

## The Benefits of a Right to Silence for the Innocent Supplementary Appendix

This supplementary appendix provides a detailed analysis of the case in which the premium for confession is high ( $\theta_2 > u > \delta_2$ ).

Suppose that suspects do not have a right to silence. Then there does not exist a completely separating equilibrium in which the innocent suspect and the guilty suspect choose different pure strategies, since the guilty suspect could then profitably deviate to the innocent suspect's equilibrium strategy. A similar argument rules out an equilibrium in which the innocent suspect mixes between silence and speech and the guilty suspect always speaks, always remains silent or always confesses. There also does not exist a pooling equilibrium in which both the innocent and guilty suspects speak or an equilibrium in which the guilty suspect mixes between speech and silence, since the guilty suspect could then profitably deviate to confession (since  $u > \delta_2$ ).

There does not exist, moreover, an equilibrium in which both the innocent and guilty suspects always confess, because the innocent suspect could profitably deviate to speech if  $\delta_1 > u$  and because the equilibrium does not survive the D1 refinement if  $\delta_1 \leq u$ .<sup>1</sup> The innocent suspect also never confesses with positive probability in equilibrium, since in any such equilibrium the innocent and guilty suspects obtain the same equilibrium payoff of  $u$ . But the evidence at trial is more likely to inculcate the guilty than the innocent suspect and therefore the innocent suspect must earn a higher equilibrium payoff than the guilty suspect.<sup>2</sup>

Two semi-pooling equilibria are left: the innocent suspect either speaks or remains silent, and the guilty suspect mixes between confession and either speech or silence—depending on the innocent suspect's strategy. Thus, in contrast to the low premium case, the guilty suspect confesses in equilibrium with positive probability. Proposition A1 presents these equilibria.

**Proposition A1.** *(equilibrium strategies without RTS and a high confession premium)*

*The following strategy profiles are the unique Perfect Bayesian equilibria that survive the D1 refinement:*

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<sup>1</sup>More specifically, let  $R_t \subseteq (0, 1]$  denote the set of jury's acquittal probabilities for which suspect  $t$ ,  $t = 1, 2$ , finds deviation to speech profitable, given that  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ . (Note that, since  $\delta_t + (1 - \delta_t)\theta_t > \theta_t > u$ , both the innocent and guilty suspects find deviation to speech profitable if the jury always acquits if  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$  and always convicts if  $\varepsilon_i = nv$  and  $\varepsilon_d = 2$ .) Then  $R_t = (\frac{u - \delta_t}{(1 - \delta_t)\theta_t}, 1]$  (since  $u = \delta_t + (1 - \delta_t)\theta_t \frac{u - \delta_t}{(1 - \delta_t)\theta_t}$ ), which implies that  $R_2 \subset R_1$  (since  $\frac{1 - \delta_1}{\theta_1(1 - \delta_1)} < \frac{1 - \delta_2}{\theta_2(1 - \delta_2)} \Rightarrow u[\frac{1}{\theta_1(1 - \delta_1)} - \frac{1}{\theta_2(1 - \delta_2)}] < \frac{\delta_1}{\theta_1(1 - \delta_1)} - \frac{\delta_2}{\theta_2(1 - \delta_2)} \Rightarrow \frac{u - \delta_1}{(1 - \delta_1)\theta_1} < \frac{u - \delta_2}{(1 - \delta_2)\theta_2}$ ). The jury must therefore believe that deviation to speech comes from the innocent suspect, thereby always acquitting if the evidence contradicts the suspect's statement. This, in turn, upsets an equilibrium in which both the innocent and guilty suspects always confess.

<sup>2</sup>The result that there are no false confessions in equilibrium thus holds for any parameter values of this model.

(a) If  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$ : the innocent suspect always speaks, and the guilty suspect speaks with probability  $\frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D}$  and confesses with the complementary probability. The jury always convicts if  $\varepsilon_i = nv$  and  $\varepsilon_d = 2$ . The jury acquits with probability  $\frac{u - \delta_2}{(1 - \delta_2)\theta_2}$  and convicts with the complementary probability if  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ . The jury always acquits if  $\varepsilon_i = v$ , for  $\varepsilon_d = 1, 2$ .

