

Table 1 Microeconomic Model Calibration

Calibrated Parameters			
Description	Parameter	Value	Source
Permanent Income Growth Factor	Φ	1.03	PSID: Carroll (1992)
Interest Factor	R	1.04	Conventional
Time Preference Factor	β	0.96	Conventional
Coefficient of Relative Risk Aversion	ρ	2	Conventional
Probability of Zero Income	\wp	0.005	PSID: Carroll (1992)
Std Dev of Log Permanent Shock	σ_{Ψ}	0.1	PSID: Carroll (1992)
Std Dev of Log Transitory Shock	σ_{θ}	0.1	PSID: Carroll (1992)

Table 2 TITLE OF THE TABLE

Key Transcripts in Endometrial Carcinoma with "Hot" Immune Prescence			
Transcript	Protein Type	Specific Function	Role
CD8B	T-cell Surface Glycoprotein	Activates CD4+ CTLs	Immune function
CX3CR1	Immature WBCs Chemokine Receptor	Recruits NK cells through inflammation	Immune function Chemotaxis
TGFB1	Growth Factor	Promotes Th17 & Tregs cells	Immune function Normal Development
CD69	T cell, B cell, NK cell Post-activation Antigen	Promotes lymphocyte proliferation	Immune function
IL-6	Cytokine	Stimulates B cells Differentiates CD4 T cells	Immune function Tissue Regeneration
PRF1	Perforin Protein	Creates pore in cell	Programmed Death
CD1C	T-cell Surface Glycoprotein	Presents antigen to TCR and NK cells	Immune function
CXCL11	Chemokine	Attracts & induces Ca+ release in activated T cells	Immune function Chemotaxis
TGFB3	Growth Factor	Stimulates Growth	Immune function Normal Development

Table 3 Sufficient Conditions for Nondegenerate[‡] Solution

Consumption Model(s)	Conditions	Comments
$\bar{c}(m)$: PF Unconstrained $\underline{c}(m) = \underline{\kappa}m$ Section 2.5.3: Section 2.5.3: Eq (5): Eq (6):	RIC, FHCW [°]	RIC $\Rightarrow v(m) < \infty$; FHCW $\Rightarrow 0 < v(m) $ PF model with no human wealth ($h = 0$) RIC prevents $\bar{c}(m) = \underline{c}(m) = 0$ FHCW prevents $\bar{c}(m) = \infty$ PF-FVAC+FHCW \Rightarrow RIC GIC+FHCW \Rightarrow PF-FVAC
$\dot{c}(m)$: PF Constrained Section 2.5.6: Appendix E: Appendix E:	GIC , RIC GIC, RIC GIC, RIC	FHCW holds ($\Phi < \mathbf{P} < R \Rightarrow \Phi < R$) $\dot{c}(m) = \bar{c}(m)$ for $m > m_{\#} < 1$ (RIC would yield $m_{\#} = 0$ so $\dot{c}(m) = 0$) $\lim_{m \rightarrow \infty} \dot{c}(m) = \bar{c}(m)$, $\lim_{m \rightarrow \infty} \dot{\kappa}(m) = \underline{\kappa}$ kinks where horizon to $b = 0$ changes* $\lim_{m \rightarrow \infty} \dot{\kappa}(m) = 0$ kinks where horizon to $b = 0$ changes*
$c(m)$: Friedman/Muth Section ??: Section ??: Figure ??: Section ??: Section ??: Section 3.3: Section ??: Section 3.3.1:	Section 3.1, Section 3.2 FVAC, WRIC	$\underline{c}(m) < c(m) < \bar{c}(m)$ $\underline{v}(m) < v(m) < \bar{v}(m)$ Sufficient for Contraction WRIC is weaker than RIC FVAC is stronger than PF-FVAC FHCW+RIC \Rightarrow GIC, $\lim_{m \rightarrow \infty} \kappa(m) = \underline{\kappa}$ RIC \Rightarrow FHCW , $\lim_{m \rightarrow \infty} \kappa(m) = 0$ “Buffer Stock Saving” Conditions GIC $\Rightarrow \exists \tilde{m}$ s.t. $0 < \tilde{m} < \infty$ GIC-Mod $\Rightarrow \exists \hat{m}$ s.t. $0 < \hat{m} < \infty$

[‡]For feasible m satisfying $0 < m < \infty$, a nondegenerate limiting consumption function defines a unique optimal value of c satisfying $0 < c(m) < \infty$; a nondegenerate limiting value function defines a corresponding unique value of $-\infty < v(m) < 0$.

[°]RIC, FHCW are necessary as well as sufficient for the perfect foresight case. *That is, the first kink point in $c(m)$ is $m_{\#}$ s.t. for $m < m_{\#}$ the constraint will bind now, while for $m > m_{\#}$ the constraint will bind one period in the future. The second kink point corresponds to the m where the constraint will bind two periods in the future, etc.

**In the Friedman/Muth model, the RIC+FHCW are sufficient, but *not* necessary for nondegeneracy

Table 4 Appendix: Perfect Foresight Liquidity Constrained Taxonomy

For constrained \dot{c} and unconstrained \bar{c} consumption functions

Main Condition Subcondition	Math	Outcome, Comments or Results
GIC and RIC	$1 < \mathbf{P}/\Phi$ $\mathbf{P}/R < 1$	Constraint never binds for $m \geq 1$ FHWC holds ($R > \Phi$); $\dot{c}(m) = \bar{c}(m)$ for $m \geq 1$
and RIC GIC and RIC	$1 < \mathbf{P}/R$ $\mathbf{P}/\Phi < 1$ $\mathbf{P}/R < 1$	$\dot{c}(m)$ is degenerate: $\dot{c}(m) = 0$ Constraint binds in finite time $\forall m$ FHWC may or may not hold $\lim_{m \uparrow \infty} \bar{c}(m) - \dot{c}(m) = 0$ $\lim_{m \uparrow \infty} \dot{\kappa}(m) = \underline{\kappa}$
and RIC	$1 < \mathbf{P}/R$	FHWC $\lim_{m \uparrow \infty} \dot{\kappa}(m) = 0$

Conditions are applied from left to right; for example, the second row indicates conclusions in the case where ~~GIC~~ and RIC both hold, while the third row indicates that when the **GIC** and the ~~RIC~~ both fail, the consumption function is degenerate; the next row indicates that whenever the **GIC** holds, the constraint will bind in finite time.