Internet Appendix

A. Proofs

A.1 Proof of proposition 1

Proof: Note first that the underwriter will always choose $\theta = 0$ and $w = 0$ in the last period, and that there is no incentive to choose anything but this action or full imitation of the commitment type ($\theta^c = 1$ and $w^c = \frac{1}{2}$) in the first period. Further, if equilibrium calls for the underwriter to play $\theta = 1$ and $w = \frac{1}{2}$, the commitment type actions, in the first period, the best possible deviation is to $\theta = 0$ and $w = 0$. Thus, we can compare the payoff to adhering to a conjectured equilibrium in which underwriters adhere to the full commitment strategy against the deviation to the stage game action. Demand by the customer in the first period in equilibrium is then 2 since the customer anticipates the commitment action with probability 1 and thus solves $\max_y y\left(\frac{1}{2} + \frac{1}{2} + 1\right)$ since $w = \frac{1}{2}$ and $\theta = 1$. Demand in the second period is $\frac{1}{2}$ if the underwriter reveals himself to be the strategic type by playing any action other than imitation of the commitment type, and $\frac{1}{2} + \frac{3}{2}\mu$ if the underwriter imitates the commitment type, since the customer does not update his beliefs. (These demands are derived directly from the payoff to the short lived customer analogously to the demand in the case of full imitation). The condition for adhering to the commitment type strategy is:

$$\begin{aligned}
\text{First Period Demand} \quad &\times \quad \left(\frac{9}{4} - \theta^c - w^c\right) \\
+\text{Second Period Demand with Uncertainty over Type} \quad &\times \quad \left(\frac{9}{4}\right) \geq \\
\text{First Period Demand} \quad &\times \quad \left(\frac{9}{4} - \text{Stage game } \theta - \text{Stage Game } w\right) \\
+\text{Second Period Demand with Type Revealed} \quad &\times \quad \left(\frac{9}{4}\right)
\end{aligned}$$

Thus, adhering to the equilibrium where the strategic type imitates the commitment type in the first period is optimal if:

$$2\left(\frac{9}{4} - 1 - \frac{1}{4}\right) + \left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right) \geq 2\left(\frac{9}{4}\right) + \left(\frac{1}{2}\right)\left(\frac{9}{4}\right), \tag{1}$$

which gives $\mu \geq \frac{20}{27}$.

A similar calculation shows that adhering to an equilibrium that calls for stage game play

in the first period with probability 1 cannot be an equilibrium for any value of μ because the value of deviating to imitating the commitment type strategy is too valuable. Thus, for $\mu < \frac{20}{27}$, underwriters must employ a mixed strategy. Let α be the probability that underwriters imitate the commitment type. Then, we can calculate the demand in the second period if the underwriter imitates the commitment type: $y_2^c \equiv \frac{1}{2} + \frac{3}{2}\frac{\mu}{\mu+(1-\mu)\alpha}$ and the demand for the security in the first period: $y_1 \equiv \frac{1}{2} + \frac{3}{2}(\mu + \alpha - \mu\alpha)$. In order for the underwriter to be indifferent between the two actions, then, we require:

$$y_1 \times 1 + y_2^c \left(\frac{9}{4}\right) = y_1 \left(\frac{9}{4}\right) + \left(\frac{1}{2}\right)\left(\frac{9}{4}\right), \tag{2}$$

where the left hand side is the payoff to fully imitating the commitment type in the first period and the right hand side is the payoff to revealing oneself by playing the stage game action. This gives:

$$\frac{5}{4}y_1 = \frac{3}{2}\frac{9}{4}\frac{\mu}{\mu + (1-\mu)\alpha},$$

or:

$$\frac{27}{5}\mu = \mu + (1-\mu)\alpha + 3(\mu + (1-\mu)\alpha)^2.$$

Solving for α gives:

$$\alpha = \frac{-5 - 25\mu + 30\mu^2 + \sqrt{5}\sqrt{5 + 314\mu - 643\mu^2 + 324\mu^3}}{30\left(1 - 2\mu + \mu^2\right)}$$

which is monotonically increasing in μ for all $\mu \in [0, 1]$. □

Intuitively, high reputation underwriters can gain a lot from imitating commitment types. Once the reputation is sufficiently low, however, the loss from revealing ones type is small. If, however, customers expect the strategic type to produce the type of securities a myopic and strategic player would produce, they will purchase very little of the security when underwriter reputation is low. This makes it relatively cheap to imitate the commitment type, making a deviation profitable. Thus, there must be a mixed strategy when reputation is low. When reputation is very low, imitating the commitment type is not valuable unless it happens infrequently, so the probability of imitation must decrease as reputation declines.

A.2 Proofs of proposition 2

To establish the proposition, we first enumerate a subset of possible equilibria through a sequence of propositions. We then show that, for the remaining candidate equilibria, the payoff will always fall below the payoff to dealing with a known strategic player whether the equilibrium in fact exists or not.

The following propositions use the following simple lemma, which establishes the optimal action for an underwriter attempting to preserve his reputation in the good state.

Lemma 1. The optimal action for the underwriter that preserves his reputation in the high state and sacrifices his reputation in the low state is to play $\theta = 0$ and $w = -\frac{1}{2}$ in the first period.

Proof: In order to pool with the commitment type in the second period following a good realization in the first period, it is necessary for the underwriter to play $\theta - w = \theta^c - w^c$. The underwriter will always be revealed following the bad realization unless he plays θ^c and w^c, so the underwriter who seeks to imitate the commitment type in the good state will solve:

$$\max_{\theta,w} g_1(\theta, w, y_1)$$

subject to:

$$\theta - w = \theta^c - w^c$$

which is equivalent to solving

$$\max_{\theta,w} -\theta - w^2$$

subject to

$$\theta - w = \frac{1}{2}.$$

This function is maximized at $\theta = 0$ and $w = -\frac{1}{2}$. □

Note that, like the security that would be produced by an underwriter unconcerned with his reputation, the time bomb security involves the underwriter overstating the value of the security as much as possible. The time bomb security, however, has the added negative effect of moving payoffs away from the state in which they are valuable to the customer, and this comes at a cost to the underwriter. Thus, the time bomb security is Pareto dominated by the stage game security.

If an underwriter wants to fully imitate the commitment type, he has no choice but to play θ^c and w^c in order for payoffs to match the payoffs from the commitment type in both states. If the underwriter chooses to neglect his reputation, his payoffs are maximized by choosing $\theta = 0$ and $w = 0$, the stage game equilibrium action. Thus, any equilibrium involves playing one of these three actions described.

We now construct the equilibria for a subset of regions to establish the proposition in the text.

Proposition 3. There exists an equilibrium where time bombs are created with probability 1 if and only if $\mu \geq \frac{27}{16}(1-\pi)$. The quantity of securities produced is given by $y_1^* = 2\mu$, such that the volume of time bombs is increasing in reputation.

Proof:

In order to pool with the commitment type in the second period following a good realization in the first period, it is necessary for the underwriter to play $\theta - w = \theta^c - w^c$. The underwriter will always be revealed following the bad realization unless he plays θ^c and w^c, so the underwriter who seeks to imitate the commitment type in the good state will solve:

$$\max_{\theta,w} g_1(\theta, w, y_1)$$

subject to:

$$\theta - w = \theta^c - w^c$$

which is equivalent to solving

$$\max_{\theta,w} -\theta - w^2$$

subject to

$$\theta - w = \frac{1}{2}.$$

This function is maximized at $\theta = 0$ and $w = -\frac{1}{2}$.

To see when such an action would be an equilibrium, we must determine the amount of the security purchased (y) in the first and second period. We then determine if the underwriter would have an incentive to deviate to any other pair of θ and w. The only deviations that could possibly be profitable are to the stage game play $\{0, 0\}$, which reveals the underwriter as strategic regardless

of the realized state, and to $\{\theta^c, w^c\}$, which allows the underwriter to imitate the commitment type in both states. We now find the equilibrium y in the first period, and the values for y on the equilibrium path following the realization of the good state and the bad state. We assume that off the equilibrium path (i.e. when the customer observes $\theta - w \neq \theta^c - w^c$ and similarly for the bad state) the customer concludes that the underwriter is the strategic type. This does not follow immediately from perfect Bayesian equilibria, but is a standard assumption in the literature on reputation with commitment types.

We find first that the customer chooses after the good state $y_2^g = \frac{1}{2} + \frac{3}{2}\mu$ since the customer solves:

$$\max_y \mu \left[y\left(\frac{1}{2} + 1 + \frac{1}{2}\right) - \frac{1}{2}y^2 \right] + (1-\mu)\left[y\left(\frac{1}{2}\right) - \frac{1}{2}y^2 \right],$$

having not updated his beliefs after the first period. That is, the customer maximizes the amount of the security he purchases, weighting the possibility that the underwriter plays $\theta = 1$ and $w = \frac{1}{2}$, the first term, or $\theta = 0$ and $w = 0$, the second term.

If the realization in the first period was bad or if the underwriter deviated to any action such that $\theta - w \neq \theta^c - w^c$, it is immediate that $y_2^b = \frac{1}{2}$.

In period 1, the customer solves:

$$\max_y \mu \left[y(\frac{1}{2} + 1 + \frac{1}{2}) - \frac{1}{2}y^2 \right] + (1-\mu)\left[y(\frac{1}{2} - \frac{1}{2}) - \frac{1}{2}y^2 \right],$$

which gives:

$$y_1 = 2\mu.$$

Thus the value of adhering to the "time bomb" strategy exceeds the value of deviating to stage game Nash equilibrium play if:

$$2\mu\left(\frac{9}{4} - \frac{1}{4}\right) + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right) + (1-\pi)\frac{1}{2}\frac{9}{4} \geq 2\mu\frac{9}{4} + \frac{1}{2}\frac{9}{4}.$$

This gives:

$$\pi \geq \frac{4}{27}.$$

On the other hand, there will be no incentive to deviate to full imitation of the commitment type

if the payoff to adhering exceeds:

$$2\mu + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\frac{9}{4} + (1-\pi)2\frac{9}{4}.$$

Note that the value of deviating to the full commitment action is particularly valuable when the bad state is realized; the customer concludes that the underwriter is certainly the commitment type and chooses a very high y. The underwriter then chooses his stage game action and gets the highest possible payoff. The condition for not deviating to the full honesty equilibrium is then:

$$\pi \geq 1 - \frac{16}{27}\mu.$$

Here, the incentive to deviate to the stage game equilibrium never binds since the condition on π for deviating to full commitment is decreasing in μ and is $\pi \geq \frac{11}{27} > \frac{4}{27}$ for $\mu \to 1$. □

Intuitively, once the underwriter's reputation is sufficiently high, he values maintaining that reputation. But, since the low state is sufficiently unlikely, it is not worth fully imitating the commitment type at greater cost. When his reputation is low, however, the costs of imitating the commitment type are also low, since the customer will purchase less of the security. Thus, if the customer anticipates that the underwriter will play the "time bomb" strategy, the underwriter will have an incentive to deviate to the full commitment strategy when his initial reputation is low.

The strategic underwriter will rely on the time bomb strategy exclusively when his reputation is sufficiently high. The possibility that the underwriter will fully imitate the commitment type in the first period only occurs when the underwriter's reputation is high and the "disaster" state is more likely than not to occur. This is clearly not the parameter region of interest.

Proposition 4. There exists a pure strategy equilibrium where the underwriter fully imitates the commitment type if and only if $\mu \geq \frac{20}{27}$ and $\pi \leq 1 - \frac{16}{27\mu}$. Thus, for $\pi > \frac{11}{27}$, there is no equilibrium in which the underwriter fully imitates the commitment type.

Proof:

When the underwriter imitates the commitment type, we have demand for the security in the first period of:

$$y_1 = 2$$

since the security always matches the security that is made by the commitment type player. In period 2, the customer does not update his beliefs, so:

$$y_2 = \frac{1}{2} + \frac{3}{2}\mu.$$

The value obtained in equilibrium is thus:

$$2\left(\frac{9}{4} - 1 - \frac{1}{4}\right) + \left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right).$$

The value of deviating to play of the stage game equilibrium is simply:

$$2\left(\frac{9}{4}\right) + \frac{1}{2}\left(\frac{9}{4}\right)$$

and the value of deviating to the time bomb strategy is:

$$4 + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right) + (1-\pi)\left(\frac{1}{2}\right)\left(\frac{9}{4}\right).$$

Comparing the first value to each of these values generates the two inequalities in the proposition. □

This leaves as possible pure strategies only that underwriters play the stage game equilibrium in the first period. This turns out not to be an equilibrium as shown in the following proposition:

Proposition 5. There is no equilibrium in which the underwriter plays the stage game equilibrium action in the first period.

Proof: The proof is by directly comparing the payoff from adhering to such an equilibrium to the payoff to deviating to the full commitment action. There is no incentive to deviate only if:

$$\left(\frac{1}{2} + \frac{3}{2}\right)\left(\frac{9}{4}\right) + \left(\frac{1}{2}\right)\left(\frac{9}{4}\right) \geq \left(\frac{1}{2} + \frac{3}{2}\right) \times 1 + 2\left(\frac{9}{4}\right).$$

This holds only if $\mu \geq \frac{44}{29} > 1$. □

Note that, even in a neighborhood around $\mu = 0$, there is no equilibrium with repeated play of the myopic stage game strategy. This feature is standard in models of this form. If the customer

expects myopic play, then a deviation to imitate the commitment type has a large effect on the beliefs of the customer. At the same time, since the volume of securities produced is relatively low when myopic play is anticipated and reputation is low, the costs of imitating the commitment type is small. These effects work together to eliminate myopic play as an equilibrium. It can be shown that, for most values of π, there will exist an equilibrium of the game with μ close to zero that converges smoothly to the zero reputation equilibrium, but we omit this analysis.

We are left with a substantial region in which there is no pure strategy equilibrium. We now derive the mixed strategy equilibrium in this region. Recall that we confine attention to the case where $\pi > \frac{1}{2}$, such that the normal state is in fact modal. The following proposition presents the mixed strategy between time bombs and full imitation of the commitment type, which will be the equilibrium for underwriters with intermediate reputation levels, and shows that, for a significant region, the quality of the security issued in the first period is decreasing in the reputation of the underwriter.