(b) If  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$ : the innocent suspect always remains silent, and the guilty suspect remains silent with probability  $\frac{p_1\theta_1}{p_2\theta_2} \frac{D}{1 - D}$  and confesses with the complementary probability. The jury always convicts if  $\varepsilon_i = nv$  and always acquits if  $\varepsilon_i = v$ , for  $\varepsilon_d = 1, 2$ . The jury always convicts if the suspect is silent and  $\varepsilon_d = 2$ . The jury acquits with probability  $\frac{u}{\theta_2}$  and convicts with the complementary probability if the suspect is silent and  $\varepsilon_d = 1$ .  $\parallel$

*Proof.* (a) We first prove that the innocent suspect, the guilty suspect, and the jury cannot profitably deviate from their equilibrium strategies. We will then show uniqueness.

The innocent suspect's equilibrium payoff, given the jury's equilibrium strategy, is  $\delta_1 + (1 - \delta_1)\theta_1 \frac{u - \delta_2}{(1 - \delta_2)\theta_2}$ . Since the jury always convicts a silent suspect, the innocent suspect cannot profitably deviate to silence. We thus proceed by showing that the innocent suspect cannot deviate to confession. To see this, observe that  $\delta_1 + (1 - \delta_1)\theta_1 \frac{u - \delta_2}{(1 - \delta_2)\theta_2} > \delta_1 + (1 - \delta_1)\theta_2 \frac{u - \delta_2}{(1 - \delta_2)\theta_2}$  (since  $\theta_1 > \theta_2$ ). The right-hand side simplifies to  $\delta_1 + (1 - \delta_1) \frac{u - \delta_2}{1 - \delta_2}$ , which, after some algebra, simplifies further to  $1 - \frac{1 - \delta_1}{1 - \delta_2}(1 - u)$ . But this is strictly greater than  $u$  (since  $1 - u > \frac{1 - \delta_1}{1 - \delta_2}(1 - u)$ ). Thus, the innocent suspect cannot profitably deviate to confession.

The guilty suspect's payoff from speech, given the jury's equilibrium strategy, is  $\delta_2 + (1 - \delta_2)\theta_2 \frac{u - \delta_2}{(1 - \delta_2)\theta_2} = u$ . The guilty suspect is thus indifferent between speech and confession. In particular, speaking with probability  $\frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D}$  is a best response (although not uniquely).<sup>3</sup> Moreover, given that the jury always convict a silent suspect, the guilty suspect cannot profitably deviate to silence.

By Bayes rule, given that  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ , the posterior probability that the suspect is guilty is  $\hat{D} = \left( p_2(1 - \delta_2)\theta_2 \frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D} \right) \div \left( p_2(1 - \delta_2)\theta_2 \frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D} + p_1(1 - \delta_1)\theta_1 \right) = D$ . The jury is thus indifferent between acquitting and convicting if  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ . In particular, acquitting with probability  $\frac{u - \delta_2}{(1 - \delta_2)\theta_2}$  is a best response (although not uniquely).<sup>4</sup>

To show uniqueness, observe that, in the only other equilibrium candidate, the innocent suspect always remains silent and the guilty suspect mixes between silence and confession. To support this equilibrium, the jury's out-of-equilibrium beliefs must be that if the suspect speaks and  $\varepsilon_i = nv$ , then  $\hat{D} \geq D$ , for  $\varepsilon_d = 1, 2$ . We will show, however, that the jury's out-of-equilibrium

<sup>3</sup>Since  $\frac{p_2\theta_2}{p_1\theta_1} > \frac{D}{1 - D}$  (by A3) and  $\delta_1 > \delta_2$ , it follows that  $\frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D} \in (0, 1)$

<sup>4</sup>Since  $\frac{u - \delta_2}{(1 - \delta_2)\theta_2} < \frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2}$  (since  $\theta_2 > u$ ) and  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} < 1$ , it follows that  $\frac{u - \delta_2}{(1 - \delta_2)\theta_2} \in (0, 1)$ .

beliefs fail the D1 criterion.

