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Six Lectures on Non-CES Demand Systems and Their Applications

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Term: 2025-A2
Dates: Thursdays. December 4; December 11; December 18; January 8; January 15; January 22
Time: **Lectures:** 16.50-18.35, Lecture Room #4. **Office Hours**: 15.30-16.30, at Room1407

Overview: CES and nested CES demand systems are popular modeling tools that are widely used in business cycles theory, economic growth and development, international trade and other general equilibrium fields, because it has many knife-edge properties, which help to keep the analysis tractable in the presence of many goods and factors. However, this also makes it hard to tell which properties of CES are responsible for certain results. Moreover, it is necessary to relax some of them for certain applications. I recently published two review articles in *Annual Review of Economics* (ARE) in 2023 and 2025, which discuss several classes of non-CES aggregators. In this lecture series, I will explain them in more detail and discuss some selected applications.

Notes:

- Even though these 6 lectures follow materials in a natural sequence, I'll do my best to make them self-contained so that you can take them independently.
- ARE 20023 and ARE2025, are review articles, which offer a quick overview of the non-CES demand systems used and their key properties. However, from Lec-2 on, I will discuss mostly articles with *.

Lec-1: Th. 2025/12/04; Nonhomothetic Demand Systems
*Matsuyama, "Non-CES Aggregators: A Guided Tour," ARE2023. Sec 1-4.
Bohr-Mestieri-Yavuz, "Aggregation and Closed Form Results for Nonhomothetic CES Preferences."

Lec-2: Th. 2025/12/11; Homothetic non-CES Demand Systems
Matsuyama, "Non-CES Aggregators: A Guided Tour," ARE 2023. Sec 5-8.
*Matsuyama-Ushchev, "Three Classes of non-CES CRS Production Functions with Multiple Factors of Production," Work in Progress, a planned revision of "Beyond CES: Three Alternative Classes of Flexible Homothetic Demand Systems" CEPR-DP#12210.

Lec-3: Th. 2025/12/18; Love-for-Variety under Homothetic non-CES with an Application to an Armington Model
Matsuyama, "Homothetic non-CES Demand Systems with Applications to Monopolistic Competition," ARE2025. Sec 3-5
*Matsuyama-Ushchev, "Love-for-Variety" CEPR-DP#18184-4.

Lec-4: Th. 2026/01/08; Homothetic non-CES Applied to Monopolistic Competition: Symmetric Firms
Matsuyama, "Homothetic non-CES Demand Systems with Applications to Monopolistic Competition," ARE2025. Sec 2-6.
*Matsuyama-Ushchev, "Anatomy of Market Failures in Monopolistic Competition," Work in Progress, a planned revision of "When does procompetitive entry imply excessive entry?" CEPR-DP#14991.

Lec-5: Th. 2026/01/15; Homothetic non-CES Applied to Monopolistic Competition: Heterogeneous Firms
Matsuyama "Homothetic non-CES Demand Systems with Applications to Monopolistic Competition," ARE2025. Sec 7.
*Matsuyama-Ushchev, "Selection & Sorting of Heterogenous Firms through Competitive Pressures" CEPR-DP#17092-3.
Matsuyama-Ushchev, "Constant Pass-Through," CEPR-DP#15475.

Lec-6: Th. 2026/01/22; Some Applications
Fujiwara-Matsuyama, "A Technology-Gap Model of 'Premature' Deindustrialization," AER 2024.
Bohr-Mestieri-RobertNicoud, "Economic Geography and Structural Change with Heterothetic Cobb-Douglas Preferences".
*Matsuyama, "Engel's Law in the Global Economy," *Econometrica,* 2019.
*Fujiwara-Matsuyama, "A Global View of Premature Deindustrialization," Work in Progress.
Fujiwara-Matsuyama, "Competition and the Phillips Curve," CEPR-DP#17521-4.
Matsuyama-Ushchev "Destabilizing Effects of Market Size in the Dynamics of Innovation," JET 2022.
Matsuyama-Ushchev "Destabilizing Effects of Market Size in the Dynamics of Innovation: Judd meets Kimball."