Proposition 6. An equilibrium with mixing between the time bomb strategy and the full commitment strategy exists if and only if:

$$\pi \leq 1 - \frac{16}{27}\mu$$

and, for $\mu \leq \frac{20}{27}$,

$$\pi \geq \frac{\sqrt{108\mu + 1} - 1}{54\mu}$$

while for $\mu > \frac{20}{27}$,

$$\pi \geq 1 - \frac{16}{27\mu}.$$

This equilibrium calls for play of the full commitment action in the first period with probability

$$\frac{3\sqrt{3}\sqrt{\mu(1-\pi)} - 4\mu}{4(1-\mu)}$$

It is convenient to first define a general mixed strategy, the posterior probabilities associated with each such strategy, and the demand for the security following the good and bad state when the payoffs are consistent with the commitment type payoff. We define τ as the probability of playing the time bomb strategy and α as the probability of fully imitating the commitment type.[32] This

[32] All strategies that are played in equilibrium call for myopic actions by the underwriter in the second period.

leads to posteriors of:

$$\begin{aligned} \mu^g &= \frac{\mu}{\mu + (1-\mu)(\alpha+\tau)} \\ \mu^b &= \frac{\mu}{\mu + (1-\mu)\alpha} \end{aligned}$$

when payoffs match the commitment type payoff following the good state and the bad state, respectively. These posteriors then induce the following demands:

$$\begin{aligned} y^g &= \frac{1}{2} + \frac{3}{2}\frac{\mu}{\mu + (1-\mu)(\alpha+\tau)} \\ y^b &= \frac{1}{2} + \frac{3}{2}\frac{\mu}{\mu + (1-\mu)\alpha} \end{aligned}$$

since demand in the second period for a general posterior μ' is given by:

$$\max_y \mu' \left(2y - \frac{1}{2}y^2\right) + (1-\mu')\left(\frac{1}{2}y - \frac{1}{2}y^2\right),$$

since the strategic type will always play the myopically optimal strategy of $\{\theta, w\} = \{0, 0\}$ in the last period.

Proof:

We conjecture that the strategy exists, solve for α, and then verify that there is no profitable deviation to stage game play. Note that by assumption $\tau = 1 - \alpha$, so we substitute τ out of all expressions. Thus,

$$\begin{aligned} y^g &= \frac{1}{2} + \frac{3}{2}\mu \\ y^b &= \frac{1}{2} + \frac{3}{2}\frac{\mu}{\mu + (1-\mu)\alpha} \\ y_1 &= 2\mu + 2\alpha(1-\mu). \end{aligned}$$

Indifference between full commitment and time bomb play requires:

$$y_1 + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right) + (1-\pi)\left(\frac{1}{2} + \frac{\mu}{\mu + (1-\mu)\alpha}\right)\left(\frac{9}{4}\right) =$$

Thus, we omit the second period action from the description of the strategy.

$$= 2y_1 + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\left(\frac{9}{4}\right) + (1-\pi)\left(\frac{1}{2}\right)\left(\frac{9}{4}\right).$$

This becomes:

$$2\mu + 2\alpha(1-\mu) = (1-\pi)\frac{3}{2}\frac{9}{4}\left(\frac{\mu}{\mu + (1-\mu)\alpha}\right)$$

$$(2\mu + 2\alpha(1-\mu))^2 = 3(1-\pi)\left(\frac{9}{4}\right)\mu$$

which gives:

$$\alpha = \frac{3\sqrt{3}\sqrt{\mu(1-\pi)} - 4\mu}{4(1-\mu)}.$$

The upper bound on π in the lemma guarantees that this probability is greater than zero while the second of the two lower bounds is needed for this probability to be less than 1.

Finally, we must check to see if there is a profitable deviation to stage game play. This requires:

$$(2\mu + 2\alpha(1-\mu)) + \left(\frac{1}{2}\right)\left(\frac{9}{4}\right) \leq 2(2\mu + 2\alpha(1-\mu)) + \pi\left(\frac{1}{2} + \frac{3}{2}\mu\right)\frac{9}{4} + (1-\pi)\left(\frac{1}{2}\right)\left(\frac{9}{4}\right).$$

Substituting equilibrium α into this expression, we have:

$$\mu \geq \frac{1-\pi}{27\pi^2}$$

which gives the first lower bound in the lemma. Since the two lower bounds are monotone in μ and equal at $\frac{20}{27}$, we have established the proposition. □

Equating the expected security quality in this equilibrium with the security quality from stage game play by the underwriter gives the two thresholds $\frac{1}{27}\frac{1}{1-\pi}$ and $\frac{(1+\pi)^2}{27(1-\pi)}$ from the proposition in the text, while equating the security quality from stage game play to the expected security quality when the strategic underwriter always plays the time bomb strategy gives the thresholds $\frac{1}{4}$ and $\frac{1+\pi}{4}$.

It remains only to consider equilibria with mixtures between full commitment and time bomb play, time bomb and stage game play, and totally mixed strategies. Instead of enumerating all existence conditions for these equilibria, we simply show that whenever the probabilities on all actions are between 0 and 1 (and thus the equilibrium may exist), the payoff to the security is

below $\frac{1}{2}$, the stage game payoff.

The most likely candidate for a counterexample is the case where the underwriter mixes between the stage game action and the full commitment action. Let the probability of playing the full commitment action be α. Then, demand for the security in the first period is given by

$$y_1 \equiv 2\mu + (1-\mu)\left(\frac{1}{2} + \frac{3}{2}\alpha\right),$$

while demand in the second period is $\frac{1}{2}$ if the stage game action is taken and

$$2\frac{\mu}{\mu + (1-\mu)\alpha} + \frac{1}{2}\frac{(1-\mu)\alpha}{\mu + (1-\mu)\alpha}$$

if the commitment action is taken. The indifference condition is thus:

$$\frac{9}{4}y_1 + \frac{1}{2}\frac{9}{4} = y_1 + \frac{9}{4}\frac{2\mu + \frac{1}{2}(1-\mu)\alpha}{\mu + (1-\mu)\alpha}$$

which gives

$$\alpha = \frac{30\mu^2 + \sqrt{5}\sqrt{324\mu^3 - 643\mu^2 + 314\mu + 5} - 25\mu - 5}{30\left(\mu^2 - 2\mu + 1\right)}$$

as the unique positive root. Having calculated the probability of playing the mixed strategy, we can now calculate the payoff for adhering and deviating to a strategy of playing time bombs. Thus, the condition for an equilibrium with mixture between full commitment and stage game play is

$$\frac{9}{4}\left((1-\mu)\left(\frac{3\left(30\mu^2 + \sqrt{5}\sqrt{324\mu^3 - 643\mu^2 + 314\mu + 5} - 25\mu - 5\right)}{2\left(30\left(\mu^2 - 2\mu + 1\right)\right)} + \frac{1}{2}\right) + 2\mu\right) + \frac{9}{2}\frac{1}{4} \geq$$

$$\frac{9\left(\frac{(1-\mu)\left(30\mu^2 + \sqrt{5}\sqrt{324\mu^3 - 643\mu^2 + 314\mu + 5} - 25\mu - 5\right)}{2(30(\mu^2 - 2\mu + 1))} + 2\mu\right)\pi}{4\left(\frac{\left(30\mu^2 + \sqrt{5}\sqrt{324\mu^3 - 643\mu^2 + 314\mu + 5} - 25\mu - 5\right)(1-\mu)}{30(\mu^2 - 2\mu + 1)} + \mu\right)}$$

$$+2\left((1-\mu)\left(\frac{3\left(30\mu^2 + \sqrt{5}\sqrt{324\mu^3 - 643\mu^2 + 314\mu + 5} - 25\mu - 5\right)}{2\left(30\left(\mu^2 - 2\mu + 1\right)\right)} + \frac{1}{2}\right) + 2\mu\right) + \frac{9(1-\pi)}{2}\frac{1}{4}$$

which simplifies to $\pi < \frac{1}{5}$. Thus, for relevant parameter values ($\pi > \frac{1}{2}$) there is no equilibrium in

which the strategic underwriter mixes between stage game and full commitment play.

It remains to consider the payoff to a mixture between stage game play and time bomb play and to the full mixture among all three strategies. For the mixture between time

First, for the time-bomb stage game mix, letting τ be the probability of the time bomb, we have demand for the security of

$$y_1 = 2\mu + \frac{1}{2}(1-\mu)(1-\tau)$$

which gives the indifference condition

$$\frac{9}{4}y_1 + \frac{1}{2}\frac{9}{4} = 2y_1 + \pi\left(\frac{2\mu + \frac{1}{2}(1-\mu)\tau}{\mu + (1-\mu)\tau}\right)\frac{9}{4} + (1-\pi)\frac{9}{4}\frac{1}{2}$$

which gives

$$\tau = \frac{\pm(1-\mu)\sqrt{16\mu^2 - 108\mu\varphi + 8\mu + 1} - 2\mu^2 + \mu + 1}{2\left(\mu^2 - 2\mu + 1\right)}$$

as the roots between 0 and 1 for all values of μ and π. The expected payoff for the security is then calculated as

$$\frac{1}{2}\mu + (1-\mu)(1-\tau)\frac{1}{2} = \frac{1}{4}\left(\sqrt{(4\mu+1)^2 - 12\mu\pi} - 2\mu + 1\right)$$

which is less than $\frac{1}{2}$ for all cases where $\tau > 0$ such that the equilibrium may exist.

Finally, we calculate the totally mixed strategy. This requires two indifference conditions

$$\frac{3}{2}(\alpha(-\mu) + \alpha + \mu) - \frac{1}{2}(1-\mu)\tau + \frac{1}{2} = \frac{27\mu(1-\pi)}{8(\alpha(1-\mu) + \mu)}$$

and

$$\frac{3}{2}(\alpha(-\mu) + \alpha + \mu) - \frac{1}{2}(1-\mu)\tau + \frac{1}{2} = \frac{27\mu\pi}{2((1-\mu)(\alpha+\tau) + \mu)}$$

where τ is the probability of a time bomb and α is the probability of full commitment play. The only solution with τ, α, and $1-\tau-\alpha$ in $(0,1)$ for any values of π and μ is

$$\alpha = -\frac{\mu(\mu(8-16\pi) + 15\pi - 7) + \sqrt{-(\mu-1)^2(\pi-1)^2(108\mu(2\pi-1)-1)} + \pi - 1}{8(\mu-1)^2(2\pi-1)}$$

and

$$\tau = \frac{(5\pi - 1)\left(\mu(-\pi) + \sqrt{-(\mu-1)^2(\pi-1)^2(108\mu(2\pi-1)-1)} + \mu + \pi - 1\right)}{8(\mu-1)^2(\pi-1)(2\pi-1)}.$$

The expected payoff to the security is then

$$(1-\mu)\left(\frac{1}{2}(1-\alpha-\tau)+2\alpha\right)+\frac{\mu}{2}$$

which is always less than $\frac{1}{2}$ for $\phi > \frac{1}{2}$.

B. Comparative static on μ

In this section we formalize the discussion of the comparative static on μ from the main text. The result summarized in proposition 7 is obtained by directly calculating thresholds for existence and the probabilities of different actions from the enumeration of possible equilibria above. As these calculations are elementary but exceedingly long, we omit them from this document. The following proposition provides an exhaustive description of the behavior of the time bomb probability as a function of μ:

Proposition 7. The probability of a time bomb from a strategic type is increasing in the probability the underwriter is a commitment type as long as

$$\mu \leq \frac{27}{16}(1-\pi)$$

or

$$\mu \geq \begin{cases} \frac{32}{27(1-\pi)} - \left(\frac{2}{3}\right)^3 \sqrt{\frac{27\pi-11}{(1-\pi)^2}} - 1, & \text{if } \pi \leq \tilde{\pi} \approx 0.976 \\ \frac{1}{8}(27\pi - 2 - 3\sqrt{3}\sqrt{\pi(27\pi-4)} & \text{if } \pi > \tilde{\pi} \approx 0.976 \end{cases}$$

up to the point above which time bombs are produced with probability 1.

Otherwise, if

$$\max\{\frac{1}{108(2\pi-1)}, \frac{1}{8}(27\pi - 2 - 3\sqrt{3}\sqrt{\pi(27\pi-4)})\} < \mu < \frac{32}{27(1-\pi)} - \left(\frac{2}{3}\right)^3 \sqrt{\frac{27\pi-11}{(1-\pi)^2}} - 1$$

the probability of a time bomb is decreasing in μ. The largest possible drop is when $\pi = \frac{1}{2}$, which

implies a decrease in the time bomb probability from $\frac{81}{100}$ to $\frac{1}{16}(8+\sqrt{10}) \approx 0.7$.

For the remaining region, the probability of the time bomb is increasing continuously along the equilibrium that exists for μ close to 0, but two other equilibria exist.

C. General values for the surplus level and split

In this section, we discuss how the model behaves for alternative values of the exogenous split of the surplus, that is different values of a and b. Specifically, we analyze whether the basic insight that higher reputation leads to increasingly worse incentives for underwriters is specific to the parameterization studied in the text or is a more general phenomenon. The result is that our analysis is fully general in the sense that there is always a disaster rare enough that a good reputation provides bad incentives. Further, this region becomes small only when the costs of maintaining a reputation become very low such that the underwriter has no incentive not to imitate the commitment type. That is, if good securities offered at fair prices are just as profitable to the underwriter as securities that provide less value to investors and are sold at higher prices, then the underwriter has no incentive to risk his reputation at all. Since this extreme case is not a realistic description of securitization, our results hold over the relevant parameter region.

Our argument will use the following two propositions:

Proposition 8. There exists an equilibrium where time bombs are created with probability 1 in the first period if and only if $\mu \geq \frac{3}{4}(a+1)(1-\pi) - \left(b-\frac{3}{2}\right)\left(\frac{1}{2}\right)$.

The proof follows the same logic as Proposition B.3 so we omit it.

Proposition 9. As $\mu \to 1$, the threshold for π above which time bombs, rather than full commitment securities, are produced is given by:

$$\pi \geq 1 - \left(\frac{b+\frac{1}{2}}{a+1}\right)\left(\frac{2}{3}\right).$$

This proposition is established by taking $\mu \to 1$ for general a and b and solving for the threshold in π where the equilibrium switches from a pure strategy of imitating the commitment type to a

pure strategy of creating time bombs. Since the calculation and ruling out alternative equilibria as $\mu \to 1$ are both elementary and follow the same logic as in the main text, we omit them here.

The first proposition is sufficient to establish that there will be a region of sufficiently high μ and π where time bombs will be played. Since a zero reputation player will always play the stage game action, this effectively establishes that there is a region where higher reputation leads to lower quality securities from strategic types. The analysis for the mixed strategies goes through similarly to that in the special case we analyze in full. Basically, for any values of a and b which produce positive demand for securities at all reputation levels, there is a rare enough disaster state and a high enough reputation such that even higher reputation leads to worse securities from strategic players.