Let  $R_t \subseteq [0, 1]$  denote the set of jury's acquittal probabilities for which suspect  $t$ ,  $t = 1, 2$ , finds deviation to speech profitable, given that  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ .<sup>5</sup> First, suppose  $\delta_1 > \theta_1$ . Then  $R_1 = [0, 1]$  (since  $\delta_1 > \theta_1 \frac{u}{\theta_2}$ ) and  $R_2 \subset [0, 1]$  (since  $u > \delta_2$ ); therefore  $R_2 \subset R_1$ . Next, suppose  $\delta_1 \leq \theta_1$ . Then  $R_1 = [q_1, 1]$  and  $R_2 = (q_2, 1)$ , where  $q_1 = \frac{u\theta_1 - \delta_1\theta_2}{(1-\delta_1)\theta_1\theta_2}$  (since  $\theta_1 \frac{u}{\theta_2} = \delta_1 + (1-\delta_1)\theta_1 q_1$ ) and  $q_2 = \frac{u - \delta_2}{(1-\delta_2)\theta_2}$  (since  $u = \delta_2 + (1-\delta_2)\theta_2 q_2$ ).

Now,  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1-\delta_1)}{(1-\delta_2)\theta_2}$  implies that  $\frac{\delta_1}{\theta_1} \geq \frac{u}{\theta_2} - \frac{(1-\delta_1)(u-\delta_2)}{(1-\delta_2)\theta_2}$ . Dividing through by  $(1-\delta_1)$  yields  $\frac{\delta_1}{\theta_1(1-\delta_1)} \geq \frac{u}{(1-\delta_1)\theta_2} - \frac{u-\delta_2}{(1-\delta_2)\theta_2}$ , which, after rearranging, gives  $q_1 = \frac{u\theta_1 - \delta_1\theta_2}{(1-\delta_1)\theta_1\theta_2} \leq \frac{u-\delta_2}{(1-\delta_2)\theta_2} = q_2$  and therefore  $R_2 \subset R_1$ .

(b) We first prove that the innocent suspect, the guilty suspect, and the jury cannot profitably deviate from their equilibrium strategies. We will then show uniqueness.

The innocent suspect's equilibrium payoff, given the jury's equilibrium strategy, is  $\theta_1 \frac{u}{\theta_2}$ . By deviating to confession, the innocent suspect obtains  $u$ . But  $\theta_1 > \theta_2$  implies that  $\frac{\theta_1}{\theta_2} > 1$  and therefore  $\theta_1 \frac{u}{\theta_2} > u$ . The innocent suspect, therefore, cannot profitably deviate to confession. By deviating to speech, the innocent suspect obtains  $\delta_1$ , the probability with which the direct evidence verifies his statement. But  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1-\delta_1)}{(1-\delta_2)\theta_2}$  implies that  $\delta_1 < u \frac{\theta_1}{\theta_2} - \theta_1 \frac{(1-\delta_1)(u-\delta_2)}{(1-\delta_2)\theta_2} < u \frac{\theta_1}{\theta_2}$ . Thus, the innocent suspect cannot deviate to speech as well.

The guilty suspect's payoff from silence, given the jury's equilibrium strategy, is  $\theta_2 \frac{u}{\theta_2} = u$ . By deviating to speech, the guilty suspect obtains  $\delta_2$ , the probability with which the indirect evidence does not contradict his statement. But since  $u > \delta_2$ , the guilty suspect cannot profitably deviate to speech. Since the guilty suspect's payoff from silence is  $u$ , he is indifferent between silence and confession. In particular, remaining silent with probability  $\frac{p_1\theta_1}{p_2\theta_2} \frac{D}{1-D}$  is a best response (although not uniquely).<sup>6</sup>

By Bayes rule, the posterior probability that a silent suspect is guilty given that  $\varepsilon_d = 1$  is  $\hat{D} = \left( p_2\theta_2 \frac{p_1\theta_1}{p_2\theta_2} \frac{D}{1-D} \right) \div \left( p_2\theta_2 \frac{p_1\theta_1}{p_2\theta_2} \frac{D}{1-D} + p_1\theta_1 \right) = D$ . The jury is thus indifferent between acquitting and convicting a silent suspect if  $\varepsilon_d = 1$ . In particular, acquitting with probability  $\frac{u}{\theta_2}$  is a best response (although not uniquely).

To show uniqueness, observe that, in the only other equilibrium candidate, the innocent suspect always speaks and the guilty suspect mixes between speech and confession. To support this equilibrium, the jury's out-of-equilibrium beliefs must be that if the suspect is silent, then  $\hat{D} \geq D$ . We will show, however, that the jury's out-of-equilibrium beliefs fail the D1 criterion.

<sup>5</sup>Both the innocent and guilty suspects find deviation to speech profitable if the jury always convicts if  $\varepsilon_i = nv$  and  $\varepsilon_d = 2$  and always acquits if  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$  (since, for  $t = 1, 2$ ,  $\delta_t + (1-\delta_t)\theta_t > \theta_t > u$ ).

