What Business Cycles Cost Us Part 2

$$U = \log(\widetilde{c}_1) + \gamma \log(\widetilde{c}_2) +$$

$$\gamma^2 \log(\widetilde{c}_3) + \dots$$

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Lectures in Macroeconomics- Charles W. Upton

The Immortal Consumer

$$U = \log(\widetilde{c}_1) + \gamma \log(\widetilde{c}_2) +$$
$$\gamma^2 \log(\widetilde{c}_3) + \dots$$

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What Business Cycles Cost Us

Two Changes c is uncertain, the weights are declining $U = \log(\widetilde{c_1}) + \gamma \log(\widetilde{c_2}) + \gamma^2 \log(\widetilde{c_3}) + \dots$

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What Business Cycles Cost Us Part 2

Two Changes c is uncertain, the weights are declining $U = \log(C_1) + \gamma \log(C_2) + U$ U is uncertain, but we can compute expected utility

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What Business Cycles Cost Us

Expected Utility

Suppose

we could

avoid

cycles

)]+

Two Changes c is uncertain, the weights are declining $U = \log(C) + \gamma \log(C) + 0$ U is uncertain, but we can compute expected utility Lets call that U_{now}

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 $E(U) = E[\log(\widetilde{c}_1)]$

What Business Cycles Cost Us Part 2

 $\gamma^2 E[\log(\widehat{c}]]$ business

Expected Utility $E(U): \begin{array}{c} c_{_{1}}^{*} = E(\widetilde{c}_{_{1}}) \\ c_{_{2}}^{*} = E(\widetilde{c}_{_{2}}) \\ c_{_{3}}^{*} = E(\widetilde{c}_{_{3}}) \end{array} \begin{array}{c} \text{Suppose we could avoid business cycles} \\ \end{array}$

Expected Utility

$$E(U) = \log(c_1^*) + \gamma \log(c_2^*) + \gamma^2 \log(c_3^*) + \dots$$

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Expected Utility

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$$E(U) = \log(c_1^*)$$
 Lets call that $U_{no-cycle}$ $\gamma^2 \log(c_3^*) + ...$

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The Question

$$U_{now} < U_{no-cycle}$$

• How much of an increase in consumption?

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How Big an Increase

$$E(U) = E[\log((1+\lambda)\widetilde{c}_1)] + \gamma E[((1+\lambda)\widetilde{c}_2)] + \gamma^2 E[((1+\lambda)\widetilde{c}_3)] + \dots$$

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What Business Cycles Cost Us Part 2

Expected Utility

$$E(U) = E[\log((1+\lambda)\widetilde{c}_1)] \text{ Lets call that } U_{\lambda}) + \gamma^2 E[((1+\lambda)\widetilde{c}_3)] + \dots$$

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What Business Cycles Cost Us Part 2

The Question

$U_{now} < U_{no-cycle}$

• And, for some value of λ

$$U_{\lambda} = U_{no\text{-cycle}}$$

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What Business Cycles Cost Us Part 2

The Question

This gives us the benefit from eliminating uncertainty

• And, for some value of λ

$$U_{\lambda} = U_{no-cycle}$$

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What Business Cycles Cost Us Part 2

The Answer

 $\lambda \cong 0.015$

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What Business Cycles Cost Us Part 2 The Answer

 $\lambda \cong 0.015$

Eliminating business cycles is worth as much as a 1.5% increase in consumption.

Part 2

The Answer

Since C runs about \$7,000 billion per year, this is equal to about \$105 billion per year.

Eliminating business cycles is worth as much as a 1.5% increase in consumption.

Part 2

End

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What Business Cycles Cost Us
Part 2