It remains to ask whether the region where the relationship between reputation and security quality is reversed is the more relevant region. Proposition R.1, combined with Panel A of Figure 2 helps pin down when this occurs. The threshold in the proposition corresponds to the point on Figure 2A to the far right where the Full Commitment and Time Bomb regions touch. The role of a and b become more clear here. First, as long as $b > -\frac{7}{2}$, there will always be some $\pi^\star < 1$ such that $\pi > \pi^\star$ implies the highest reputation types produce time bombs with probability 1. But, if $b < -\frac{7}{2}$, there is basically no market for securities at any reasonable level of insurance or markup, as is apparent from the customers payoff equation on page 59 (recall that the efficient level of insurance to provide is $w = \frac{1}{2}$).

To make the region where high reputation leads to time bombs small, we must take a to a large number. This raises the point where the time bomb and full commitment regions meet, making Full Commitment the equilibrium for a wider range of π values. Importantly, simply increasing a cannot eliminate the time bomb region; there will always be a value of π high enough to ensure that time bombs are still optimal for very high reputation underwriters. Something else also becomes apparent from Proposition R1. To get the negative relationship to reverse at high reputation levels when the bad state is rare, a must increase without b increasing, or at least with b increasing much slower. So, if instead of defining a and b separately, the model defined a total exogenous level of gains to trade and then assumed it was split evenly (say, by appealing to something like Nash bargaining as is standard in theoretical models of bilateral bargaining or trade), the result would hold in the limit as the scale of the exogenous gains to trade increased toward infinity. For

example, if $a+b \equiv c$, and a and b are each replaced by $\frac{c}{2}$ to represent something like an even split of the exogenous gains to trade, as c goes to infinity time bombs remain optimal for high reputation underwriters ($\mu \to 1$) as long as $\pi > \frac{2}{3}$, meaning the disaster occurs with probability less than $\frac{1}{3}$ to preserve the result. A disaster probability of more that $\frac{1}{3}$ does not seem to be the region of most interest.

What, then, happens when a grows while b does not? We can see the intuition here most clearly by normalizing the payoff to the underwriter by $\frac{1}{a}$ and the customer by $\frac{1}{b}$. This normalization produces the same game, since all of the mixed strategy probabilities will be identical. The payoffs can now be expressed as:

$$\text{underwriter} = y + \frac{1}{a}((p-v) - w^2) \tag{3}$$

$$\text{customer} = y + \frac{1}{b}\left(w - (p-v) - \frac{1}{2}y^2\right). \tag{4}$$

Here, it becomes obvious both why the region in which the reputation effect we identify shrinks for high values of a and why this is not an important region for our analysis. As a grows, the relevance of the underwriter's actions for his own payoffs disappears (recall that the markup is bounded, so the expression in parentheses is bounded). All that the underwriter cares about in the limiting case is that the customer buys the security in the next period, so in the limit there is no incentive to risk the relationship. Put another way, if it is effectively costless for a high reputation underwriter to maintain his reputation, he will do so. We do not find this a particularly relevant case. It is even perhaps more natural to think about the case with high a as another form of simple securities. Here, it is trivial for the underwriter to create value for the customer, so he will do so except in the last period. Crucially, the customer is still quite sensitive to the decision of the underwriter to create value, so the demand for the security will drop precipitously if the underwriter (foolishly) reveals himself to be the strategic type. The strategic type will, of course, fail to provide any added value in the last period regardless of how infinitesimal the costs, and thus demand drops appreciably in response to the revelation. Furthermore, the lowest reputation types will still play the stage game equilibrium in the first period because even paying the infinitesimal cost to provide good securities cannot move the prior from $\mu = 0$, so the quality of securities rises with reputation. The analysis of the mixed strategy case is a bit more subtle but this is the main

intuition.

One thing that is perhaps a bit more surprising is that increasing a only has this effect if b is not increased. At first glance, increasing both a and b generates a game where reputation concerns are irrelevant. To a certain extent this is true, but what happens as a and b increase simultaneously is that the costs of providing insurance and reporting the security honestly disappears, while at the same time the customer's concern about whether or not the underwriter is a commitment type also disappears. Thus, even if the underwriter is found out, the customer will still have a hefty demand in the second period as little of the payoff depends on the action of the underwriter. Thus, even though the benefit of playing the time bomb in the form of savings over the full commitment strategy disappears as $a \to \infty$, the costs of doing so and getting caught also disappear as $b \to \infty$.

Thus, for the relevant range of parameters, the basic insight that high reputation provides bad incentives with complex securities goes through for a more general model.

Figure A.1. Model Equilibria

We show the equilibrium strategy of a strategic player with a positive commitment probability. In particular, we show the possible equilibria for all possible combinations of the probability of the normal state, π, and the commitment type probability, μ.

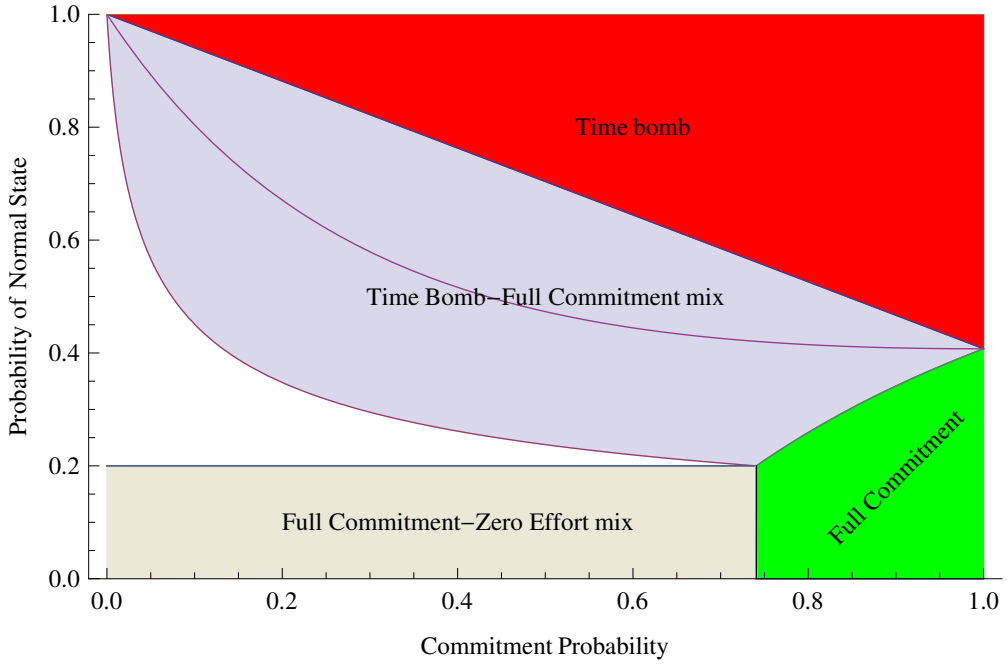


Figure A.2. Proportion of Deal in Default as of December 2010

This figure displays the histogram of the distribution of the proportion of deal in default for each deal as of December 2010. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The reputation scores were obtained from Professor Jay Ritter's website. The score is a measure of the prestige ranking of IPO underwriters obtained following the method proposed by Carter and Manaster (1990): it is on a 0 to 9 scale, and is based on the pecking order seen in "tombstone" advertisements. Underwriters with a score greater than or equal to 8 are deemed "High Reputation"; underwriters with a score lower than 8 are deemed "Low Reputation". We match the Ritter dataset to our dataset by name of the underwriter institution. For deals that have more than one underwriter, the reputation score is calculated as the average score across underwriters. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

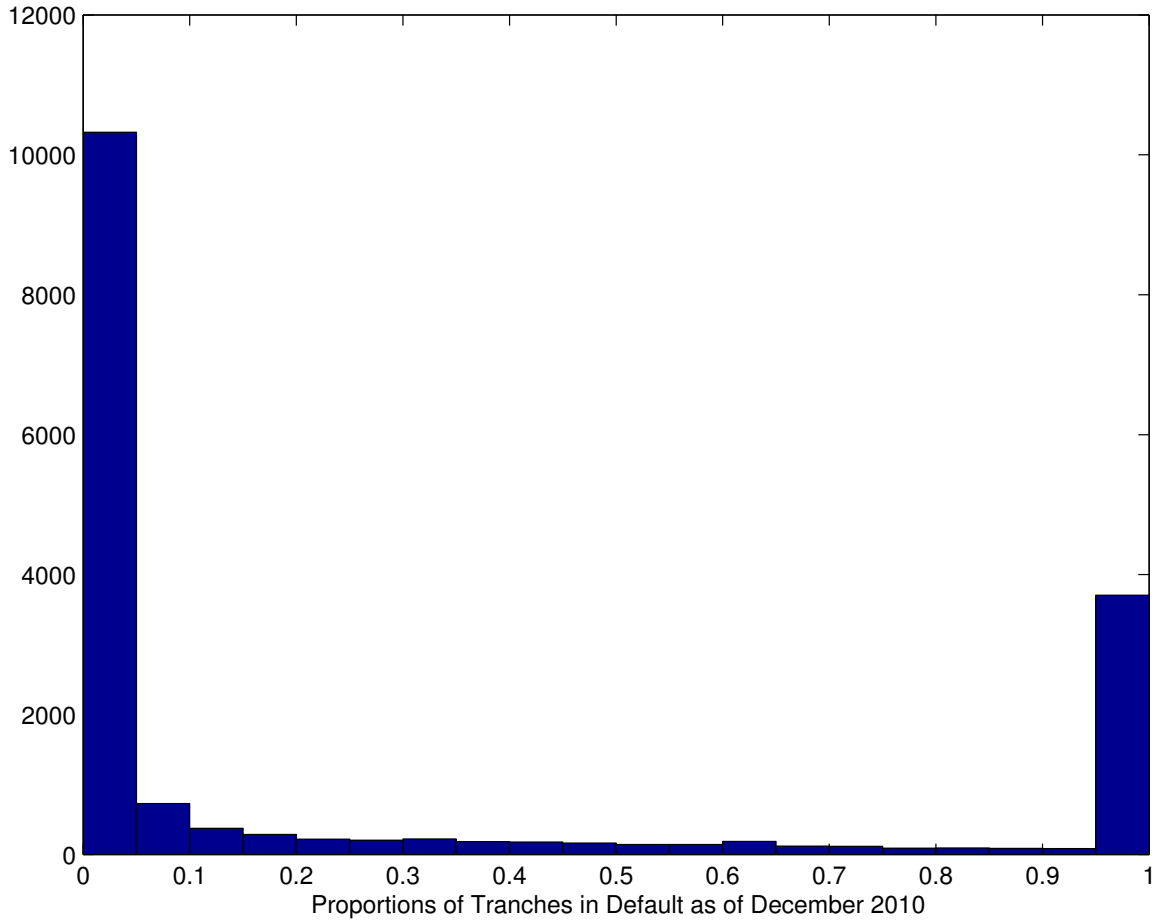


Figure A.3. Proportion of Issuance for Each Reputation Group

This figure shows proportion of issuance of securities in each market relative to the total amount of issuance of each reputation group. We report results for Top, Prime and Limited reputation groups separately. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The reputation scores were obtained from Professor Jay Ritter's website. The score is a measure of the prestige ranking of IPO underwriters obtained following the method proposed by Carter and Manaster (1990): it is on a 0 to 9 scale, and is based on the pecking order seen in "tombstone" advertisements. Underwriters with a score greater than or equal to 8 are deemed "High Reputation"; underwriters with a score lower than 8 are deemed "Low Reputation". We match the Ritter dataset to our dataset by name of the underwriter institution. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

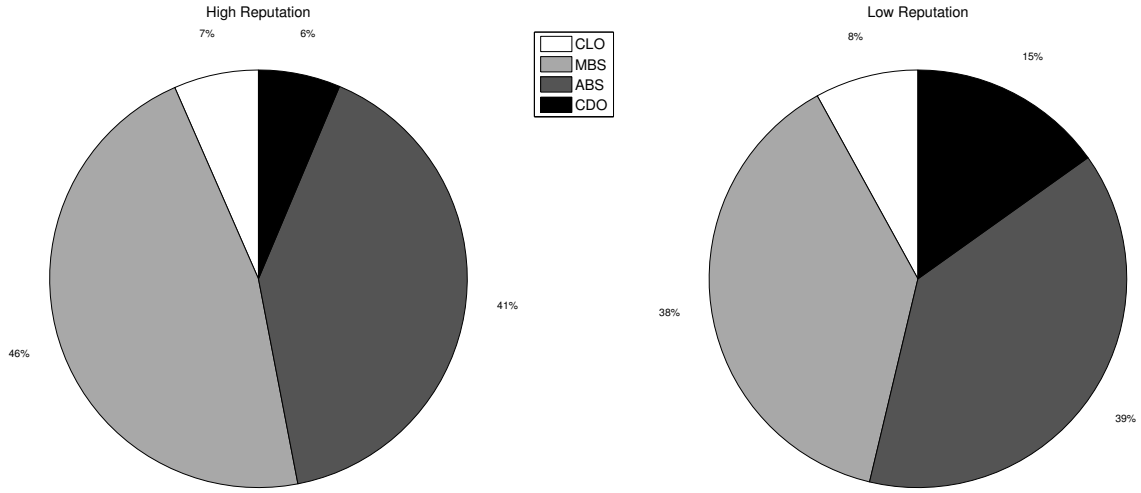


Figure A.4. Cumulative Percentage of Deal in Default

This figure shows the cumulative proportion of deal in default of CLO, MBS, ABS and CDO deals issued from January of 2000 through December of 2010. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The data are from Bloomberg.