<sup>6</sup>Since  $\frac{p_2\theta_2}{p_1\theta_1} > \frac{D}{1-D}$  (by A3), it follows that  $\frac{p_1\theta_1}{p_2\theta_2} \frac{D}{1-D} \in (0, 1)$ .

Let  $R_t \subseteq [0, 1]$  denote the set of jury's acquittal probabilities for which suspect  $t$ ,  $t = 1, 2$ , finds deviation to silence profitable, given that  $\varepsilon_d = 1$ .<sup>7</sup> Then  $R_1 = (q_1, 1]$  and  $R_2 = (q_2, 1]$ , where  $q_1 = \frac{\delta_1}{\theta_1} + \frac{1-\delta_1}{1-\delta_2} \frac{u-\delta_2}{\theta_2}$  (since  $\theta_1 q_1 = \delta_1 + (1-\delta_1)\theta_1 \frac{u-\delta_2}{(1-\delta_2)\theta_2}$ ) and  $q_2 = \frac{u}{\theta_2}$  (since  $\theta_2 q_2 = u$ ). Now,  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1-\delta_2)+\delta_2(1-\delta_1)}{(1-\delta_2)\theta_2}$  implies that  $q_1 < q_2$  and therefore  $R_2 \subset R_1$ .  $\square$

The next corollary considers suspects' equilibrium payoffs if suspects do not have a right to silence.

**Corollary A1.** (*equilibrium payoffs without RTS and high confession premium*)

(a) *The innocent suspect's equilibrium payoff is  $\delta_1 + (1-\delta_1)\theta_1 \frac{u-\delta_2}{(1-\delta_2)\theta_2} \in (\max\{u, \delta_1\}, 1)$  if he always speaks in equilibrium and is  $\theta_1 \frac{u}{\theta_2} \in (\max\{u, \delta_1\}, \theta_1)$  if he always remains silent in equilibrium.*

(b) *The guilty suspect's equilibrium payoff is  $u$  irrespective of the equilibrium outcome.*

(c) *Both the innocent and guilty suspects' equilibrium payoffs are higher if the premium for confession is high than low.*

The innocent suspect's equilibrium payoff is greater than  $\max\{u, \delta_1\}$ , because he can secure a payoff of  $u$  by confessing and because he is acquitted with positive probability if he always speaks and the indirect evidence contradicts his statement (since the guilty suspect does not always speak in equilibrium). The guilty suspect's equilibrium payoff is  $u$ , since in any equilibrium in which suspects do not have a right to silence, the guilty suspect confesses (thereby obtaining  $u$ ) with positive probability. Finally, the guilty suspect's equilibrium payoff is higher if the premium for confession is high than low since he obtains  $\delta_1$  if the premium is low (see Corollary 1) but  $u$  if the premium is high. The innocent suspect's equilibrium payoff is higher if the premium for confession is high than low since the guilty suspect pools with the innocent suspect with lower probability if the premium is high than if it is low.

The next proposition considers the equilibrium strategies in the presence of a right to silence.

**Proposition A2.** (*equilibrium strategies with RTS and a low or high confession premium*)

*If suspects have a right to silence and a right to silence is effective (i.e.,  $\theta_2 > \max\{\delta_2, u\}$ ):*

(a) *No suspect confesses.*

(b) *The equilibrium play is not affected by the premium for confession. ||*

<sup>7</sup>Both the innocent and guilty suspects find deviation to silence profitable if the jury always convicts if the suspect is silent and  $\varepsilon_d = 1$  and always acquits if the suspect is silent and  $\varepsilon_d = 2$  (since, for the innocent suspect,  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1-\delta_2)+\delta_2(1-\delta_1)}{(1-\delta_2)\theta_2}$  implies that  $\frac{\delta_1}{\theta_1} < \frac{u}{\theta_2} - \frac{(1-\delta_1)(u-\delta_2)}{(1-\delta_2)\theta_2} < 1 - \frac{(1-\delta_1)(u-\delta_2)}{(1-\delta_2)\theta_2}$  and therefore  $\theta_1 > \delta_1 + (1-\delta_1)\theta_1 \frac{u-\delta_2}{(1-\delta_2)\theta_2}$ ; and, for the guilty suspect,  $\theta_2 > u$ ).

