

Default Experience of California CFD and AD Bonds

As part of a dissertation in Economics, our colleague, Anna Racheva, examined the default experience of the California non-rated land-secured bond market. Her research covered the period 1985 to 2004 and examined the performance of the non-rated Community Facilities Districts (CFDs) and Assessment Districts (ADs). For purposes of the analysis, default was defined as the first missed payment of interest or principal due on the bonds.

Below is a brief summary of the findings of that study:

1. From 1985 to 2004 there were a total of 1,230 CFD bonds issued totaling \$14,676 million in gross proceeds. 2,307 AD bonds totaling \$12,415 million in gross proceeds were also issued during that period.
2. AD bonds were issued in greater amounts and more often from 1985 to 1993. However, starting in the early 1990's, the use of CFD bonds as a financing mechanism grew, especially after 1993.
3. Of 1,230 CFD deals issued from 1985 through 2004, 311 were either called or matured during that time, leaving 919 CFD issues outstanding. Of those 919 CFD issues, 27 defaulted by the terminal date of the study, December 31, 2004. Thus, total defaults were 2.94% in terms of number of transactions. In terms of par amount of the defaulted CFD bonds, the aggregate default rate was 2.51% of the par amount of all CFD bonds issued.
4. The distribution of CFD defaults during the study period was as follows: there were no defaults in 1990, 1992, 1993, 2001, 2003, and 2004. There was one default per year in 1991, 1995, 1999, and 2002, and two defaults in 1998 and 2000. 1997 was the year with most CFD defaults, eight. Next most predominant in terms of number of CFD defaults were 1994 and 1996, with six and five CFD defaults, respectively.
5. The study demonstrates that there is a time lag between CFD issuance and default. The age distribution of default shows three peaks of non-rated CFD bond defaults, in the third year, sixth year, and ninth year after issuance. However, for the entire study period, only 35% of the CFD bonds defaulted in the first three years after issuance. The highest peak in CFD defaults occurs in the sixth year after issuance.

6. Of 2,307 AD bonds issued during the study period, 518 were either called or matured during that time, leaving 1,789 AD deals outstanding. Of those 1,789 AD deals, 31 defaulted by December 31, 2004. Therefore, total defaults in terms of number of transactions were 1.73% of those ADs issued. During the same period, the aggregate default rate in terms of par amount of the defaulted AD bonds was 1.96% of the par amount of all AD bonds issued.
7. Most of the AD defaults occurred in 1994 and 1996, with five in each year. Next most predominant in terms of AD defaults were 1997 and 1999 with four AD defaults in each of those two years, followed by 1992, 1995, and 2000 with three AD defaults in each year. There was only one AD default per year in 1990, 1998, 2001, and 2002 and no AD defaults occurred in 1991, 1993, 2003, and 2004.
8. The overall performance of the California non-rated land-secured market for the study period can be characterized by 2,708 outstanding deals, 58 of which defaulted before the December 31, 2004 termination date of the study, resulting in an aggregate default rate of 2.14%.
9. The recovery rate of the 58 defaulted CFD and AD bonds, calculated on a dollar-weighted average basis, was estimated at 58%. However, over a longer term in most cases CFD and AD bonds' defaults ultimately get cured and those bonds' recovery rates are closer to the recovery rate of general purpose bonds, which is 90.27%.
10. The results of the study demonstrate that during the study period the default rates of non-rated CFD and AD bonds in California were above the overall default rate for investment grade U.S. municipal bonds. The default rate during the study period compares to the default rate of Standard & Poor's BB and B rated municipal bonds.

This is an excerpt from a dissertation entitled "Essays on the Default of California Non-Rated Land Secured Bonds", Charles University, Center for Economic Research and Graduate Education, Economics Institute, Prague, Czech Republic, November 2006.