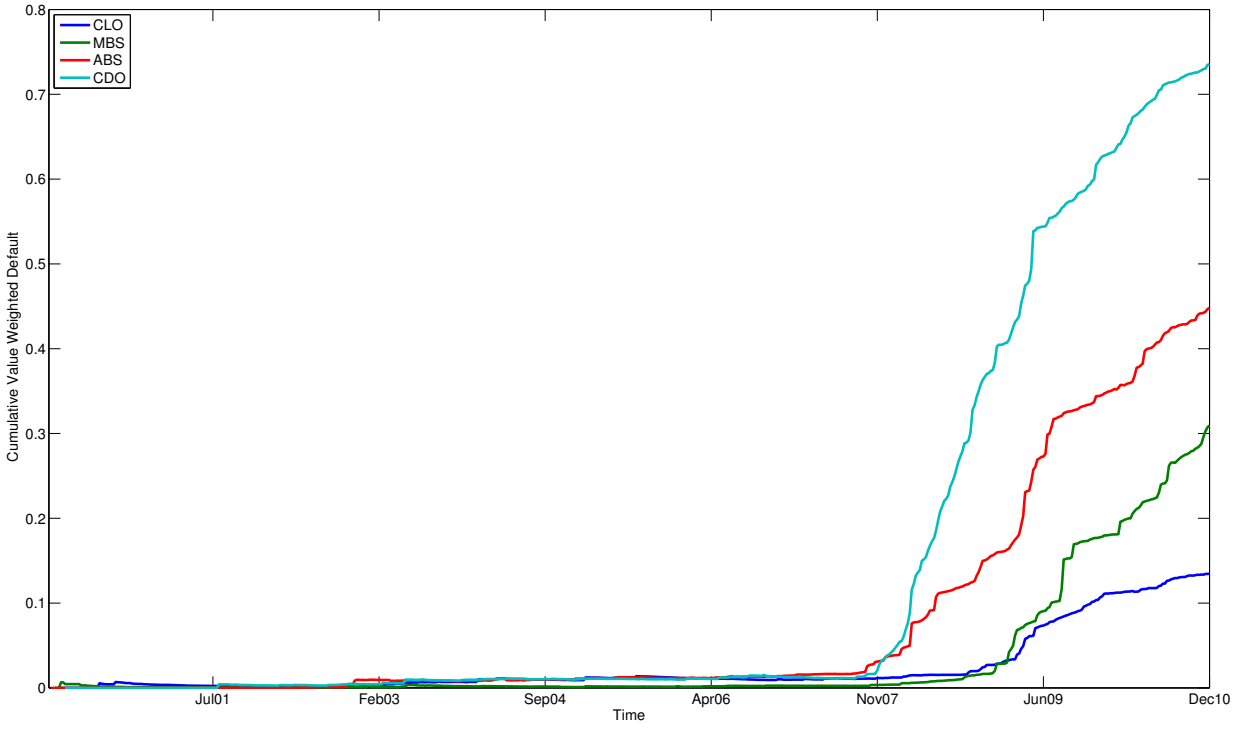


Figure A.5. Cumulative Percentage of Deal in Default by Collateral Type

This figure shows the cumulative proportion of deal in default of CLO, MBS, ABS and CDO deals issued from January of 2000 through December of 2010. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. Within each type of deal the data are divided according to the type of collateral that is backing up the tranches. For example CLO are divided in Loan, Bond and Trust Preferred CLOs. The data are from Bloomberg.

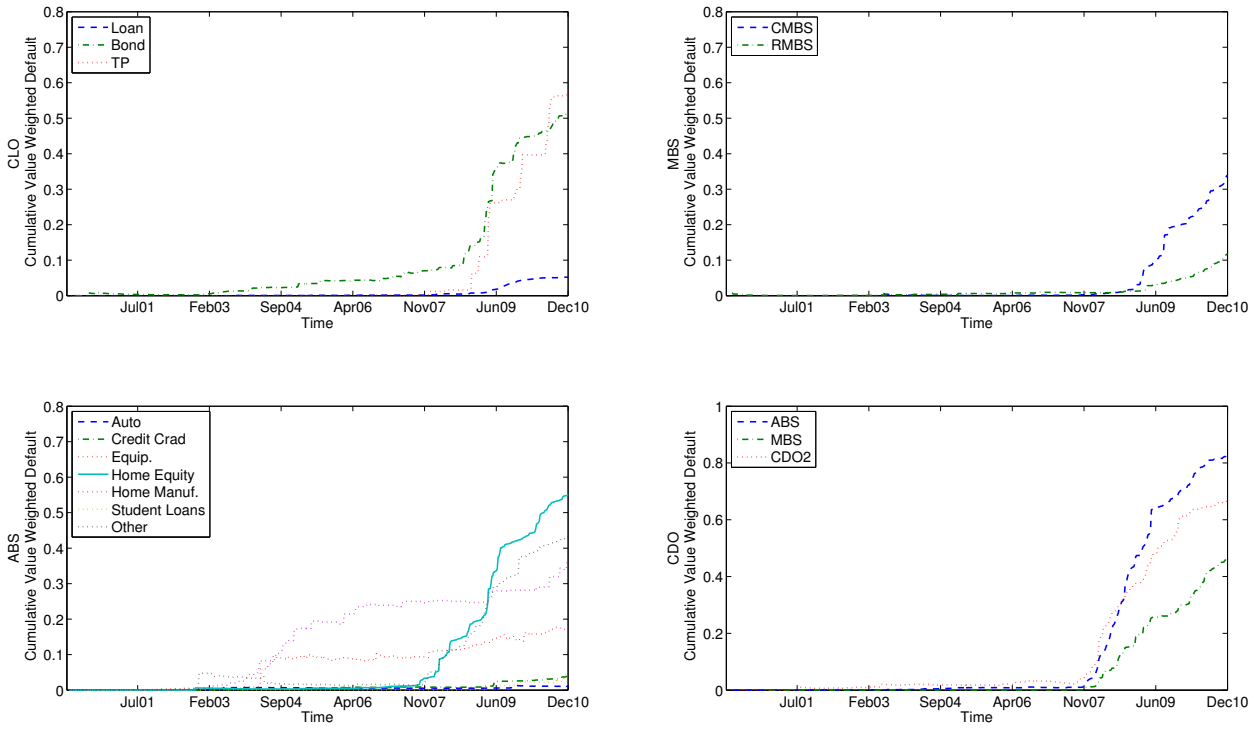
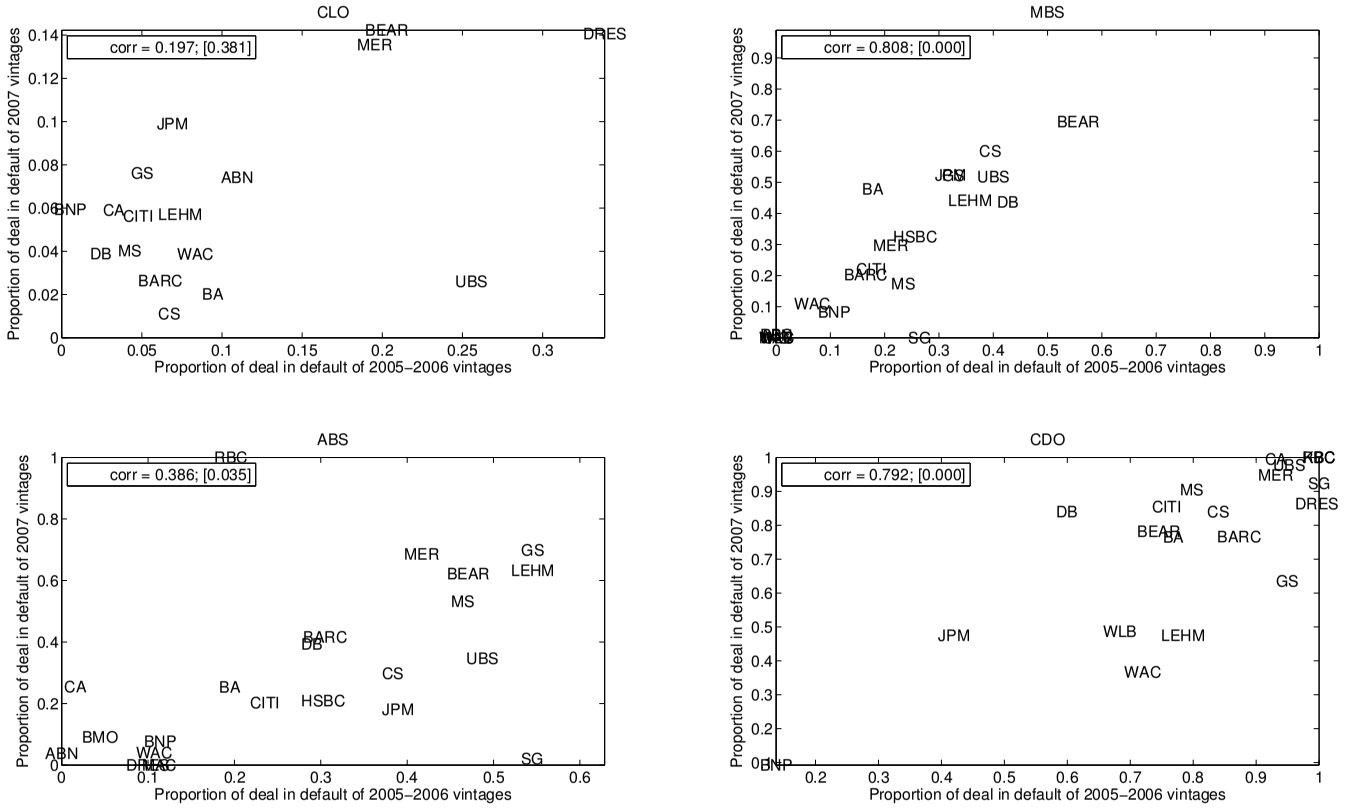


Figure A.6. Performance by Banks Around the Crisis, by Market

This figures shows how the performance (proportion of deal in default) of the securities issued during 2005 and 2006 is related to the performance of the securities issued in 2007, around the beginning of the financial crisis. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal, and then are aggregated at the underwriter level. Panel A presents results for the full sample average performance. Panel B presents a plot similar to that reported in Panel A, but wherein averages are replaced by bank fixed effects. Fixed effects are estimated from a regression similar to that reported in column (5) of Table 2, wherein we do not include the reputation variable, and separately for the two vintages 2005-2006 and 2007 respectively. The data are from Bloomberg.

Panel A: Average



Panel B: Fixed effect

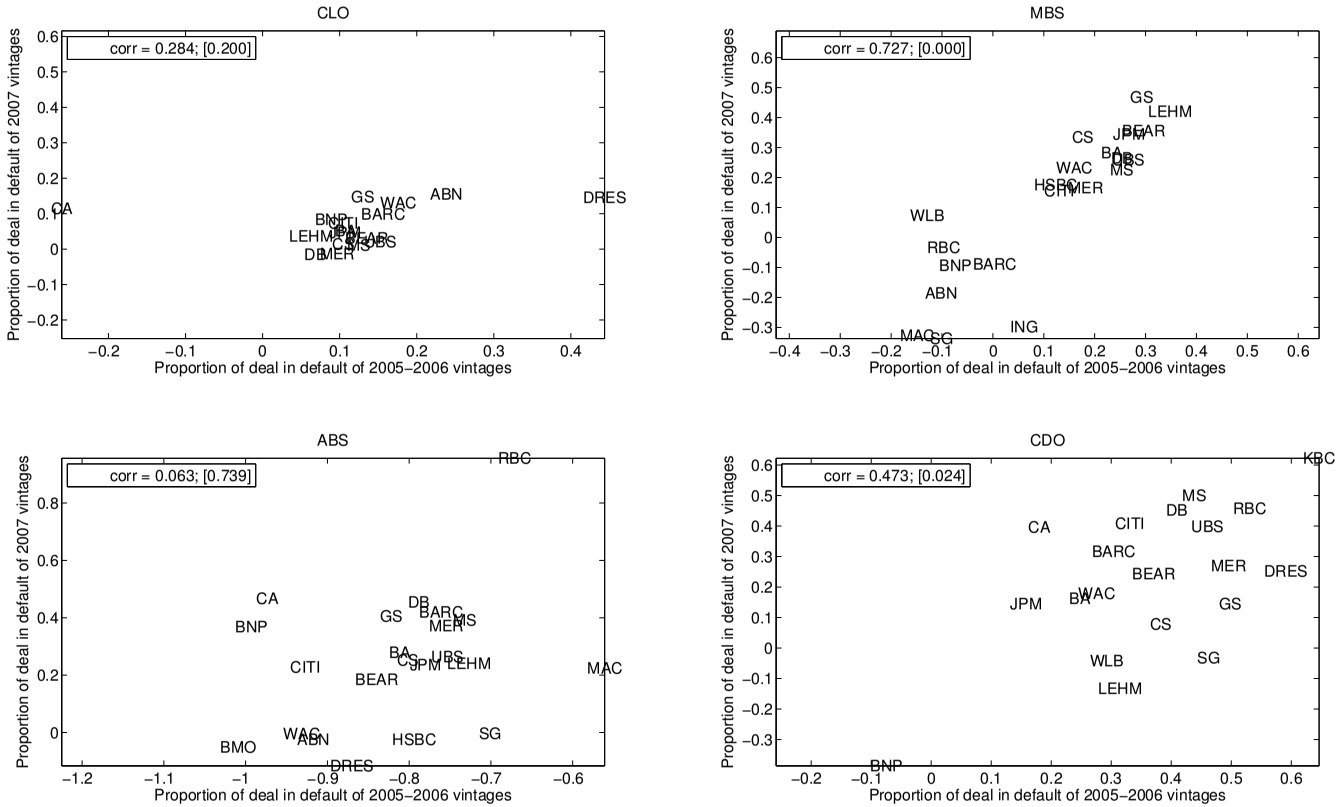


Table A.1. Issuance by Year

This table reports yearly issuances of CLO, MBS, ABS and CDO securities from January of 2000 through December of 2010. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The data are from Bloomberg.

