Robots seem to have great therapeutic value for patients with autism spectrum disorders. But their usefulness derives from a potentially problematic source: their appealingly friendly presence, which can lead patients to think of them as friends, or even to prefer their companionship to that of human beings. In this chapter, an analogy between false friends and counterfeit currency is leveraged to explore a potential moral hazard posed by these therapeutic robots. An objection from the subjective nature of the value of friendship is raised, and refuted by an appeal to the importance of cultivating social capabilities. I conclude that the moral hazard can be mitigated by careful design and responsible use, and that these therapies offer genuine promise. But I argue that we must tread with caution when using robots in therapeutic applications where the appearance of friendship is liable to arise.