Appendix C

Regression Equations for Calculating Risk Indexes

The equations which were used to calculate risk indexes through time are listed below. The first term on the right-hand side of each equation is the constant. This is followed by the regression coefficient and mnemonic symbol of each variable included in the equations. Standard errors of the regression coefficients appear in parentheses directly below the coefficients to which they apply.

**Delinquency Risk**

**CONVENTIONAL LOANS**

*Sample Data*

\[ R = 0.3026 + 0.1694 RLS - 0.00034 T + 0.04148 P_1 \]

\[ + 0.1191 P_2 + 0.1641 P_3 + 0.1830 FJ \]

\[ (0.0420) \quad (0.0001) \quad (0.0139) \]

*Aggregate Data*

\[ R = 0.3509 + 0.1824 RLS - 0.00046 T + 0.0513 P_1 + 0.1570 P_2 \]

\[ + 0.1191 P_2 + 0.1641 P_3 + 0.1830 FJ \]

\[ (0.0247) \quad (0.0133) \quad (0.0136) \]

**FHA AND VA LOANS (SAMPLE AND AGGREGATE DATA)**

\[ R = 0.2972 + 0.4451 RLS - 0.00055 T - 1.002 RPI \]

\[ (0.0812) \quad (0.0016) \quad (1.808) \]
Conditional Foreclosure Risk

CONVENTIONAL LOANS

Sample Data

\[ R = 0.0943 + 0.0704RLS + 0.00049T + 0.0852P_1 \\
    + 0.0484P_2 + 0.0560P_3 + 0.0741FJ \]

Aggregate Data

\[ R = 0.1198 + 0.0432RLS + 0.00054T + 0.0872P_1 + 0.0541P_2 \]

FHA AND VA LOANS (SAMPLE AND AGGREGATE DATA)

\[ R = -0.0618 + 0.2916RLS + 0.00051T - 0.5121RPI \]

Straight Foreclosure Risk (Conventional Loans)

SAMPLE DATA

\[ R = 0.1574 + 0.0400RLS + 0.0012T + 0.0285P_1 \\
    + 0.0244P_2 + 0.0274P_3 + 0.0579FJ \]

AGGREGATE DATA

\[ R = 0.1331 + 0.0473RLS + 0.0023T + 0.0293P_1 + 0.0513P_2 \]