	TOTAL	CLO				MBS (Non Agency)		
	CLO, MBS, ABS, CDO	Loan	Bond	TP	Total	RMBS	CMBS	Total
2000	282.1	8.8	15.2	0.0	24.0	0.0	40.0	40.0
2001	295.5	10.8	17.6	0.0	28.4	0.0	42.0	42.0
2002	403.3	17.7	7.3	0.3	25.3	0.3	46.6	46.9
2003	837.9	25.0	2.2	2.8	30.1	344.5	61.2	405.7
2004	1284.9	39.7	1.4	3.5	44.6	567.1	67.8	634.9
2005	1860.5	83.0	1.8	6.0	90.8	809.7	141.2	950.8
2006	2151.0	145.1	5.1	8.7	158.9	868.3	158.5	1026.8
2007	1955.7	173.3	7.9	5.0	186.3	943.4	160.9	1104.2
2008	519.0	35.7	5.4	0.0	41.1	310.8	3.3	314.1
2009	342.2	35.5	0.0	0.0	35.5	172.6	14.1	186.7
2010	301.5	14.6	0.0	0.0	14.6	205.6	6.1	211.7

	ABS								CDO				
	Auto	Credit Card	Equip.	Home Equity	Manuf. Housing	Student Loan	Other	Total	ABS	MBS	CDO2	Missing	Total
2000	50.1	54.9	11.0	56.2	10.6	2.4	20.3	205.5	7.0	0.5	0.9	4.1	12.5
2001	41.5	57.3	3.5	68.3	7.0	1.3	25.3	204.3	7.9	0.8	1.3	10.7	20.8
2002	44.9	59.0	4.3	146.4	4.7	5.9	33.9	299.1	13.1	6.1	2.2	10.5	31.9
2003	40.4	53.2	4.8	230.9	0.8	7.1	34.3	371.6	14.3	2.9	1.4	11.9	30.5
2004	49.1	56.1	6.7	405.5	1.2	7.2	25.8	551.6	37.8	4.1	2.9	9.0	53.8
2005	62.9	68.3	8.4	528.4	0.7	9.1	47.9	725.8	68.8	7.8	4.9	11.5	93.0
2006	55.7	71.2	8.5	546.3	0.5	16.4	60.4	758.9	139.5	29.4	8.1	29.5	206.4
2007	69.3	94.1	6.2	250.5	0.4	10.3	54.1	485.0	110.6	22.1	11.6	35.9	180.2
2008	45.1	63.3	0.6	1.2	0.3	0.0	34.6	145.1	2.3	0.0	0.0	16.3	18.7
2009	26.4	45.6	4.4	0.0	0.0	13.6	18.6	108.5	0.0	0.0	0.0	11.5	11.5
2010	40.5	10.4	1.3	0.0	0.4	8.7	13.3	74.7	0.0	0.0	0.0	0.6	0.6

Table A.2. Banks by Volume

This table presents issuance volume and number of deals for each underwriter included in the main analysis (underwriters with reputation) and for the top underwriters for which no reputation variable is available. Next to the IPO reputation, we also present the average rank in the fixed income League Rank Tables. The data are organized in descending order of reputation and total issuance volume. Note that we list here all deals that we could find on the Bloomberg system, regardless of whether we can observe a reputation measure for the issuer in the year in which the securities were issued and regardless of whether any rating information is available for that security. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

		Average		ALL		CLO		MBS		ABS		CDO	
		Rep	Rank	Volume	Deals	Volume	Deals	Volume	Deals	Volume	Deals	Volume	Deals
Citigroup	CITI	9	2	1330.5	1590	80.4	143	618.3	531	541.7	773	90.1	143
JP Morgan Chase	JPM	9	2	1316.4	1466	87.8	173	657.8	546	545.7	649	25.1	98
Credit Suisse	CS	9	91	1220.0	1701	57.5	140	681.4	734	444.9	719	36.2	108
Deutsche Bank	DB	9	4	1089.4	1401	86.5	140	570.8	485	372.2	655	60.0	121
Morgan Stanley	MS	9	5	761.0	1248	41.8	85	367.2	399	324.0	589	28.0	175
Merrill Lynch	MER	9	6	720.8	1008	56.2	97	320.8	359	233.5	409	110.3	143
Goldman Sachs	GS	9	8	641.4	935	50.9	132	336.2	378	178.4	332	76.0	93
HSBC	HSBC	9	9	173.9	331	14.3	16	72.3	76	86.8	236	0.4	3
Bank of America	BA	8	4	1221.1	1181	23.9	53	759.4	499	400.9	567	37.0	62
Lehman Brothers	LEHM	8	11	995.8	1597	62.5	149	499.1	628	393.1	693	41.1	127
Bear Stearns	BEAR	8	22	954.5	1471	48.3	142	691.0	752	188.1	462	27.1	115
Barclays Bank	BARC	8	8	588.4	609	59.9	46	322.5	212	181.4	320	24.6	31
UBS	UBS	8	10	480.8	803	19.6	37	298.0	406	104.8	259	58.5	101
Santander	SANT	8	70	122.2	49	28.7	14	74.4	19	19.1	16	0.0	0
Daiwa Securities	DAIW	8	67	31.0	40	0.0	0	29.8	35	1.3	5	0.0	0
Mediobanca	MED	8	70	7.4	8	0.0	0	0.0	0	7.4	8	0.0	0
Sandler ONeil & Partners LP	SOP	8	229	3.5	4	0.0	0	2.4	2	1.0	2	0.0	0
Wachovia Securities	WAC	7	31	349.5	473	25.2	68	114.7	77	136.2	226	73.4	102
BNP Paribas	BNP	7	13	179.9	246	17.6	22	94.7	71	60.0	106	7.6	47
Societe Generale	SG	7	39	101.0	165	8.5	11	54.0	63	32.2	71	6.3	20
Credit Agricole	CA	7	97	84.5	199	10.3	18	22.4	23	20.0	52	31.8	106
Dresdner Bank	DRES	7	18	43.1	110	7.4	17	4.6	8	14.1	51	16.9	34
Commerzbank	COMM	7	35	39.3	32	7.9	9	28.5	16	2.9	7	0.0	0
RBC Capital Markets	RBC	7	148	19.1	54	0.1	1	6.7	20	10.2	29	2.1	4
BMO-Nesbitt Burns	BMO	7	43	7.7	19	0.0	0	0.3	1	7.4	18	0.0	0
Wells Fargo Securities	WF	7	192	5.5	20	0.6	3	3.5	9	1.4	8	0.0	0
China Int. Capital	CIC	7	95	5.1	11	3.5	6	0.9	2	0.7	3	0.0	0
Scotia Capital	SCOT	7	40	3.5	16	0.0	1	2.0	7	1.4	7	0.1	1
Investec Bank	INVTC	7	250	3.2	17	0.0	0	3.1	13	0.1	1	0.0	3
Nikko Cordial Securities	NIKK	7	382	1.6	4	0.9	2	0.5	1	0.0	0	0.2	1
Rotschild & Cie	RCIE	7	500	1.6	1	0.0	0	0.0	0	1.6	1	0.0	0
Morgan Keegan	MK	7	230	1.0	3	0.0	0	0.1	1	0.9	2	0.0	0
US Bancorp Piper Jaffray	BANC	7	491	0.5	9	0.0	0	0.0	0	0.5	9	0.0	0
NM Rothschild & Sons	NMRS	7	399	0.2	2	0.1	1	0.0	0	0.0	1	0.0	0
Raymond James & Associates	RJA	7	332	0.2	2	0.0	0	0.1	1	0.1	1	0.0	0
Legg Mason Wood Walker	LMWW	7	289	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0

		Aver. Rep	Rank	ALL Volume	ALL Deals	CLO Volume	CLO Deals	MBS Volume	MBS Deals	ABS Volume	ABS Deals	CDO Volume	CDO Deals
Macquarie Bank	MAC	6	150	30.5	66	0.0	0	20.9	45	9.5	21	0.0	0
Suntrust Cap Mkts	SUNT	6	148	3.8	16	2.0	5	0.2	1	1.6	10	0.0	0
BB&T Capital Markets	BBT	6	213	2.1	18	0.0	0	0.3	3	1.8	15	0.0	0
Cantor Fitzgerald	CANT	6	400	1.0	1	0.0	0	0.0	0	0.0	0	1.0	1
Sutro & Co	SU	6	290	0.1	1	0.0	0	0.1	1	0.0	0	0.0	0
Davenport & Company	DAV	6	500	0.0	3	0.0	0	0.0	3	0.0	0	0.0	0
KBC Bank	KBC	5	93	18.1	20	1.8	7	11.2	2	1.8	6	3.4	5
Jefferies & Co	JEFF	5	109	10.5	36	0.5	4	9.9	31	0.1	1	0.0	0
Friedman Billings Ramsey	FBRG	5	217	9.2	23	0.0	0	0.0	0	9.2	23	0.0	0
McDonald Investments	MCDI	5	500	1.0	7	0.4	1	0.0	0	0.6	6	0.0	0
Blaylock & Partners	BLA	5	300	0.7	3	0.0	0	0.0	0	0.7	3	0.0	0
KeyBanc Capital Markets	KEY	5	123	0.4	2	0.3	1	0.0	0	0.1	1	0.0	0
Kirkpatrick Pettis	KIRK	5	500	0.2	2	0.0	0	0.2	2	0.0	0	0.0	0
Sterne Agee & Leach	SAL	5	349	0.1	1	0.0	0	0.0	0	0.1	1	0.0	0
Stifel Nicolaus & Co	STN	5	332	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1
Imperial Capital Bank	ICB	4	301	0.4	1	0.0	0	0.4	1	0.0	0	0.0	0
First Albany	FA	4	500	0.4	5	0.0	0	0.1	1	0.3	4	0.0	0
Jesup & Lamont Securities Corp	JES	3	587	10.0	2	0.0	0	10.0	2	0.0	0	0.0	0
Barits Intl Securities	BAR	3	500	0.3	1	0.3	1	0.0	0	0.0	0	0.0	0
Capital West Securities	CAPW	3	500	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0
Royal Bank of Scotland			76	685.4	962	25.6	42	441.2	405	195.7	462	22.8	53
Countrywide Securities			128	587.1	688	0.0	0	302.5	355	284.7	333	0.0	0
Abn Amro Bank			214	279.7	211	39.5	16	170.9	123	64.8	68	4.5	4
ING Bank			36	169.8	40	22.7	4	141.8	18	5.4	18	0.0	0
Rabobank International			55	164.9	36	6.4	7	153.8	21	3.3	3	1.5	5
Fortis Bank			44	143.5	92	16.2	14	113.9	33	6.9	38	6.6	7
Bank of Scotland			159	139.7	14	0.0	0	135.0	13	4.7	1	0.0	0
Hypovereinsbank			27	98.8	59	41.8	24	46.6	23	10.1	10	0.4	2
Lloyds TSB Bank			73	85.5	22	9.3	7	70.7	11	4.8	3	0.6	1
Banc One Capital Markets			500	72.9	114	0.7	2	0.1	1	71.9	110	0.3	1
Intesa Sanpaolo			94	66.8	20	0.0	0	53.3	9	7.6	8	5.9	3
Banco Bilbao Vizcaya Argentaria			45	63.7	27	16.6	8	40.6	14	6.6	5	0.0	0
WestLB			37	41.6	105	0.3	1	4.4	10	12.6	70	24.3	24
Nationwide Building Society			500	39.2	2	0.0	0	39.2	2	0.0	0	0.0	0
GMAC RFC Securities			500	38.6	76	0.0	0	21.7	43	16.9	33	0.0	0
Banca Monte Dei Paschi di Siena			103	37.0	11	2.2	1	30.3	7	3.8	2	0.6	1
Instituto de Credito Oficial			500	36.7	2	36.7	2	0.0	0	0.0	0	0.0	0
Caja de Barcelona			119	36.1	18	18.6	8	17.5	10	0.0	0	0.0	0
NIBC Bank			355	32.2	30	1.8	2	25.0	18	0.4	4	4.9	6
Nomura International			500	30.7	97	6.0	11	15.0	48	9.2	33	0.5	5

Table A.3. Impact of High Reputation on Proportion of Rating Changes

This table reports estimation results of regression models in which the dependent variables are deal rating changes. The main variable of interest is an indicator variable (High Reputation) set equal to one for deals with an underwriter reputation score bigger or equal to 8. The variable is constructed based on reputation scores obtained from Professor Jay Ritter's website. The score is a measure of the prestige ranking of IPO underwriters obtained following the method proposed by Carter and Manaster (1990): it is on a 0 to 9 scale, and is based on the pecking order seen in "tombstone" advertisements. We match the Ritter dataset to our dataset by name of the underwriter institution. For deals that have more than one underwriter, the reputation score is calculated as the maximum score across underwriters. Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total asset of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Panel A presents results for the full sample and the dependent variable is the difference in the value-weighted deal rating as of December 2010 and at issuance. Panel B reports results of difference in deal rating between the end and the beginning of each year, starting in 2000 throughout 2010. Panel C reports results of regressions similar to that reported in Panel A but disaggregated by vintage year. For example the first column reports results of the difference in the deal rating in December 2010 and issuance for deals issued between January 1, 2000 throughout December 31, 2000. Panel D presents results of regressions for disaggregated markets of CLO, MBS, ABS and CDO, respectively, the dependent variable is the difference in the value-weighted deal rating as of December 2010 and at issuance. Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. Most regression specification contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but only reported in Panel A. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

Panel A: Overall

	Jan-2000 to Dec-2010					
	(1)	(2)	(3)	(4)	(5)	(6)
High Reputation	2.711	0.830	1.219	0.992	0.976	1.085
	(3.96)	(2.77)	(3.87)	(3.15)	(3.19)	(3.25)
US Deal			3.849	3.834	3.581	3.505
			(4.00)	(3.99)	(3.81)	(3.77)
Amount			-0.004	-0.002	-0.096	-0.084
			(-0.04)	(-0.02)	(-0.88)	(-0.75)
Maturity			1.037	1.037	0.964	0.912
			(3.13)	(3.10)	(2.94)	(2.52)
Initial Rating			-0.782	-0.781	-0.688	-0.687
			(-11.32)	(-11.27)	(-9.88)	(-9.51)
AAA Fraction			-2.754	-2.744	-2.745	-2.576
			(-4.91)	(-4.88)	(-4.84)	(-4.43)
Synthetic			2.297	2.279	2.251	2.476
			(2.62)	(2.59)	(2.54)	(2.72)
Investment Bank				0.414	0.423	0.307
				(2.77)	(2.87)	(2.19)
Bank Size						-0.066
						(-0.48)
Bank Book-to-Market						0.072
						(0.64)
Constant	5.789	0.494	-1.728	-1.790	0.905	0.864
	(12.67)	(1.65)	(-0.67)	(-0.70)	(0.36)	(0.29)
Credit Enhancement Control					X	X
Vintage by Type Fixed Effects		X	X	X	X	X
Adjusted-R^2	0.006	0.517	0.568	0.568	0.574	0.593
Observations	11246	11246	11242	11242	11242	10520

