Abstract of "Ex-Post Implementation by the Associated Direct Revelation Mechanism"

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We consider ex-post implementation by the associated direct revelation mechanisms in incomplete information environments with interdependent values. In these environments, Bergemann and Morris (2007, "Ex-Post Implementation," forthcoming in *Games and Economic Behavior*) first studied ex-post implementation, and provided some characterization results. They focused mainly on ex-post implementation by *indirect* mechanisms, but they also characterized ex-post implementable social choice functions by the associated direct revelation mechanisms.

Bergemann and Morris (2007) identified necessary conditions and, separately in general environments and single crossing environments, sufficient conditions for ex-post implementation by the associated direct revelation mechanism. This paper derives a complete characterization of the class of social choice functions which are ex-post implemented by the associated direct revelation mechanisms. Our characterization result fills the gap between Bergemann and Morris's (2007) necessary and sufficient conditions for ex-post implementation by the associated direct revelation mechanism. Furthermore, in contrast to their results, our result holds both in general environments and single crossing environments.

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