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The functioning of large-value payment systems (LVPSs) can be affected when some of its participants voluntarily decide to delay their payments until they can totally fund them with the payments received from other participants. This behaviour, known as the free-rider problem, can cause an under-provision

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of liquidity in LVPSs that operate under a RTGS (real-time gross settlement) mode. With the aim of determining whether there are free-riders in the Colombian LVPS (CUD), we empirically tested this payment strategy: firstly, using regression techniques (quantile regression models) and secondly, computing the empirical quantiles. Our results indicate that there is evidence of this problem in the Colombian case; however, their negative effects on CUD are negligible.