Panel B: Perfromance by year

	2001 (1)	2002 (2)	2003 (3)	2004 (4)	2005 (5)	2006 (6)	2007 (7)	2008 (8)	2009 (9)	2010 (10)
High Reputation	0.144	0.412	-0.162	-0.115	0.060	0.137	0.219	0.653	0.166	-0.040
	(1.02)	(1.90)	(-0.90)	(-0.95)	(0.62)	(1.25)	(1.70)	(2.73)	(0.71)	(-0.85)
US Deal	0.007	0.581	0.090	-0.072	0.015	-0.018	0.096	1.092	2.210	-0.010
	(0.09)	(2.08)	(0.75)	(-1.14)	(0.33)	(-0.32)	(1.34)	(3.64)	(3.15)	(-0.44)
Amount	0.042	-0.066	0.016	-0.046	0.015	-0.048	-0.068	-0.050	-0.059	-0.007
	(1.75)	(-0.72)	(0.42)	(-1.68)	(0.74)	(-0.87)	(-1.56)	(-0.60)	(-0.82)	(-1.49)
Maturity	-0.104	-0.396	-0.005	-0.011	-0.008	0.058	0.295	0.444	-0.060	0.015
	(-2.54)	(-1.25)	(-0.05)	(-0.18)	(-0.17)	(1.09)	(4.11)	(2.05)	(-0.37)	(1.38)
Initial Rating	0.022	-0.069	-0.085	-0.049	-0.053	-0.057	-0.026	-0.140	-0.205	-0.005
	(1.34)	(-1.37)	(-2.67)	(-2.42)	(-2.84)	(-2.16)	(-0.75)	(-1.94)	(-4.98)	(-1.68)
AAA Fraction	0.058	-0.313	-0.915	-0.291	-0.237	-0.402	-0.727	-0.150	0.433	0.021
	(0.25)	(-0.84)	(-3.30)	(-1.57)	(-1.70)	(-2.72)	(-2.73)	(-0.30)	(1.17)	(0.75)
Synthetic	0.843	0.268	-0.115	0.203	0.041	-0.279	0.972	1.732	-0.049	0.011
	(1.29)	(0.86)	(-0.50)	(0.96)	(0.31)	(-2.39)	(2.08)	(2.09)	(-0.13)	(0.31)
Investment Bank	0.021	-0.120	0.019	0.000	-0.057	0.033	0.052	0.195	0.171	0.020
	(0.53)	(-0.79)	(0.23)	(0.01)	(-1.29)	(0.84)	(0.71)	(2.37)	(1.72)	(1.47)
Bank Size	-0.031	-0.107	-0.057	-0.015	0.027	-0.048	-0.019	-0.063	0.093	-0.008
	(-0.62)	(-1.10)	(-1.11)	(-0.36)	(0.73)	(-1.36)	(-0.28)	(-0.63)	(0.91)	(-0.78)
Bank Book-to-Market	-0.070	-0.668	-0.009	0.024	0.065	-0.021	-0.209	0.036	0.582	-0.006
	(-0.57)	(-1.53)	(-0.06)	(0.17)	(0.56)	(-0.20)	(-1.18)	(0.14)	(1.80)	(-0.63)
Credit Enhancement Control	X	X	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X	X	X
Adjusted-R^2	0.215	0.076	0.264	0.254	0.055	0.077	0.179	0.429	0.428	0.038
Observations	315	760	1435	2612	4183	6065	8259	10151	10470	10640

Panel C: Performance by vintage

	2000 (1)	2001 (2)	2002 (3)	2003 (4)	2004 (5)	2005 (6)	2006 (7)	2007 (8)	2008 (9)	2009 (10)	2010 (11)
High Reputation	1.413	2.554	-0.004	1.728	-0.044	1.458	1.953	0.847	2.413	0.729	0.179
	(0.79)	(2.08)	(-0.01)	(1.94)	(-0.05)	(2.13)	(2.53)	(1.05)	(1.07)	(0.59)	(0.94)
US Deal	0.664	0.053	-0.362	-0.013	2.049	5.973	5.187	4.777	4.159	-1.471	0.136
	(0.29)	(0.04)	(-0.38)	(-0.02)	(2.63)	(2.73)	(2.00)	(2.28)	(2.22)	(-1.17)	(0.64)
Amount	0.782	0.144	0.484	0.243	-0.071	-0.005	-0.057	-0.608	-0.672	0.172	0.055
	(2.18)	(0.51)	(1.14)	(0.63)	(-0.55)	(-0.03)	(-0.21)	(-2.76)	(-1.82)	(0.77)	(1.28)
Maturity	2.640	0.577	0.608	1.138	1.471	-0.933	0.954	1.485	-0.341	-0.552	0.051
	(2.32)	(1.08)	(0.82)	(2.75)	(2.39)	(-1.89)	(1.74)	(1.75)	(-0.27)	(-0.45)	(0.54)
Initial Rating	-0.053	-0.785	-0.449	-0.441	-0.376	-0.663	-0.840	-0.832	-0.541	-0.599	-0.323
	(-0.14)	(-3.85)	(-2.02)	(-2.80)	(-1.51)	(-3.50)	(-6.38)	(-7.69)	(-1.28)	(-1.84)	(-6.34)
AAA Fraction	0.782	-5.120	-1.383	-1.589	-2.142	-2.670	-2.862	-1.422	-3.029	-7.341	-2.345
	(0.30)	(-3.27)	(-0.83)	(-1.27)	(-1.14)	(-1.58)	(-2.03)	(-1.15)	(-1.40)	(-4.02)	(-6.96)
Synthetic	4.353	5.520	0.730	1.029	0.143	1.757	1.843	3.776	-4.012		
	(1.09)	(0.83)	(0.79)	(1.06)	(0.08)	(1.29)	(1.40)	(2.52)	(-1.90)		
Investment Bank	-1.898	-0.127	0.871	0.416	0.254	0.225	0.253	0.474	-0.084	-0.342	-0.051
	(-1.30)	(-0.22)	(1.95)	(0.67)	(1.16)	(0.90)	(0.92)	(1.38)	(-0.23)	(-0.50)	(-0.47)
Bank Size	-1.464	-0.693	1.260	0.081	-0.260	-0.692	-0.002	0.234	-0.824	0.135	-0.291
	(-0.92)	(-1.32)	(2.49)	(0.33)	(-1.40)	(-3.30)	(-0.01)	(0.44)	(-1.43)	(0.16)	(-2.06)
Bank Book-to-Market	-3.140	-0.045	-1.236	1.134	-0.268	-1.847	0.738	1.690	0.863	0.099	0.249
	(-1.37)	(-0.02)	(-1.11)	(1.07)	(-0.37)	(-1.70)	(0.48)	(1.57)	(1.33)	(0.68)	(2.24)
Credit Enhancement Control	X	X	X	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X	X	X	X
Adjusted-R^2	0.219	0.286	0.299	0.350	0.384	0.442	0.597	0.613	0.530	0.192	0.601
Observations	314	446	678	1178	1569	1895	2206	1894	304	169	208

Panel D: CLO, MBS, ABS, and CDO — Jan-2000 to Dec-2010

	CLO		MBS		ABS		CDO	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
High Reputation	-0.767	-1.079	1.589	1.517	1.064	1.081	1.565	1.467
	(-2.13)	(-2.10)	(1.79)	(1.82)	(2.58)	(2.25)	(2.60)	(2.19)
US Deal	-0.934	-0.600	7.241	6.941	0.932	0.513	3.868	3.980
	(-2.78)	(-1.82)	(5.31)	(5.21)	(2.27)	(1.50)	(4.49)	(4.79)
Amount	-0.202	-0.274	-0.105	-0.163	0.058	0.107	-0.221	-0.217
	(-0.87)	(-1.26)	(-0.79)	(-1.15)	(0.25)	(0.46)	(-1.58)	(-1.58)
Maturity	0.680	1.157	-1.953	-1.916	0.668	0.431	3.112	3.076
	(1.46)	(2.49)	(-3.33)	(-3.08)	(2.79)	(1.63)	(6.85)	(7.23)
Initial Rating	0.007	-0.073	-0.485	-0.475	-0.778	-0.780	-0.634	-0.653
	(0.02)	(-0.28)	(-2.57)	(-2.56)	(-8.34)	(-8.02)	(-4.38)	(-4.41)
AAA Fraction	-3.421	-3.324	-0.735	-0.275	-3.909	-3.803	-0.847	-0.964
	(-2.66)	(-2.55)	(-0.41)	(-0.15)	(-6.54)	(-5.97)	(-1.01)	(-1.18)
Synthetic	1.684	1.936					1.604	1.757
	(1.39)	(1.62)					(2.50)	(2.72)
Investment Bank	-0.161	-0.040	0.559	0.340	0.684	0.634	-0.231	-0.195
	(-0.57)	(-0.12)	(2.29)	(1.27)	(2.80)	(3.13)	(-0.64)	(-0.58)
Bank Size		0.063		-0.348		-0.022		0.541
		(0.27)		(-2.20)		(-0.10)		(1.24)
Bank Book-to-Market		0.353		0.184		0.006		-0.856
		(0.42)		(0.80)		(0.08)		(-1.04)
Credit Enhancement Control	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X
Adjusted-R^2	0.519	0.578	0.638	0.648	0.520	0.539	0.582	0.594
Observations	1055	999	3563	3402	5500	5029	1124	1090

Table A.4. Alternative Measures — Rating Changes

This table reports estimation results of regression models in which the dependent variable is the difference in the value-weighted deal rating as of December 2010 and at issuance. The main variables of interest are: an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank) in column 1, 2 and 3, and the negative of the natural logarithm of the deal's underwriter position in the league rank table of fixed income desks (League Rank) column 4, 5 and 6. Both variables are measured as of the issuance date of the security their are paired with. For deals that have more than one underwriter, we consider the rank of the highest placed underwriter. Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total assets of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. Most regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	(1)	(2)	(3)	(4)	(5)	(6)
Top 10 League Rank	0.572	0.248	0.471			
	(3.33)	(2.45)	(3.46)			
League Rank				0.176	0.078	0.054
				(3.19)	(2.19)	(1.67)
US Deal		3.653	3.388		3.654	3.396
		(3.84)	(3.85)		(3.85)	(3.85)
Amount		-0.076	-0.042		-0.079	-0.043
		(-0.68)	(-0.40)		(-0.71)	(-0.39)
Maturity		0.863	1.012		0.859	0.994
		(3.20)	(2.95)		(3.20)	(2.90)
Initial Rating		-0.719	-0.704		-0.716	-0.700
		(-11.25)	(-10.28)		(-11.24)	(-10.24)
AAA Fraction		-2.928	-2.759		-2.902	-2.737
		(-6.03)	(-4.87)		(-5.92)	(-4.80)
Synthetic		2.422	2.443		2.406	2.432
		(3.16)	(2.80)		(3.15)	(2.80)
Investment Bank		0.296	0.217		0.294	0.250
		(2.58)	(1.76)		(2.57)	(1.93)
Bank Size			-0.327			-0.260
			(-2.46)			(-2.07)
Bank Book-to-Market			-0.003			-0.008
			(-0.03)			(-0.08)
Credit Enhancement Control		X	X		X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X
Adjusted-R^2	0.485	0.551	0.594	0.486	0.551	0.593
Observations	14474	14470	11395	14474	14470	11395

Table A.5. Alternative Measures by Market — Proportion of Deal in Default

This table reports estimation results of regression models in which the dependent variables are changes in the proportion of deal that is rated in default as of December 2010. We presents results of regressions for disaggregated markets of CLO, MBS, ABS and CDO, respectively. the league rank table of fixed income desks (Top 10 League Rank), and the negative of the natural logarithm of the deal's underwriter position in the league rank table of fixed income desks (League Rank). Both variables are measured as of the issuance date of the security their are paired with. For deals that have more than one underwriter, we consider the rank of the highest placed underwriter. Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total asset of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (calendar quarter) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. Most regression specifications contain vintage by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but only reported in Panel A. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	CLO		MBS		ABS		CDO	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Top 10 League Rank	-0.005		0.039		0.047		0.056	
	(-0.33)		(2.59)		(4.51)		(2.05)	
League Rank		-0.003		0.010		0.003		0.015
		(-0.98)		(2.35)		(1.07)		(1.92)
US Deal	0.011	0.011	0.250	0.250	0.041	0.038	0.315	0.320
	(0.65)	(0.64)	(4.08)	(4.07)	(2.51)	(2.30)	(5.08)	(5.12)
Amount	-0.029	-0.029	-0.001	-0.001	-0.010	-0.010	-0.004	-0.004
	(-1.64)	(-1.67)	(-0.07)	(-0.16)	(-0.84)	(-0.83)	(-0.36)	(-0.36)
Maturity	0.068	0.068	-0.039	-0.040	0.011	0.010	0.186	0.184
	(2.18)	(2.15)	(-1.80)	(-1.82)	(0.71)	(0.67)	(9.65)	(9.55)
Initial Rating	0.046	0.046	0.042	0.043	0.002	0.003	0.012	0.013
	(2.38)	(2.38)	(4.77)	(4.77)	(0.31)	(0.37)	(1.17)	(1.22)
AAA Fraction	-0.070	-0.072	0.081	0.086	-0.071	-0.069	0.004	0.011
	(-0.78)	(-0.80)	(0.82)	(0.87)	(-1.44)	(-1.38)	(0.08)	(0.22)
Synthetic	0.061	0.061					0.148	0.145
	(0.82)	(0.82)					(3.93)	(3.83)
Investment Bank	-0.009	-0.009	0.021	0.019	0.039	0.044	0.017	0.020
	(-0.50)	(-0.53)	(1.75)	(1.75)	(3.64)	(4.02)	(0.68)	(0.77)
Bank Size	-0.008	-0.007	-0.024	-0.021	0.009	0.014	0.030	0.031
	(-0.64)	(-0.51)	(-2.06)	(-1.89)	(0.85)	(1.42)	(1.01)	(1.10)
Bank Book-to-Market	0.011	0.011	0.005	0.005	-0.006	-0.006	-0.104	-0.102
	(0.24)	(0.25)	(0.41)	(0.36)	(-1.46)	(-1.47)	(-1.70)	(-1.67)
Credit Enhancement Control	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X
Adjusted-R^2	0.532	0.533	0.468	0.468	0.462	0.459	0.502	0.501
Observations	999	999	3402	3402	5029	5029	1090	1090

Table A.6. Finer Reputation Categories

This table reports estimation results of regressions where the dependent variable is the percentage of the deal in default as of December 2010. Differently from specifications reported in other tables, we disaggregate the reputation variables into finer groups. We consider four categories for the IPO reputation: score equal to 9, score equal to 8, score equal to 7, and the rest. We also evaluate four categories for the league table measure: rank between 1 and 10, rank between 11 and 25, rank between 26 and 200, and the rest. We estimate the first three and let the constant absorb the effect of the remaining group. Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total assets of the underwriter (Bank Size) and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. Most regression specifications contain vintage (semester) by type fixed effects and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	(1)	(2)	(3)	(4)
Reputation = 9	0.140	0.202		
	(3.62)	(3.32)		
Reputation = 8	0.147	0.209		
	(3.89)	(3.54)		
Reputation = 7	0.086	0.134		
	(2.26)	(2.38)		
1-10 League Rank			0.033	0.035
			(2.36)	(2.02)
11-25 League Rank			0.015	-0.013
			(0.97)	(-0.71)
26-200 League Rank			0.009	0.004
			(0.42)	(0.17)
US Deal	0.155	0.154	0.145	0.142
	(4.19)	(4.18)	(3.87)	(3.98)
Amount	-0.011	-0.010	-0.013	-0.010
	(-1.75)	(-1.53)	(-2.06)	(-1.56)
Maturity	0.059	0.056	0.061	0.063
	(3.51)	(3.02)	(4.33)	(3.38)
Initial Rating	0.014	0.015	0.007	0.011
	(3.02)	(3.11)	(1.30)	(1.96)
AAA Fraction	-0.023	-0.015	-0.062	-0.045
	(-0.70)	(-0.46)	(-1.89)	(-1.29)
Synthetic	0.161	0.173	0.173	0.169
	(3.37)	(3.51)	(4.22)	(3.44)
Investment Bank	0.016	0.014	0.008	0.021
	(1.94)	(2.05)	(1.23)	(2.67)
Bank Size		-0.002		-0.016
		(-0.21)		(-1.84)
Bank Book-to-Market		-0.003		-0.003
		(-0.52)		(-0.54)
Constant	-0.111	-0.183	0.096	0.204
	(-0.82)	(-1.00)	(0.69)	(1.01)
Credit Enhancement Control	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X
Adjusted-R^2	0.486	0.497	0.466	0.492
Observations	11615	10861	13665	11045

