CBO Analysis Strengthens Case for Major Refinancing Program

By Alan Boyce, Glenn Hubbard, and Chris Mayer¹

The Congressional Budget Office recently released a working paper review of large-scale mortgage refinancing programs, similar to what has been proposed by Boyce, Hubbard, and Mayer, David Greenlaw (Morgan Stanley), Mark Zandi (Moody's Analytics), and others.

The report confirms many key arguments of proponents of major refinancing of currently guaranteed loans. Specifically:

- A major refinancing program for homeowners with currently guaranteed mortgages would save homeowners an average of \$2,600 each (P. 20). Three-quarters of these savings would be paid for by private mortgage investors (P. 3) who invested knowing the risk of prepayments due to lower interest rates (P. 8).
- For each 1,000 new refinancings, 38 fewer mortgages would default, with a total savings to the government in lower insurance costs of \$3.9 billion.
- The main cost identified to the federal government identified by the CBO was the loss in book value to the Federal Reserve absent that non-budget impact, CBO estimates a net gain to taxpayers of \$1.8 billion (p 22: (\$0.6) + \$2.4).² The Federal Reserve does not mark to market, so there will be no accounting impact on its balance sheet. The CBO also notes that "...the conclusion that the program has a net fair-value cost to the government overall is robust to a wide set of alternative assumptions." (P. 20)
- CBO's analysis shows that the GSEs benefit from refinancings in purely financial terms. The CBO says they will come out ahead by \$0.7 billion. (P. 21)
- CBOs estimates include a clear statement that the "reps and warranties" issue is small and should not be an obstacle to the program (P. 22).
- The CBO paper also mentions the benefits to communities from fewer foreclosures. It does not estimate these savings.

¹ Alan Boyce is CEO of the Absalon Project; Glenn Hubbard is Dean and Russell Carson Professor of Finance and Economics at Columbia Business School; Chris Mayer is Paul Milstein Professor of Real Estate, Finance and Economics at Columbia Business School and Visiting Scholar at the Federal Reserve Bank of New York. The authors would like to thank Daniel Hubbard and James Witkin for

helpful suggestions.

excellent research assistance and valuable comments and David Greenlaw and Joe Tracy for data and

² Our proposal also contains small additional spreads to be paid to the GSEs. With the inclusion of an additional guarantee fee, profits for the GSEs would more than offset even mark to market losses by the Federal Reserve in the CBO analysis. The CBO analysis confirms that such a program can be a budget-neutral event for the federal government.

The CBO analysis predicts that such a program would lead to a much lower number of new refinancings than estimated by other independent analysts. As noted below, there a number of inconsistencies in the CBO working paper relative to current market conditions, including the assumption of interest rates that are higher than are currently available and and very low assumed savings from reduced frictions which are now adding several full points to upfront borrower costs or obtaining a mortgage. .

The CBO analysis suggests that lowering mortgage rates and reducing barriers to refinancing would result in only 2.9 million new refinancings, amounting to \$7.4 billion per year, at great variance to private estimates from Goldman Sachs, Moody's Analytics, Morgan Stanley, and our own estimates suggesting an economic stimulus of up to \$40 to \$70 billion or more and helping 18 to 30 million borrowers (See Appendix Table 1).

We believe that the report greatly underestimates the likely take-up of an aggressive refinancing program as proposed by Boyce, Hubbard, and Mayer. For example, the CBO paper predicts that only about 30 percent of borrowers with 30year fixed-rate mortgages paying rates of more than 6.5 percent would take advantage of a streamlined refinancing program that could reduce their mortgage rate to well below 5 percent without concerns for being turned down due to poor credit or high LTV (CBO Table 3).

Instead, we believe that an appropriately structured refinancing program that minimizes closing costs, requires minimal underwriting, and that incentivizes servicers and originators to participate would mimic take-up rates at previous times when rates fell.

For example, in 2002 and 2003, monthly mortgage rates fell from 7.0 percent to 5.2 percent.³ More than 85 percent of all mortgages outstanding in January 2002 with rates above 7 percent prepaid their loan in the next 30 months. 4 An even larger reduction in mortgage rates from 6.1 to 4.2 percent from November, 2008 to June. 2011 resulted in prepayment by only about 40 percent of mortgages outstanding in November, 2008. And unlike 2002, many of those prepayments were actually defaults rather than refinancings. A Morgan Stanley analysis of actual versus predicted prepayment rates for securitized mortgage pools (similar to those used in the CBO analysis) also finds that overall prepayment was well below what would have been predicted from earlier periods. (See Appendix Table 2.)

CBOs also assumes that the gains from reduced transactions costs are limited to .25 basis points (p. 15), and thus sees small gains from reduced frictions. Yet current

⁴ Authors computations from LPS/McDash data on outstanding 30-year fixed rate mortgages

guaranteed by Fannie Mae or Freddie Mac.

³ Source: Freddie Mac Primary Mortgage Market Survey.

GSE LLPAs are often 2 full points upfront, and other margins throughout the process are at historic highs on top of this. A well designed program will see substantial gains from reducing these costs and greatly increase the numbers of borrowers in whose interests it is to refi compared to this very restrictive assumption in CBO's analysis.

