BANKERS' NEW CLOTHES



What's Wrong with Banking and What to Do about It

ANAT ADMATI and MARTIN HELLWIG

| House | Mortgage Equity | FIGURE 2.1 Balance sheet diagram for buying a house. |
|-------|--------------------|--|
|-------|--------------------|--|

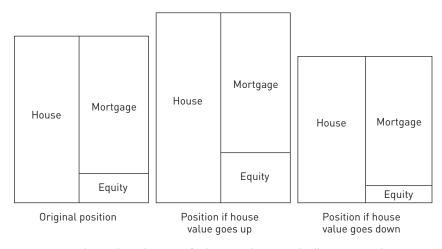


FIGURE 2.2 Balance sheet diagrams for buying a house and selling it a year later.

TABLE 2.1 Debt and Equity When Buying a \$300,000 House in Two Down Payment Scenarios (with a nonrecourse mortgage loan)

| | Buying with a \$30,000 down payment (initial equity) | | | | |
|--------------------------------------|--|----------------------------|---------------------------|-------------------------------|--|
| Year-end house price (dollars) | Percentage change in house price | Mortgage debt (dollars) | Final equity (dollars) | Return on equity (percent) | |
| 345,000 | 15 | 270,000 | 75,000 | 150 | |
| 315,000 | 5 | 270,000 | 45,000 | 50 | |
| 300,000 | 0 | 270,000 | 30,000 | 0 | |
| 285,000 | -5 | 270,000 | 15,000 | -50 | |
| 255,000 | -15 | 270,000 | 0 | -100 | |
| | Buying with a | \$60,000 down paym | ent (initial equit | y) | |
| Year-end house price (dollars) | Percentage change in house price | Mortgage debt (dollars) | Final equity (dollars) | Return on equity (percent) | |
| 345,000 | 15 | 240,000 | 105,000 | 75 | |
| 315,000 | 5 | 240,000 | 75,000 | 25 | |
| 300,000 | 0 | 240,000 | 60,000 | 0 | |
| 285,000 | -5 | 240,000 | 45,000 | -25 | |
| 255,000 | -15 | 240,000 | 15,000 | -75 | |

| Assets | Debt (liabilities) | |
|--------|-----------------------|---|
| Assets | Owner equity | FIGURE 2.3 Balance sheet diagram for a business. |

| Assets | Debt (liabilities) | |
|--------|-----------------------|---|
| Assets | Shareholder equity | FIGURE 2.4 Balance sheet diagram for a corporation. |

| Assets | Liabilities | |
|--|---|--------------------------|
| Reserves Short-term loans Long-term loans Other investments | Deposits Short-term debt Long-term debt | FIGURE (4 |
| | | FIGURE 4.1 |
| | | A traditional commercial |
| | Shareholder equity | bank's balance sheet. |

| Cash | |
|-----------------------------------|---|
| Loans | Deposits |
| Trading and other assets | Other debt (mostly short-term) |
| | Long-term debt |
| | Equity |

FIGURE 6.1 JPMorgan Chase balance sheet, December 31, 2011, by U.S. accounting rules (left) and international rules (right).

Cash

Loans

Trading

and

other

assets

Deposits

Other

debt

(mostly

short-term)

Long-term debt Equity

Year-end house price

(dollars)

345,000

315,000

300,000

285,000

255,000

Year-end

(dollars)

345,000

315,000

300,000

285,000

255,000

house price

TABLE 8.1 Borrowing at 4 Percent to Buy a \$300,000 House in Two Down

Payment Scenarios (assuming a nonrecourse clause) *Borrowing with a \$30,000 down payment (initial equity)*

in house price

15

5

0

-5

-15

Percent change

in house price

15

5

0

-5

-15

Percent change Mortgage debt

(dollars)

280,800

280,800

280,800

280,800

280,800

Borrowing with a \$60,000 down payment (initial equity)

Mortgage debt

(dollars)

249,600

249,600

249,600

249,600

249,600

Final equity

(dollars)

64,200

34,200

19,200

4,200

Final equity

(dollars)

95,400

65,400

50,400

35,400

5,400

0

Return on equity

(percent)

114

14

-36

-86

-100

Return on equity

(percent)

59

9

-16

-41

-91

TABLE 9.1 How Kate Benefits from Guarantees When Borrowing

Kate's position with no guarantees (borrowing at 4 percent)

285,000

255,000

-5

-15

| | • | - | | |
|--------------------------------------|-------------------------------------|----------------------------|---------------------------|----------------------------------|
| Year-end house price (dollars) | Percent change in house price | Mortgage debt (dollars) | Final equity (dollars) | Return on equity (percent) |
| 345,000 | 15 | 280,800 | 64,200 | 114 |
| 315,000 | 5 | 280,800 | 34,200 | 14 |
| 300,000 | 0 | 280,800 | 19,200 | -36 |
| 285,000 | -5 | 280,800 | 4,200 | -86 |
| 255,000 | -15 | 280,800 | 0 | -100 |
| K | Kate's position with | guarantees (borrow | ving at 3 percent) | |
| Year-end house price (dollars) | Percent change in house price | Mortgage debt (dollars) | Final equity (dollars) | Return on equity (percent) |
| 345,000 | 15 | 278,100 | 66,900 | 123 |
| 315,000 | 5 | 278,100 | 36,900 | 23 |
| 300,000 | 0 | 278,100 | 21,900 | -27 |
| | | | | |

278,100

278,100

6,900

0

-77

-100

Year-end

(dollars)

345,000

315,000

300,000

285,000

255,000

Year-end

(dollars)

345,000

315,000

300,000

285,000

255,000

house price

house price

How Guarantees Make Borrowing More Attractive to Kate

Percent

change in

house price

15

5

0

-5

-15

Percent

change in

house price

15

0

-15

\$30,000 down payment (initial equity)

Mortgage

debt

(dollars)

278,100

278,100

278,100

278,100

278,100

\$10,000 down payment (initial equity)

Mortgage

debt

(dollars)

298,700

298,700

298,700

298,700

298,700

Kate's

final equity

(dollars)

66,900

36,900

21,900

6,900

Kate's

final equity

(dollars)

46,300

16,300

1,300

0

0

Aunt Claire's

position

(dollars)

0

0

0

0

-23,100

Aunt Claire's

position

(dollars)

-13,700

-43,700

0

0

0

TABLE 9.2