunity costs of additional days on the market. Cotterman (1992) found that from one-half to three-fourths of seller concessions are capitalized into the sales price of a home, suggesting that the uncapitalized portion represents the reduced holding cost from a more rapid sale. If the seller benefits from having the option to offer contributions to closing costs, then the seller loses from the reduction of this flexibility.<sup>17</sup>

Imperfect capitalization of seller concessions reflects situations in which sellers benefit from offering the concession. I summarize the effect as follows:

$$\text{Market impact of reduced concessions} = \text{cost to borrowers} + \text{cost to sellers}, \quad (3)$$

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<sup>14</sup> See Exhibit D-1 of IFE (2010) for a forecast of mortgage interest rates.

<sup>15</sup> Present value of loan cost = downpayment + closing costs - seller concessions + net present value of mortgage payments.

<sup>16</sup> FHA predicts FY 2010 purchase loan volume to be 1.1 million. The FHA has recently forecast purchase loan volume in subsequent years to be approximately 800,000. This revised number is less than the prediction of 1.3 million found in the *Actuarial Review* (IFE, 2010). The first-time homebuyer tax credit affected previous estimates.

<sup>17</sup> The seller can just as easily reduce the asking price to sell a house. For example, a study of a policy change in Massachusetts that prevented relisting found that, after the policy change, sales prices in Massachusetts went down by around \$11,000 relative to prices in Rhode Island but that the average number of days on the market shortened by 18 (Tucker, Zhang, and Zhu, 2009).

where the “cost to borrowers” is equal to the increased cost of a loan as a result of concessions (taking into account the capitalization rate), and the increased cost to sellers is equal to  $(1 - \text{capitalization rate}) \times \text{the reduction in seller concessions}$ .

The share of transfers and efficiency loss will depend on the state of the market. For example, in the preceding analysis, I assume a perfect capitalization of seller concessions. A slack real estate market would lead to imperfect capitalization at, suppose, a 75-percent rate. Exhibit 3 illustrates that the benefits to borrowers of seller concessions would be greater. Instead of a \$200 borrower loss per loan from a \$1,500 reduction in concessions, the loss in transfers would be \$530. Additional efficiency losses of \$375  $(\$1,500 \times (1 - 0.75))$  per loan would accrue to sellers.<sup>18</sup>

One advantage to a loan originator of offering the closing cost concession is that the seller concession is not as transparent as a price reduction. Seller contributions to closing costs appear to be another source of confusion and friction in the mortgage market; for each \$100 the seller contributes, borrowers benefit in terms of reduced loan costs of roughly \$70 from depositories and large mortgage banks but closer to \$40 when dealing with brokers (Woodward, 2008). Perfectly informed borrowers who are diligent comparison shoppers should experience a \$100 reduction in loan costs for every \$100 the seller contributes. Thus, when lenders contribute to seller closing costs, the loss to the borrower will not be not as great as the preceding net present value calculation of \$200 assumes; perhaps only one-half as much. Indeed, greater borrower attention to the tradeoff between seller concessions and other loan costs could ensure that the borrower realizes the full benefit of the seller concession.

### Exhibit 3

#### Regulatory Impact of the Reduction of Seller Concessions

Impact	Capitalization Rate of Seller Concessions Into Sales Price							
	100 Percent				75 Percent			
	Discount Rate				Discount Rate			
	3 Percent		7 Percent		3 Percent		7 Percent	
	Per Loan (\$)	All Loans (\$ millions)	Per Loan (\$)	All Loans (\$ millions)	Per Loan (\$)	All Loans (\$ millions)	Per Loan (\$)	All Loans (\$ millions)
Gain to FHA	645	69	562	60	650	70	567	61
Benefit of foreclosures prevented	230	25	203	22	230	25	203	22
Cost to borrowers	200	21	200	21	530	57	530	57
Cost to sellers	0	0	0	0	375	40	375	40

FHA = Federal Housing Administration.

Notes: Assumes a 5-percent mortgage interest rate, a \$1,500 reduction in seller concessions, and 107,200 loans. Assumes all homebuyers the notice affects to have 7-percent discount rates. Only the gain to FHA and benefit of foreclosures prevented vary with the discount rate.

<sup>18</sup> The estimated combined effect on sellers and borrowers will be different from the change in concessions when the social discount rate used to calculate present value (3 and 7 percent, as provided by OMB) is different from the real mortgage interest rate paid by the borrower.

## Summary of Economic Impact

The advantage of limiting seller concessions on FHA loans will be to decrease the LTV ratio on affected loans and thus reduce the default risk for FHA. FHA will reduce the expected losses stemming from high rates of insurance claims that are paid on loans with high levels of seller concessions. The lower costs can be considered a benefit to FHA or the taxpayers. My estimates of the net gain to FHA (and subsequent transfer to the U.S. Treasury) range from \$60 to \$70 million, depending on the discount rate (see exhibit 3).

Reducing foreclosures has additional social benefits. Some deadweight costs (for example, distress discount related to property damage and transaction fees) would already be included in FHA severity loss estimate. Other deadweight costs, however (such as neighborhood externalities and costs to local government) are social costs separate from the severity loss estimate. PD&R has estimated the per-loan external costs at \$230 (at a 3-percent discount rate) and \$203 (at a 7-percent discount rate).

Costs associated with this regulation include a higher loan cost for affected borrowers and possibly a higher cost for affected homesellers. First, borrowers who experience a reduction in seller concessions also experience an increase in the upfront and interest costs of their loans. The loss to borrowers can vary depending on assumptions concerning the capitalization of seller concessions into home prices. When only a fraction of the seller concessions are capitalized, borrowers derive greater benefit from seller concessions and thus lose more when concessions are limited. When the market is tight, the loss to borrowers using seller concessions is \$200 per loan. The cost to the borrower rises to \$530 per loan when the capitalization rate is 75 percent.

Sellers who offer concessions as an incentive to potential buyers will incur costs. The size of the cost will depend on whether it is a buyers' or sellers' market, which the capitalization rate of concessions will indicate. In a healthy market, the sellers' cost of compliance will be close to non-existent because incentives are not necessary to sell the home. In a tight market, the prospective homebuyer recognizes that good homes go quickly. If borrowers want to leverage home purchases through seller concessions, they will have to accept the sellers' terms. In a slower market, however, a seller would be willing to share some costs of seller contribution. The cost to a seller could be \$375 per loan. Combined, the two costs are \$905 per loan in a slack market.

None of the aggregate effects meets the OMB threshold of economic significance (more than \$100 million), although some come close. Moreover, these estimates are highly stylized: behavioral responses would reduce the impact. Currently, the market is very slack and so the bottom half of exhibit 3 would represent the impact of the notice. Over the next few years, the real estate market will possibly become more vigorous, in which case, the top half of exhibit 3 would be more representative of the impact of the notice.

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