Reducing Transaction Settlement Times Increases Inflation

Decreasing transaction settlement times increases the effective inflation rate without a Federal Funds Rate Reduction. To maintain a margin of safety against future events, reduce transaction times by the equivalent effective federal funds rate. Efficient money is needed to maintain a smaller money supply relative to ex-us currencies without slowing the economy. The reduction in transaction settlement times decreases friction in the money supply, increasing money velocity and maintaining reserve currency status without exchanging growth using the same money supply.

Efficient money reduces the need for more money.

$$\mathbf{T+2 \Rightarrow T+1 \Rightarrow T+0}$$

Where:

$$|T| \pm 1 = \pm 1\mu |R(e)|$$

$$|T| + 1 = + 1\mu |R(e)|$$

$$|T| - 1 = - 1\mu |R(e)|$$

$T = Tansaction\ Settelment\ Time\ (Days)$

$\mu = One\ Unit\ of\ \ an\ Eff ective\ Rate\ Change$

$R(e) = Eff ective\ Federal\ Funds\ Rate$

$$(\Rightarrow (MV = (p \cdot q) \Rightarrow MS \Rightarrow)) - g - f = |i(e)| = |R(e)|$$

$MV = Money\ Velocity$

$MS = Money\ Supply$

$p = Price$

$q = Quantity$

$g = \ Federal\ Funds\ Rate\ (Gavity)$

$f = Transaction\ Settlement\ Time\ (Friction)$

$i(e) = Eff ective\ Inf lation$

$R(e)\ Eff ective\ Federal\ Funds\ Rate$

Figure 1: The Money Supply Moving Through Space and Time Against Gravity and Friction

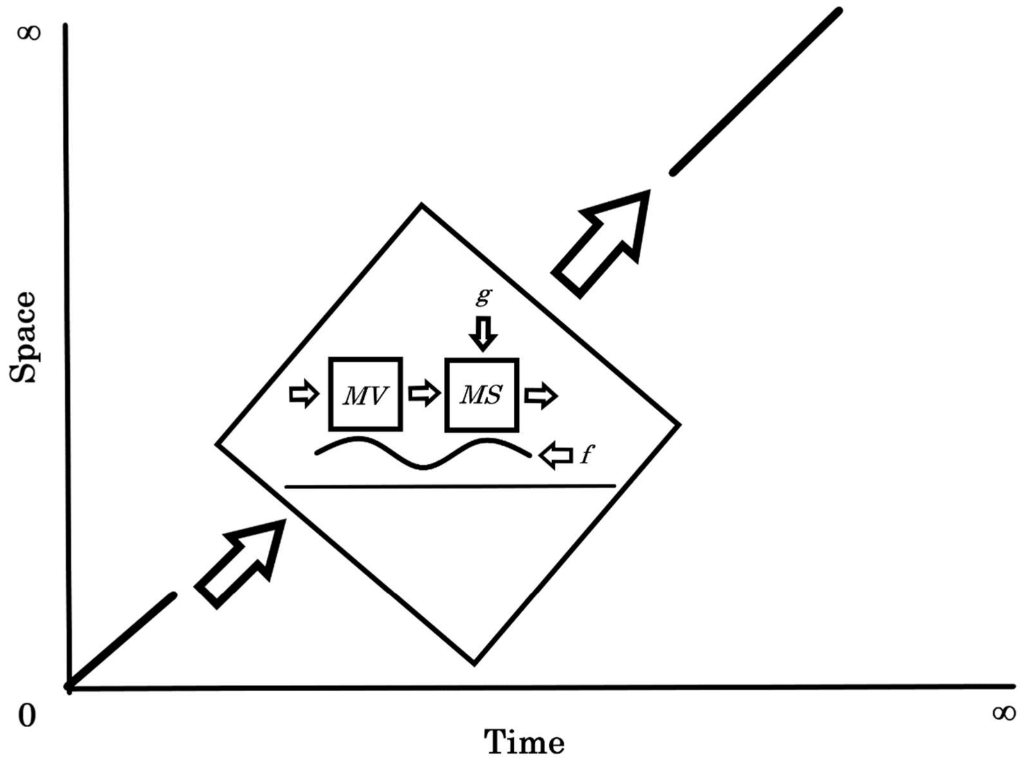


Figure 3: More Friction with The Same Gravity

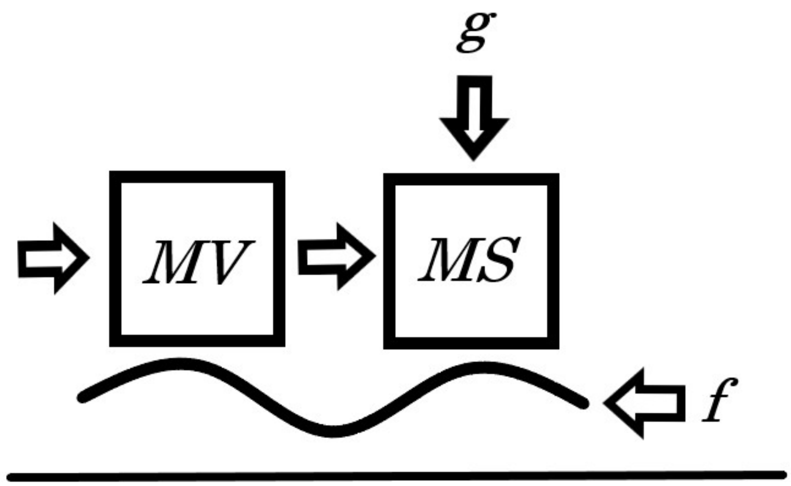
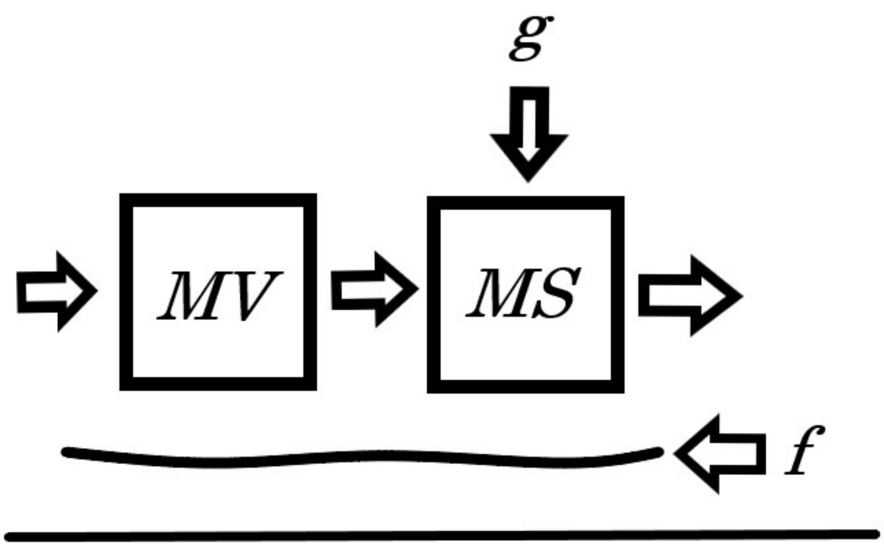


Figure 3: Less Friction with The Same Gravity



Federal Funds Rate Margin of Safety:

$$FFRMS > 2.5 \sim 3.5 = Safer\ vs.\ Less\ Safety$$