Table A.7. Reputation and Asset Quality — Rating Changes

This table reports estimation results of regression models in which the dependent variables are the changes (between December 2010 and issuance) in the value-weighted deal rating. In column 1 and 2 we report results in which the dependent variables are based only on the tranches that were rated AAA at issuance. In column 3 and 4 we report results obtained excluding deals that are synthetics (i.e., the collateral pool contains some short position in credit default swaps); in column 5 and 6 we only consider non-housing ABS and CMBS deals. In column 7 and 8 we report results for CLO and CDO deals for which we have information about the quality of the collateral assets. The main variable of interest is either an indicator variable (High Reputation) set equal to one for deals with an underwriter IPO reputation score bigger or equal to 8, or an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank). Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total assets of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. All regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	Overall No Synthetics		CDO+CLO Quality		ABS+CMBS No Housing		Overall AAA Tranches	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
High Reputation	1.136		0.847		0.459		0.964	
	(3.37)		(1.83)		(1.24)		(2.74)	
Top 10 League Rank		0.593		-0.051		0.313		0.245
		(4.09)		(-0.19)		(1.49)		(1.56)
US Deal	3.432	3.380	1.221	0.999	0.516	0.635	4.031	3.915
	(3.60)	(3.69)	(2.57)	(2.29)	(1.20)	(1.44)	(4.01)	(4.05)
Amount	-0.084	-0.074	-0.303	-0.279	-0.401	-0.363	-0.406	-0.327
	(-0.73)	(-0.66)	(-2.68)	(-1.59)	(-1.98)	(-1.80)	(-2.74)	(-2.33)
Maturity	0.556	0.634	2.729	2.714	-0.082	-0.032	1.057	1.163
	(1.97)	(2.12)	(6.49)	(6.81)	(-0.27)	(-0.10)	(2.37)	(2.53)
Initial Rating	-0.683	-0.755	-0.562	-0.560	-0.227	-0.259	-0.393	-0.452
	(-9.34)	(-11.09)	(-4.38)	(-4.09)	(-1.72)	(-1.77)	(-1.81)	(-2.03)
AAA Fraction	-2.614	-2.864	-1.818	-1.977	-1.332	-1.453	0.362	-0.054
	(-4.10)	(-4.49)	(-2.95)	(-3.12)	(-1.49)	(-1.46)	(0.31)	(-0.04)
Synthetic			2.040	2.100			3.663	3.736
			(3.30)	(3.28)			(3.74)	(3.85)
Low Quality			1.419	1.404				
			(5.63)	(5.08)				
Investment Bank	0.348	0.369	-0.121	-0.030	0.242	0.202	0.226	-0.004
	(2.42)	(2.60)	(-0.48)	(-0.15)	(1.18)	(0.89)	(1.65)	(-0.03)
Bank Size	-0.127	-0.418	0.164	0.199	-0.403	-0.207	-0.039	-0.460
	(-0.94)	(-2.91)	(0.63)	(0.91)	(-1.76)	(-1.05)	(-0.25)	(-2.85)
Bank Book-to-Market	0.063	0.044	0.089	0.192	0.044	0.061	-0.047	-0.063
	(0.59)	(0.46)	(0.14)	(0.31)	(1.28)	(1.48)	(-0.57)	(-0.71)
Credit Enhancement Control	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X
Adjusted-R^2	0.588	0.585	0.712	0.704	0.225	0.225	0.678	0.667
Observations	10436	10604	2135	2141	1921	1821	9058	9233

Table A.8. Reputation and Bank Identity — Rating Changes

This table reports estimation results of regression models in which the dependent variables are the changes (between December 2010 and issuance) in the value-weighted deal rating. In column 1 and 2 we report results obtained on a sample that excludes Lehman Brothers and Bear Stearns. In column 3 and 4 we report results obtained excluding the 5 largest underwriters with low reputation; in columns 5 and 6 we eliminate the top five high reputation underwriters by volume and the bottom five low reputation by volume; in column 7 and 8 we only consider USD denominated securities. The main variable of interest is either an indicator variable (High Reputation) set equal to one for deals with an underwriter IPO reputation score bigger or equal to 8, or an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank). Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total assets of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. All regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	Overall No Lehman/Bear		Overall No Bottom Rep		Overall No Top-Bottom		Overall US Only	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
High Reputation	0.990		1.085		0.909		1.032	
	(3.06)		(3.38)		(2.50)		(2.72)	
Top 10 League Rank		0.815		0.583		0.662		0.429
		(5.24)		(4.11)		(3.12)		(3.06)
US Deal	3.215	3.164	3.388	3.357	3.301	3.350		
	(3.52)	(3.51)	(3.77)	(3.77)	(3.50)	(3.69)		
Amount	-0.232	-0.280	-0.123	-0.166	-0.252	-0.086	0.213	0.153
	(-1.87)	(-2.31)	(-1.14)	(-1.55)	(-1.79)	(-0.69)	(1.33)	(0.97)
Maturity	0.904	0.905	0.939	0.936	0.430	0.356	0.760	0.667
	(2.32)	(2.19)	(2.68)	(2.52)	(1.49)	(1.37)	(3.22)	(2.63)
Initial Rating	-0.678	-0.770	-0.672	-0.745	-0.694	-0.757	-0.622	-0.679
	(-8.83)	(-10.27)	(-9.72)	(-11.28)	(-7.38)	(-9.85)	(-7.40)	(-8.06)
AAA Fraction	-2.271	-2.483	-2.310	-2.495	-1.860	-2.244	-2.415	-2.481
	(-3.87)	(-4.15)	(-4.02)	(-4.35)	(-3.03)	(-3.75)	(-3.65)	(-3.65)
Synthetic	2.556	2.555	2.434	2.439	1.957	2.104	3.931	4.116
	(2.63)	(2.54)	(2.70)	(2.62)	(2.54)	(2.89)	(2.73)	(2.78)
Investment Bank	0.566	0.776	0.294	0.498	0.421	0.306	0.355	0.414
	(3.56)	(4.32)	(2.08)	(3.16)	(2.10)	(1.76)	(2.53)	(2.70)
Bank Size	-0.043	0.107	-0.096	-0.150	0.576	-0.277	-0.033	-0.043
	(-0.21)	(0.53)	(-0.70)	(-1.03)	(2.30)	(-1.31)	(-0.23)	(-0.27)
Bank Book-to-Market	0.061	0.073	0.067	0.090	-0.016	-0.327	0.052	0.086
	(0.43)	(0.52)	(0.62)	(0.82)	(-0.04)	(-0.78)	(0.80)	(1.36)
Credit Enhancement Control	X	X	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X	X	X
Adjusted-R^2	0.587	0.584	0.597	0.594	0.615	0.606	0.648	0.647
Observations	8687	8047	10859	10219	5306	6455	8389	7810

Table A.9. Yield Spreads of Lower (not AAA) Tranches

This table reports estimation results of regression models in which the dependent variables are: the average spread of tranches rated less than AAA at issuance (AA–B) in columns 1 and 2, the average spread of tranches rated between AA and A at issuance (AA–A) in columns 3 and 4, the average spread of tranches rated less than A at issuance (BBB–B) in columns 5 and 6. The main variable of interest is either an indicator variable (High Reputation) set equal to one for deals with an underwriter IPO reputation score bigger or equal to 8, or an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank). Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), and an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total asset of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. All regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	AA–B		AA–A		BBB-B	
	(1)	(2)	(3)	(4)	(5)	(6)
High Reputation	-0.101		-0.071		0.586	
	(-0.75)		(-0.68)		(1.39)	
Top 10 League Rank		0.027		0.066		0.063
		(0.47)		(1.33)		(0.32)
US Deal	0.310	0.312	0.359	0.397	1.421	1.341
	(2.68)	(2.77)	(3.96)	(4.35)	(3.56)	(3.33)
Maturity	0.077	-0.010	-0.020	-0.048	-0.063	-0.274
	(0.89)	(-0.16)	(-0.32)	(-0.85)	(-0.21)	(-0.85)
Initial Rating	0.235	0.246	0.182	0.173	-0.006	-0.028
	(5.02)	(6.75)	(5.86)	(6.02)	(-0.05)	(-0.18)
AAA Fraction	0.845	0.965	0.741	0.740	0.298	0.008
	(3.16)	(4.49)	(4.01)	(4.11)	(0.27)	(0.01)
Synthetic	0.229	0.184	0.158	0.149	1.102	0.604
	(1.56)	(1.52)	(1.35)	(1.49)	(2.44)	(1.48)
Investment Bank	0.024	0.109	0.047	0.123	0.198	0.236
	(0.36)	(1.86)	(0.80)	(2.25)	(1.10)	(1.44)
Bank Size	-0.043	-0.004	-0.061	-0.031	-0.248	-0.076
	(-0.77)	(-0.10)	(-1.44)	(-0.97)	(-1.32)	(-0.53)
Bank Book-to-Market	0.075	0.250	0.126	0.235	-0.539	-0.077
	(0.55)	(1.93)	(1.21)	(2.23)	(-0.64)	(-0.12)
Credit Enhancement Control	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X
Adjusted-R^2	0.536	0.527	0.585	0.565	0.636	0.573
Observations	1867	1926	1820	1883	544	574

Table A.10. Reputation and Securities Risk — Rating Changes

This table reports estimation results of regression models in which the dependent variables are the changes in the value-weighted deal rating between issuance and December 2010. The main variable of interest is either an indicator variable (High Reputation) set equal to one for deals with an underwriter IPO reputation score bigger or equal to 8, or an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank). Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total asset of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. All regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	Overall		CLO		MBS		ABS		CDO	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
High Reputation	0.651		-1.131		0.499		0.484		2.122	
	(2.10)		(-2.34)		(0.71)		(0.99)		(3.22)	
Top 10 League Rank		0.321		-0.494		0.206		0.637		0.264
		(2.40)		(-2.05)		(1.74)		(2.78)		(0.50)
US Deal	1.108	1.112	-0.782	-0.896	5.254	5.628	0.647	0.936	4.512	4.116
	(2.81)	(2.86)	(-2.41)	(-2.85)	(3.26)	(3.68)	(1.79)	(2.43)	(4.21)	(4.00)
Amount	-0.041	-0.037	-0.388	-0.400	-0.122	-0.056	0.039	0.022	0.003	0.032
	(-0.28)	(-0.25)	(-1.36)	(-1.55)	(-0.65)	(-0.30)	(0.15)	(0.09)	(0.01)	(0.12)
Maturity	1.638	1.611	1.043	1.080	0.496	0.449	0.744	0.602	3.260	3.331
	(3.89)	(3.70)	(2.15)	(2.02)	(1.09)	(0.99)	(1.85)	(1.34)	(7.07)	(7.71)
Initial Rating	-0.596	-0.630	-0.283	-0.561	-0.353	-0.266	-0.112	-0.286	-1.076	-1.129
	(-3.35)	(-3.30)	(-0.94)	(-1.64)	(-0.95)	(-0.73)	(-0.23)	(-0.60)	(-5.06)	(-4.69)
Initial Frac. AAA	-3.525	-4.001	-3.449	-4.535	-5.207	-5.320	-4.034	-4.850	-2.007	-2.625
	(-4.19)	(-4.45)	(-2.36)	(-3.11)	(-3.05)	(-3.30)	(-2.38)	(-2.66)	(-1.79)	(-2.13)
Synthetic	2.334	2.388	2.667	2.965					2.041	2.054
	(2.63)	(2.70)	(2.05)	(2.40)					(3.12)	(3.15)
AAA Spread	0.001	0.002	1.077	1.127	-0.001	0.001	-0.041	-0.068	0.880	0.881
	(0.03)	(0.09)	(2.07)	(2.23)	(-0.04)	(0.05)	(-0.20)	(-0.33)	(1.84)	(1.74)
Investment Bank	0.384	0.176	0.249	-0.014	0.340	0.019	0.675	0.368	-0.136	0.253
	(2.65)	(1.36)	(0.77)	(-0.06)	(2.83)	(0.11)	(2.51)	(1.73)	(-0.31)	(0.58)
Bank Size	0.218	-0.060	0.058	0.033	-0.025	-0.262	0.428	0.080	0.391	0.443
	(1.61)	(-0.46)	(0.25)	(0.15)	(-0.19)	(-1.84)	(1.78)	(0.43)	(0.89)	(1.03)
Bank Book-to-Market	0.009	-0.030	-0.174	0.083	0.319	0.170	-0.001	-0.032	-1.395	-1.245
	(0.14)	(-0.48)	(-0.24)	(0.13)	(1.89)	(0.97)	(-0.02)	(-0.43)	(-1.32)	(-1.35)
Credit Enhancement	X	X	X	X	X	X	X	X	X	X
Vintage by Type FE	X	X	X	X	X	X	X	X	X	X
Adjusted-R^2	0.690	0.685	0.574	0.579	0.817	0.821	0.557	0.553	0.585	0.585
Observations	8065	8194	904	911	2564	2638	3667	3724	930	921

Table A.11. Impact of Reputation on Issuance Characteristics

This table reports estimation results of regression models in which the dependent variables are deal characteristics: size of the deal in billion dollars (Amount), average maturity of the securities in years (Maturity), value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), and an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic). The main variable of interest is either an indicator variable (High Reputation) set equal to one for deals with an underwriter IPO reputation score bigger or equal to 8, or an indicator variable set equal to one when the underwriter belongs to the top ten of the league rank table of fixed income desks (Top 10 League Rank). Other control variables are: the natural logarithm of the size of the deal in billion dollars (Amount), the natural logarithm of the maturity of the securities in years (Maturity), the value weighted rating of the securities comprising a deal as of the date of issuance (Initial Rating), the fraction of securities that are rated AAA as of the issuance date relative to the size of the deal (AAA Fraction), an indicator variable that identifies deals that are backed, in part or in full, by positions in CDS contracts (Synthetic), an indicator variable equal to one for securities that are produced by an investment bank (Investment Bank). We also include controls at the underwriter level measured at the deal issuance date: the natural logarithm of the total asset of the underwriter (Bank Size), and the ratio of book equity capital to the market value of the underwriter (Bank Book-to-Market). Estimated coefficients are reported along with t-statistics based on standard errors clustered by vintage (semester) by type, in parenthesis. The type refers to the type of collateral that is (predominantly) backing up the deals, as presented in Table 1. All regression specifications contain vintage (semester) by type fixed effects, and a set of indicator variables that are set equal to one when the deal has one of the following credit enhancements: collateral account, cross-collateralization, insurance wrap, letter of credit, over collateralization, reserve account, spread account, subordination. A constant is estimated but not reported. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