We believe that most borrowers would like to refinance to lower rates, but are unable to do so due to frictions that are prevalent today, but are not modeled in the paper, including:

- 1) Underwater second liens
- 2) Conservative underwriting by lenders who fear the additional liability from originating all but the cleanest loans
- 3) Appraisal standards that have tightened appreciably
- 4) High delivery fees from Fannie Mae and Freddie Mac for mortgages for any borrower with less than a 40 percent down payment or a risk score below 700
- 5) Changes in bank capital regulation making mortgage origination much less attractive

Finally, it is challenging to assess the specific differences between the assumptions and models used in the CBO paper and the findings of other analysts. To improve transparency and comparative analysis, the public version of the paper should list key information such as the time period of the analysis, the level of key inputs such as the mortgage rate, the specific variables used in the statistical model, and the full output of the model.

We believe that all models attempting to predict the take-up rate of a widespread refinancing program face inherent challenges, including large changes in the structure of lending and availability of credit due to:

- The entry (and exit) of subprime lenders that substantially changed the composition of GSE and FHA borrowers in the last decade
- The availability of and qualification for cash-out refinancing
- The availability of second liens
- Appraisal and underwriting standards
- How originators assess their Reps and Warranties liability.
- The composition of various housing price indices, which are key inputs in all modeling efforts
- How to treat existing, current borrowers whose loans are not guaranteed by the GSEs
- The full impact of Basel III's harsh treatment of Mortgage Servicing Rights (MSRs)

The authors encourage a free flow of information, from the CBO and others, to more accurately estimate the potential for a more streamlined refinancing process. What is not in doubt is that 35-40 million households are stuck with legacy, high interest rate mortgages. This imperfection has negative implications for labor mobility, household savings, investment, and consumption.

<u>Appendix Table 1:</u> Comparison of various estimates of the impact of a widespread refinancing plan

Organization	Date Published	Coverage	Maximum Number	Maximum Amount	Mortgage Rate Used	Amt. Saved Per Loan
			Refinanced	Saved		Refinanced
Congressional Budget Office	9/7/2011	GSE & FHA	2.9 million	\$7.4 billion	Not published	\$2,600
Boyce, Hubbard, and Mayer (v. 11)	9/1/2011	GSE, FHA & VA	30 million	\$70 billion	4.0% (no points or closing costs)	\$2,333
Goldman Sachs	8/26/2011	GSE only	Not published	\$40 billion	4.25% (30- yr. FRMs); 3% (ARMs)	Not published
Moody's Analytics	10/7/2010	GSE, FHA & VA	18.5 million	\$56 billion	4.25%	\$3,027
Moody's Analytics	5/25/2011	GSE, FHA & VA	18 million	\$45 billion	4.5%	\$2,500
Morgan Stanley	7/27/2010	GSE, FHA & VA	18.5 million	\$46 billion	4.5%	\$2,500

CBO: Lucas, D., D. Moore and M. Remy. 2011. "An Evaluation of Large-Scale Mortgage Refinancing Programs," CBO Working Paper 2011-4, Washington DC.

Boyce, Hubbard, Mayer: Boyce, A., G. Hubbard and C. Mayer. 2011. "Streamlined Refinancings for up to 30 Million Borrowers."

Goldman Sachs: Philips, A. 2011. "Revisiting the Potential for Large Scale Mortgage Refinancing," *U.S. Daily*, August 26. New York, N.Y.: Goldman Sachs.

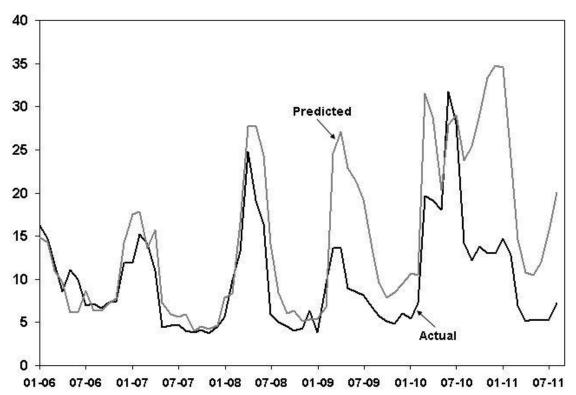
Moody's Analytics (2010): DeRitis, C. and M. Zandi. 2010. "Restringing HARP: The Case for More Refinancing Now," Moody's Economic and Consumer Credit Analytics, October 7.

Moody's Analytics (2011): Zandi, M. 2011. "To Shore Up the Recovery, Help Housing," Moody's Economic and Consumer Credit Analytics, May 25.

Morgan Stanley: Greenlaw, D. 2010. "US Economics: Slam Dunk Stimulus," *US Economics*, July 27. New York, N.Y.: Morgan Stanley.

Appendix Table 2: Comparison of actual and predicted prepayment rates

Cumulative Prepayment Rates (CPRs)



Source: Morgan Stanley estimates of predicted cumulative prepayment rates (CPRs) versus actual prepayment rates, updated to August, 2011. Even the spike in prepayments in 2010 may be driven by high defaults and buyouts of defaulted mortgages from pools rather than prepayments, suggesting appreciable barriers to refinancing that have appeared starting in the second half of 2008.