Macroeconomic Sequence 2022-2023

Block I: Nicola Pavoni

Bocconi University: Fall, 2022

1. Quick Refresh of the Solow Model and Development Accounting Literature

- Income inequality and Development Accounting, The Neoclassical Production Function, The Golden Rule, Income Convergence
- Basic Reference: Class Notes.
- Additional: Romer (2012), Ch. 1; Mankiw-Romer-Weil (1992), Chancel and Piketty (2021).
- 2. Introduction to Recursive Methods
 - Optimal Growth, Euler Equations vs Dynamic Programming, the Guess and Verify
 - Basic Reference: Class Notes.
 - Advanced References: Luenberger (1969).

3. Math Review and Some Useful Advanced Concepts

- Metric Spaces and the Contraction Mapping Theorem
- Basic Reference: Class Notes.
- Additional References: SLP, Ch. 3.
- Advanced References: Rudin (1991).
- 4. The Bellman Principle and Deterministic Dynamic Programming
 - Definition and Comparison with other Methods. Continuity, Concavity and Differentiability under Bounded Returns
 - Basic Reference: Class Notes.
 - Additional References: AC, Ch. 2 and SLP, Ch. 4.
 - Advanced References: Cugno and Montrucchio (1998).

5. Introduction to Economic Growth

- The Ramsey Model and Basic Models of Endogenous Growth
- Basic References: Class Notes
- Additional: Romer (2012) Ch.s 2 and 3; Barro & Sala-i-Martin (1990) Ch.s 6 and 7.

- 6. Introduction to Numerical Methods
 - Value and Policy Function Iterations, Projection Methods
 - Basic Reference: Class Notes.
 - Additional References: AC, Ch. 3 and SLP, Ch 4.
 - Advanced References: Judd (1998).

7. Review on Probability Theory, and Stochastic D.P.

- Markov Chains and Stationary Distributions, Dynamic Programming with Discrete and Continuous Shocks
- Basic Reference: Class Notes.
- Additional References: LS, Ch. 2 and SLP, Chs. 7-9.
- Advanced References: Bertsekas (1976).

8. Consumption Theory, and Practice

- Non Durable Consumption under Rational Expectations, Precautionary Saving; Risk Sharing, Introduction to New Consumption Theory
- Basic Reference: Class Notes.
- Additional References: LS, Chs. 16 & 17; BB, Ch. 1; AC, Chs. 6 & 7;
- Advanced References: Deaton (1992); Attanasio and Weber (1993), Hall (1978), Kocherlakota (1996), Ligon (1998), Attanasion and Pavoni (2011); Attanasio-Weber (2010);

9. Introduction to Consumption Capital Asset Pricing

- The Lucas' tree model, CCAPM, the Equity Premium Puzzle, Recursive Preferences
- Basic Reference: Cochrane (2001), Ch. 1, 2, 3 & BB, Ch. 1;
- Additional References: SLP, Chs. 10.

10. Investment and Dynamics of Employment Adjustment

- q-Theory of Investment with Adjustment Costs, Credit Constraint and Irreversibilities
- Basic Reference: Class Notes
- Additional Reference: BB, Chs. 2 & 3; AC, Chs. 8 & 9.
- Advanced Reference: Abel-Eberly (1994), Bertola-Caballero (1990), Gilchrist-Himmelberg (1995), Hayashi (1982), Dixit-Pindyck (1994).

References

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