Figure 1: The Credit Market Equilibrium

\[ r_{t+1} = \Pi(k_{t+1}) \]

\[ R(W(k_t)) \]

\[ m \mu_2 \]

\[ k_{t+1} \]

\[ O \]

a: \((k_t < k_c)\)

b: \((k_c < k_t < k_{cc})\)

c: \((k_t > k_{cc})\)
Figure 2: The Rate of Return Expected from Lending to the Traders: $R(W(k_t))$
Figure 3a ($k_c \geq K$)

\[ k^* = K \]

\[ k_t + k_t^+ \]

\[ k_0 \]

\[ k^* = K \]

\[ W(k_t) \]
Figure 3b \((k_\lambda \leq k_c < K)\)
Figure 3c ($k_c < k_\lambda \leq \Pi^{-1}(R)$)
Figure 3d: (Locally) Oscillatory Convergence
Figure 3e: Endogenous Fluctuations
Figure 4: $(K < m < K\phi(1/K))$

\begin{align*}
\lambda R &= \Pi(h(m))[1-W(h(m))/m] \\
R &= \Pi(W^{-1}((1-\lambda)m)) \\
\lambda R &= \Pi(K)[1-K/m] \\
R &= \Pi((1-\lambda)m)
\end{align*}

Endogenous Fluctuations

(Locally) Oscillatory Convergence
Figure 5: The Chaotic Maps
Figure 6

\[
\frac{\lambda_1 \Pi(W(k_t))}{1 - W(k_t)}
\]

\[
\frac{\lambda_2 R}{1 - W(k_t)/m}
\]

\[
\Pi(W(k_t))
\]

\[
R
\]

\[
k_c, k_{\lambda}
\]

\[O - k_t\]

a: \((k_{\lambda} > k_c)\)

b: \((k_{\lambda} < k_c)\)
\[
\frac{\lambda_1 \Pi(W(\kappa_i))}{1-W(\kappa_i)}
\]

\[
\frac{\lambda_2 R}{1-W(\kappa_i)/m}
\]

\[
\Pi(W(\kappa_i))
\]
Figure 8: Introducing the Credit Multiplier Effect

\[ \frac{k_t}{g_{176}} \frac{kt}{g_{176}} \left( \frac{kt}{g_{176}} \right) \]

\[ k^* \frac{W(k_c)}{g_{108}} \]

\[ \psi(k_{\rho}) \]

\[ \psi^2(k_{\rho}) \]

\[ I \]

\[ W(k_t) \]

\[ 45^\circ \]

\[ k_{t+1} \]

\[ k_t \]

credit multiplier

credit reversal
Figure 9: A Tangent Bifurcation and Intermittency

\[ k_{t+1} \]

\[ \psi(k_{\rho}) \]

\[ k^* \]

\[ \psi^2(k_{\rho}) \]

\[ k_0 \]

\[ h(1) \]

\[ k_{\lambda 1} \]

\[ k_\rho \]

\[ \psi(k_{\rho}) \]

credit multiplier

credit reversal