

# Recap Information 3: Shopping-time models and Cash-in-Advance models

“Monetary Economics: Macro Aspects,” Spring 2004

[www.econ.ku.dk/personal/henrikj/monec2004/](http://www.econ.ku.dk/personal/henrikj/monec2004/)

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The lecture slides associated with this part of the course provide the most comprehensive information about what I find of relevance. Nevertheless, this note briefly lists the key concepts that you are supposed to know and be able to explain.

## Key concepts you should know

### Shopping-time models

- The relationship between shopping time, consumption and real money holdings
- The utility function as an indirect function of real money balances
- The consumption leisure trade-off and the impact of an increase in real money
- Optimal money demand and the optimal quantity of money in the dynamic shopping-time model

### Cash-in-advance models

- The Cash-in-Advance constraint
- The Lagrange multiplier on the CIA constraint
- The optimal consumption choice with a binding CIA constraint
- The relationship between the nominal interest rate and the Lagrange multiplier on the CIA constraint

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- Consumption and the nominal interest rate; the nominal interest rate as a “consumption tax”
- The long-run non-distortionary implications of the “consumption tax”
- Superneutrality in model with CIA constraint only on consumption goods, and utility only depending on consumption
- Causes of non-superneutrality: A consumption-leisure trade-off; cash and credit goods; CIA restrictions on investment on physical capital
- The optimal rate of inflation in cases of non-superneutrality
- The stochastic CIA model with endogenous labor supply
- The channel of monetary shocks through the consumption-leisure trade-off
- Qualitative effect of money shocks independent of value of constant rate of relative risk aversion
- Why only anticipated money matters
- The stabilizing effect of a procyclical monetary policy (against supply shocks)

### **Money and real costs of transactions**

- Money, consumption and transactions costs
- Feenstra’s equivalence result (just knowing it exists is sufficient)