	Amount		Initial Rating		AAA Fraction	
High Reputation	-0.103		0.139		-0.032	
	(-1.24)		(1.07)		(-1.82)	
Top 10 League Rank		-0.017		0.087		-0.004
		(-0.55)		(1.63)		(-0.56)
US Deal	-0.318	-0.292	0.090	0.106	0.018	0.014
	(-5.18)	(-4.92)	(0.99)	(1.18)	(1.23)	(0.94)
Amount			-0.961	-0.930	0.133	0.130
			(-14.52)	(-14.65)	(17.66)	(17.92)
Maturity	0.416	0.435	0.455	0.480	-0.058	-0.053
	(7.84)	(8.66)	(4.71)	(5.08)	(-3.83)	(-3.71)
Initial Rating	-0.152	-0.172				
	(-7.52)	(-7.49)				
AAA Fraction	1.105	1.061				
	(7.90)	(7.05)				
Synthetic	-0.356	-0.305	-0.174	-0.119	-0.050	-0.053
	(-2.55)	(-2.23)	(-0.95)	(-0.69)	(-1.62)	(-1.93)
Investment Bank	0.047	-0.033	0.042	0.181	-0.007	-0.020
	(1.61)	(-1.33)	(0.73)	(4.22)	(-0.90)	(-2.96)
Bank Size	0.092	0.058	-0.042	-0.070	0.009	0.006
	(3.77)	(2.61)	(-0.95)	(-1.82)	(1.35)	(1.14)
Bank Book-to-Market	0.009	0.006	0.002	-0.010	-0.004	-0.001
	(0.46)	(0.32)	(0.05)	(-0.22)	(-0.49)	(-0.09)
Credit Enhancement Control	X	X	X	X	X	X
Vintage by Type Fixed Effects	X	X	X	X	X	X
Adjusted-R^2	0.555	0.556	0.516	0.538	0.512	0.521
Observations	10881	11065	10881	11065	10881	11065

Table A.12. Performance by Banks

This tables presents summary statistics calculated for individual underwriters in each market in which they operate. We presents: the average reputation during the sample period; the total issuance volume (in billion); the number of deals; the average proportion of deal in default; the bank fixed effects estimated from a regression of proportion of deal in default similar to that reported in column 6 of Panel A of Table 2, wherein we do not include the reputation variable; the bank fixed effects from different sub-periods (2000 to 2006, 2005 to 2006, and 2007); and finally the change in issuance volume from 2005-2006 to 2007. The change in volume is constructed as the ratio of the total volume in 2007 to the average volume in 2005 and 2006. Panel A presents results for CLO deals, Panel B for MBS deals, Panel C for ABS deals, and Panel D for CDO deals. The data are organized at the deal level, so that all securities (i.e., tranches) that are backed by the same assets are grouped together into a deal. We report in bold the names of the banks that issued at least twenty deals during the sample period. The sample is from January of 2000 through December of 2010 and the data are from Bloomberg.

Panel A: CLO

	Rep	Issuance Volume	Number of Deals	Proportion in Default		Proportion in Default FE			Volume Change
				Average	FE	00-06	05-06	07	
KBC Bank	5.0	1.8	7	0.850	0.311	0.284	0.043		-1.000
HSBC	8.8	14.3	16	0.115	0.300	0.307	0.094	0.206	-0.924
Dresdner Bank	7.0	7.4	17	0.177	0.280	0.369	0.444	0.146	-0.001
Commerzbank	7.0	7.9	9	0.048	0.254	0.268	0.237		1.000
UBS	8.1	19.6	37	0.176	0.177	0.209	0.152	0.021	-0.231
Wachovia Securities	7.0	25.2	68	0.074	0.173	0.169	0.175	0.131	0.005
Goldman Sachs	9.0	50.9	132	0.055	0.156	0.119	0.130	0.148	1.000
Barclays Bank	8.0	59.9	46	0.082	0.151	0.153	0.157	0.099	1.000
Deutsche Bank	9.0	86.5	140	0.047	0.148	0.198	0.069	-0.015	1.000
Bank of America	8.0	23.9	53	0.103	0.135	0.157	0.108	0.052	-0.141
Citigroup	9.0	80.4	143	0.050	0.133	0.135	0.105	0.073	0.055
BNP Paribas	7.0	17.6	22	0.030	0.124	0.086	0.089	0.083	1.000
Bear Stearns	8.0	48.3	142	0.179	0.124	0.139	0.135	0.031	0.127
Lehman Brothers	8.1	62.5	149	0.157	0.112	0.105	0.063	0.036	0.868
Credit Suisse	9.0	57.5	140	0.080	0.099	0.110	0.105	0.013	0.304
Merrill Lynch	9.0	56.2	97	0.157	0.096	0.120	0.097	-0.014	0.122
Suntrust Cap Mkts	6.1	2.0	5	0.025	0.093	0.097	0.081	0.065	-0.408
Santander	8.1	28.7	14	0.158	0.091	0.077		-0.019	1.000
JP Morgan Chase	9.0	87.8	173	0.057	0.090	0.090	0.107	0.047	0.028
Morgan Stanley	9.0	41.8	85	0.032	0.084	0.090	0.125	0.011	1.000
Societe Generale	7.0	8.5	11	0.009	0.076	0.098	0.067		-0.899
Credit Agricole	7.0	10.3	18	0.022	0.004	-0.030	-0.261	0.114	1.000

Panel B: MBS

	Rep	Issuance Volume	Number of Deals	Proportion in Default		Proportion in Default FE			Volume Change
				Average	FE	00-06	05-06	07	
Daiwa Securities	8.0	29.8	35	0.289	0.556	-0.022	0.137		-0.214
Wells Fargo Securities	7.3	3.5	9	0.838	0.297	0.050		0.789	1.000
Lehman Brothers	8.1	499.1	628	0.233	0.197	0.161	0.348	0.420	0.356
Goldman Sachs	9.0	336.2	378	0.241	0.166	0.115	0.293	0.468	0.200
Bear Stearns	8.0	691.0	752	0.331	0.166	0.139	0.296	0.355	-0.323
Bank of America	8.0	759.4	499	0.118	0.152	0.141	0.234	0.282	-0.404
JP Morgan Chase	9.0	657.8	546	0.259	0.139	0.113	0.268	0.345	-0.123
UBS	8.1	298.0	406	0.263	0.130	0.117	0.266	0.259	-0.395
Deutsche Bank	9.0	570.8	485	0.287	0.115	0.117	0.253	0.264	-0.091
Credit Suisse	9.0	681.4	734	0.259	0.106	0.060	0.177	0.335	0.123
Morgan Stanley	9.0	367.2	399	0.138	0.103	0.096	0.254	0.226	0.724
Dresdner Bank	7.0	4.6	8	0.000	0.100	0.079			-0.151
Merrill Lynch	9.0	320.8	359	0.162	0.066	0.056	0.182	0.165	0.327
Wachovia Securities	7.0	114.7	77	0.060	0.064	0.046	0.158	0.232	-0.502
Citigroup	9.0	618.3	531	0.155	0.061	0.041	0.130	0.155	0.447
Scotia Capital	7.0	2.0	7	0.000	0.058	0.039			0.000
HSBC	8.8	72.3	76	0.277	0.020	-0.003	0.124	0.175	1.000
Jefferies & Co	5.5	9.9	31	0.324	0.015				0.000
Commerzbank	7.0	28.5	16	0.000	0.012	0.084			1.000
Barclays Bank	8.0	322.5	212	0.072	-0.059	-0.048	0.003	-0.090	0.104
BNP Paribas	7.0	94.7	71	0.030	-0.071	-0.099	-0.073	-0.094	1.000
Societe Generale	7.0	54.0	63	0.051	-0.076	-0.062	-0.101	-0.337	-0.781
Santander	8.1	74.4	19	0.006	-0.089	0.014	0.069	-0.276	1.000
Credit Agricole	7.0	22.4	23	0.002	-0.117	-0.195	-0.175		-0.162
RBC Capital Markets	7.3	6.7	20	0.002	-0.142	-0.153	-0.097	-0.033	-0.049
Macquarie Bank	6.0	20.9	45	0.000	-0.145	-0.175	-0.149	-0.327	-0.854
Investec Bank	7.0	3.1	13	0.000	-0.172			-0.211	-0.243

Panel C: ABS

	Rep	Issuance Volume	Number of Deals	Proportion in Default		Proportion in Default FE			Volume Change
				Average	FE	00-06	05-06	07	
KBC Bank	5.0	1.8	6	0.530	0.142	0.084	-0.233	0.660	0.058
RBC Capital Markets	7.3	10.2	29	0.193	-0.020	-0.195	-0.671	0.956	-0.585
Morgan Stanley	9.0	324.0	589	0.360	-0.036	-0.173	-0.732	0.392	-0.127
Lehman Brothers	8.1	393.1	693	0.378	-0.043	-0.151	-0.727	0.241	-0.635
Barclays Bank	8.0	181.4	320	0.222	-0.050	-0.184	-0.761	0.419	-0.401
Merrill Lynch	9.0	233.5	409	0.334	-0.052	-0.178	-0.755	0.372	-0.337
Deutsche Bank	9.0	372.2	655	0.175	-0.070	-0.214	-0.788	0.454	-0.359
UBS	8.1	104.8	259	0.355	-0.071	-0.179	-0.753	0.264	-0.547
Credit Agricole	7.0	20.0	52	0.031	-0.085	-0.292	-0.974	0.467	-0.734
Credit Suisse	9.0	444.9	719	0.248	-0.088	-0.200	-0.802	0.252	-0.439
Macquarie Bank	6.0	9.5	21	0.012	-0.095	-0.131	-0.561	0.224	1.000
Goldman Sachs	9.0	178.4	332	0.415	-0.102	-0.245	-0.822	0.406	-0.622
JP Morgan Chase	9.0	545.7	649	0.152	-0.108	-0.215	-0.780	0.236	-0.046
Bank of America	8.0	400.9	567	0.115	-0.109	-0.229	-0.811	0.279	-0.400
Societe Generale	7.0	32.2	71	0.134	-0.127	-0.177	-0.701	-0.004	0.015
Wells Fargo Securities	7.3	1.4	8	0.000	-0.128				1.000
Bear Stearns	8.0	188.1	462	0.313	-0.144	-0.260	-0.840	0.184	-0.618
Citigroup	9.0	541.7	773	0.128	-0.152	-0.273	-0.927	0.228	0.267
HSBC	8.8	86.8	236	0.203	-0.173	-0.191	-0.794	-0.024	-0.196
Wachovia Securities	7.0	136.2	226	0.099	-0.176	-0.279	-0.932	-0.005	-0.316
Friedman Billings Ramsey	5.0	9.2	23	0.360	-0.183	-0.302	-0.876		-1.000
Santander	8.1	19.1	16	0.015	-0.187	-0.306		0.094	1.000
Commerzbank	7.0	2.9	7	0.000	-0.190	-0.316			0.000
Daiwa Securities	8.0	1.3	5	0.000	-0.205	-0.323	-0.985		-1.000
BNP Paribas	7.0	60.0	106	0.051	-0.212	-0.372	-0.993	0.369	-0.448
McDonald Investments	5.2	0.6	6	0.055	-0.228	-0.354	-0.686		-1.000
Scotia Capital	7.0	1.4	7	0.000	-0.233	-0.349			0.000
Dresdner Bank	7.0	14.1	51	0.059	-0.242	-0.312	-0.870	-0.116	-0.701
Mediobanca	8.0	7.4	8	0.000	-0.249	-0.371	-1.166		-1.000
BB&T Capital Markets	6.5	1.8	15	0.000	-0.271	-0.506	-1.022	0.001	-0.275
BMO-Nesbitt Burns	6.8	7.4	18	0.022	-0.292	-0.404	-1.009	-0.051	-0.368
Suntrust Cap Mkts	6.1	1.6	10	0.102	-0.304	-0.456	-1.069		-1.000

Panel D: CDO

	Rep	Issuance Volume	Number of Deals	Proportion in Default		Proportion in Default FE			Volume Change
				Average	FE	00-06	05-06	07	
KBC Bank	5.0	3.4	5	1.000	0.605	0.532	0.646	0.622	0.720
UBS	8.1	58.5	101	0.908	0.393	0.351	0.460	0.398	0.612
Citigroup	9.0	90.1	143	0.808	0.373	0.311	0.331	0.408	0.268
Merrill Lynch	9.0	110.3	143	0.879	0.334	0.327	0.496	0.269	0.209
Morgan Stanley	9.0	28.0	175	0.554	0.316	0.247	0.438	0.500	-0.154
Barclays Bank	8.0	24.6	31	0.848	0.312	0.252	0.304	0.316	-0.770
Deutsche Bank	9.0	60.0	121	0.447	0.308	0.255	0.409	0.452	-0.289
Goldman Sachs	9.0	76.0	93	0.865	0.305	0.350	0.499	0.145	-0.323
Bear Stearns	8.0	27.1	115	0.598	0.276	0.250	0.371	0.243	0.101
Credit Suisse	9.0	36.2	108	0.637	0.255	0.262	0.382	0.078	-0.015
Bank of America	8.0	37.0	62	0.715	0.250	0.244	0.247	0.163	0.225
Societe Generale	7.0	6.3	20	0.870	0.246	0.328	0.462	-0.032	1.000
Credit Agricole	7.0	31.8	106	0.936	0.230	0.172	0.180	0.396	-0.217
Dresdner Bank	7.0	16.9	34	0.781	0.197	0.218	0.591	0.252	0.034
Wachovia Securities	7.0	73.4	102	0.670	0.156	0.122	0.275	0.179	-0.156
Lehman Brothers	8.1	41.1	127	0.507	0.114	0.224	0.315	-0.132	0.573
BNP Paribas	7.0	7.6	47	0.094	0.072	0.079	-0.075	-0.386	0.876
JP Morgan Chase	9.0	25.1	98	0.228	0.029	-0.002	0.158	0.145	-0.167