The rationale for part (a) is straightforward. Recall that if the premium for confession is low (i.e.,  $\theta_2 > \delta_2 > u$ ), the guilty suspect never confesses. If the premium for confession is high (i.e.,  $\theta_2 > u > \delta_2$ ), the guilty suspect obtains a higher payoff from exercising his right to silence than from confessing. Accordingly, the guilty suspect never confesses even if the premium for confession is high. Since the innocent suspect must earn a higher equilibrium payoff than the guilty suspect, the innocent suspect never confesses as well. Part (b) follows directly from part (a): In the presence of a right to silence, both the innocent and guilty suspects' equilibrium strategies do not depend on whether the premium for confession is low or high. Proposition 2 thus characterizes the equilibrium outcome if the premium for confession is high.

Proposition A3 considers the effects of a right to silence on the equilibrium strategies of the innocent and guilty suspects when the premium for confession is high.

**Proposition A3.** *(effects of RTS on the equilibrium strategies with high confession premium)*

(a) If  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  and  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} \geq \frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1}$ : the innocent suspect always speaks with and without RTS; the guilty suspect mixes between speech and confession without RTS and mixes between speech and silence with RTS.

(b) If  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  and  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} < \frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1}$ : the innocent suspect always speaks without RTS and always remains silent with RTS; the guilty suspect mixes between speech and confession without RTS and always remains silent with RTS.

(c) If  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$ , the innocent suspect always remains silent with and without RTS; the guilty suspect mixes between silence and confession without RTS and always remains silent with RTS.

(d) If the innocent suspect always remains silent without RTS, then he also always remains silent with RTS (i.e., if  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  then  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} < \frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1}$ ). ||

*Proof.* Parts (a) and (b) follow directly from Propositions A1 and 2. To prove part (d), note that  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  implies that  $\frac{\delta_1}{\theta_1} - \frac{u}{\theta_2} < \frac{(1 - \delta_1)\delta_2}{(1 - \delta_2)\theta_2} - \frac{u(1 - \delta_1)}{(1 - \delta_2)\theta_2}$ . Multiplying the RHS by  $\frac{1 - \delta_2}{1 - \delta_1} (> 1)$  yields  $\frac{\delta_2}{\theta_2} > \frac{\delta_1}{\theta_1}$ . The proof is completed by recalling from Proposition 3(d) that if  $\frac{\delta_1}{\theta_1} < \frac{\delta_2}{\theta_2}$ , then  $\frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1} > \frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2}$ . Finally, part (c) follows from part (d) and Propositions A1 and 2.  $\square$

Part (a) presents the case in which only the guilty suspect exercises the right to silence. Specifically, a right to silence causes the guilty suspect to shift from mixing between speech and confession to mixing between speech and silence, but does not alter the innocent suspect's strategy of always speaking. In parts (b) and (c), both the innocent and guilty suspects always exercise the right to silence: in part (b), a right to silence induces the innocent suspect to shift

from always speaking to always remaining silent and the guilty suspect to shift from mixing between speech and confession to always remaining silent; in part (c), a right to silence induces the guilty suspect to shift from mixing between silence and confession to always remaining silent, but does not alter the innocent suspect's strategy of always remaining silent. Note that, in all cases, a right to silence induces the guilty suspect to shift from confessing with positive probability to not confessing.

Part (d) states that if the innocent suspect always remains silent in the absence of a right to silence, he also always remains silent in the presence of a right to silence (the reverse is not true). Thus, as in the case in which the premium for confession is low, a right to silence never causes suspects to shift from silence to speech.

The next Proposition considers the effects of a right to silence on the equilibrium payoffs of the innocent suspect, the guilty suspect, and the jury.

**Proposition A4.** *(equilibrium payoffs with and without RTS and high premium for confession)*

(a) *Both the innocent and guilty suspects' equilibrium payoffs are higher with RTS than without RTS.*

(b) *The jury's equilibrium payoff is higher without RTS than with RTS. ||*

*Proof.* Part (a) follows directly from Corollaries A1 and 2. To prove part (b), consider the following three cases.

Case (i):  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  and  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} \geq \frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1}$ : In this case, the innocent suspect always speaks with and without RTS. The jury's equilibrium payoff without RTS is  $-[p_1(1 - \delta_1)D + p_2x\delta_2(1 - D)]$ , where  $x = \frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D}$ . Note that  $p_1(1 - \delta_1)D$  is the jury's expected cost of wrongful conviction and that  $p_2x\delta_2(1 - D)$  is the jury's expected cost of wrongful acquittal. The jury's equilibrium payoff with RTS is  $-\{p_1(1 - \delta_1)D + p_2[\delta_2x + \theta_2(1 - x)](1 - D)\}$ .<sup>8</sup> Now, since  $\theta_2 > \delta_2$ , it follows that  $-[p_1(1 - \delta_1)D + p_2x\delta_2(1 - D)] > -\{p_1(1 - \delta_1)D + p_2[\delta_2x + \theta_2(1 - x)](1 - D)\}$ .

Case (ii):  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  and  $\frac{\theta_2 - \delta_2}{(1 - \delta_2)\theta_2} < \frac{\theta_1 - \delta_1}{(1 - \delta_1)\theta_1}$ : In this case, the innocent suspect always speaks without RTS, but always remains silent with RTS. The jury's equilibrium payoff without RTS is  $-[p_1(1 - \delta_1)D + p_2x\delta_2(1 - D)]$ , where  $x = \frac{p_1(1 - \delta_1)\theta_1}{p_2(1 - \delta_2)\theta_2} \frac{D}{1 - D}$ . The jury's equilibrium payoff with RTS is  $-[p_1(1 - \theta_1)D + p_2\theta_2(1 - D)]$ . Subtracting the latter expression from the former gives  $-[p_1(\theta_1 - \delta_1)D + p_2(x\delta_2 - \theta_2)(1 - D)]$ ; we shall proceed by showing that this expression is strictly positive. Since  $\frac{\delta_1}{\theta_1} \geq \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$  it follows that  $\frac{\delta_1}{\theta_1} \geq \frac{u}{\theta_2} - \frac{(1 - \delta_1)(u - \delta_2)}{(1 - \delta_2)\theta_2} > \frac{u}{\theta_2} - \frac{u - \delta_2}{\theta_2} = \frac{\delta_2}{\theta_2}$ . From the proof of case (ii) in Proposition 4(b) we know that if  $\frac{\delta_1}{\theta_1} > \frac{\delta_2}{\theta_2}$  then

<sup>8</sup>To see why, recall that the jury always convicts if  $\varepsilon_i = nv$  and  $\varepsilon_d = 2$  and is indifferent between acquitting and convicting if  $\varepsilon_i = nv$  and  $\varepsilon_d = 1$ . We can thus assume the jury always convicts if  $\varepsilon_i = nv$ , for  $\varepsilon_d = 1, 2$ .

$\frac{p_2(\theta_2 - \delta_2)}{p_1(\theta_1 - \delta_1)} > \frac{D}{1-D}$ . It follows that  $-[p_1(\theta_1 - \delta_1)D + p_2(\delta_2 - \theta_2)(1 - D)] > 0$ , which implies that  $-[p_1(\theta_1 - \delta_1)D + p_2(x\delta_2 - \theta_2)(1 - D)] > 0$  (since  $x \in (0, 1)$ ).

Case (iii):  $\frac{\delta_1}{\theta_1} < \frac{u(\delta_1 - \delta_2) + \delta_2(1 - \delta_1)}{(1 - \delta_2)\theta_2}$ : In this case, the innocent suspect always remains silent with and without RTS. The jury's equilibrium payoff without RTS is  $-\{p_1(1 - \theta_1)D + p_2[\theta_2 x + \delta_2(1 - x)](1 - D)\}$ , where  $x = \frac{p_1\theta_1 - D}{p_2\theta_2(1 - D)}$ .<sup>9</sup> The jury's equilibrium payoff in a pooling equilibrium with RTS is  $-[p_1(1 - \theta_1)D + p_2\theta_2(1 - D)]$ . Since  $\theta_2 > \delta_2$  (by the assumption that the right to silence is effective), it follows that  $-\{p_1(1 - \theta_1)D + p_2[\theta_2 x + \delta_2(1 - x)](1 - D)\} > -[p_1(1 - \theta_1)D + p_2\theta_2(1 - D)]$ .  $\square$

Finally, the rationale for why the jury's equilibrium payoff is lower if suspects have a right to silence is identical to that in the low premium case.

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<sup>9</sup>To see why, recall that the jury is indifferent between acquitting and convicting a silent suspect if  $\varepsilon_d = 1$ . We can thus assume the jury always acquits a silent suspect if  $\varepsilon_d = 1$ .