Towards a Coordinationist Paradigm for Macroeconomics
- The Interplay of Capital, Interest, Money, and Prices

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Outline

- Market process-oriented microfoundations
  - What microfoundations?
  - Why market process-oriented?
  - Contribution to methodological diversity (paradigmatic talk)

- Capital, interest, money, and prices
  - Production: Capital-based and consumption-driven
  - Interest: Pure Time Preference and Loanable Funds
  - Money: The ultra-pervasive good
  - Role of time in macroeconomics (intertemporal links)

- Applications and research
  - Linking financial/monetary sphere and real economy
  - Production possibilities, path-dependencies, and crises
  - Global perspective and top-down-approach
  - Towards a coordinationist paradigm of macroeconomics
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Microfoundations for macroeconomics

- One economic process
  - Micro level: Economic mechanisms and individual decisions
  - Macro level
    - Mismatches on micro level show up as „imbalances“
    - Universal drivers (permeating into all micro markets)
      ⇒ Macroeconomics: Evidence for systematic misallocation of resources?

- Universal (= pervasive) drivers
  - Money (medium of exchange)
  - Interest (price of time)
  - Capital (means for intertemporal coordination)
  - Labor (most universal production factor)
  - Constitutional framework (regulations, policy)

⇒ Systemic micro disruptions as macro symptoms
Market process view (1/2)

- Disequilibrium approach
  - Menger/Hayek vs. Walras/Marshall tradition
  - homo agens (HA) vs. homo oeconomicus (HO)

- Role of entrepreneurs
  - Uncertainty: speculation, search, and discovery (HA as explorer)
  - Universal arbitrageurs: investment as intertemporal arbitrage

- Dynamics and time
  - Permanent adjustment process rather than sequence of equilibria
  - Market system as feedback mechanism (ex-ante and ex-post prices)
  - Time cannot pass without modifying knowledge (Hoppe)
Market process view (2/2)

- Value theory
  - Subjectivist perspective
  - Reverse value imputation (from ends to means)

- Prices as knowledge surrogates
  - Deficiency of monetary calculation:
    Distorted price structures vs. price level movements
  - Non-neutrality of money (Cantillon effects matter)

⇒ Leaving the “evenly rotating economy” behind
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“Final aggregate demand”: No demand and not all of it is final

<table>
<thead>
<tr>
<th>Source/Input (not: supply)</th>
<th>for period t</th>
<th>Use/Output (not: demand)</th>
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</thead>
<tbody>
<tr>
<td>Intermediate consumption (production structure)</td>
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<tr>
<td>Domestic value-added</td>
<td></td>
<td>Final consumption (exclusive source of value)</td>
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<tr>
<td>Imports</td>
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<td>Domestic capital formation</td>
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<td>Capital formation abroad</td>
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<td></td>
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<td>Exports</td>
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- Final use of domestic production (only with respect to period t)
Production as a time consuming, multi-stage process

Primary production factors (labor and natural resources)

Early stages (higher-order goods)
- t-6
- t-5
- t-4
- t-3
- t-2
- t-1

Late stages (lower-order goods)
- t

Consumable output (first-order goods)
- t

Capital stock as a structure

→ Capital formation: intertemporal intermediate consumption
Capital

- Capital as intentionally produced productive means ...
  - ... not a disembodied abstraction or homogenous aggregate
  - ... nor a self-perpetuating (“Knightian”) fund

- Structure of heterogeneous goods
  - Limited convertibility and recombination losses
  - Capital as a structural pattern (Lachmann)

- Value dimension:
  - Ability to allow individuals to more readily realize their plans rather than physical characteristics or physical history
  - “Unfinished entrepreneurial plans” (Kirzner): Capital goods to be assessed in light of their usefulness to those plans

⇒ Missing link between micro and macro level (Skousen)
Value of the Spanish capital stock?

Source: AMECO Database.
Spain: Invisible “ghost estates”

Positive contributions to potential growth

2006-2008 output gap nowcast/forecast: -0.9 to -1.3 %

Source: European Commission, AMECO and CIRCA databases.
Production: The Hayekian triangle

Number of production stages/shape of the Hayekian triangle?
Interest

- Interest as a value phenomenon
  - Expression of time preference
  - Price of future goods relative to present goods
  - Discount rate interwoven in the entire price system

- Capitalization theory (Fetter): Interest vs. price of capital
  - Productivity of capital reflects in price of capital goods
  - Valuation of reproducible capital pushed backward to primary factors
  - Price of capital = present value of future income streams

- Interest and “roundaboutness of production”
  - Capital-intensity increases productivity of labor
  - Choice of more roundabout production schemes depends on time preference

⇒ Pure time preference = market rate of interest?
Interest rate and market for loanable funds

\[ LFS = S \]

\[ LFD = I \]

\[ i^* \]

\[ i \]

\[ LF \]
Coordinating saving and investment

- Saving
  - Saving up for something: Future demand, not a leakage
  - Derived-demand and discount effect

\[ M^*V = P^*(Q_C + Q_2 + Q_3 + Q_4 + Q_5 + Q_6 + Q_7) \]

- Investment: Stage pattern matters (not volume alone)
  - Entrepreneurial challenge: bringing capital structure in line with pure time preference (intertemporal arbitrage)
Capital-based macroeconomic framework (Garrison)

Stages of production

Production possibilities frontier

Loanable funds

Loanable funds
Interest rate and monetary policy

\[ LFD = I \]
\[ LFS = S \]
\[ i^* \]
\[ i_M \]
\[ LFD = I + L \]
\[ LFS = S + M \]
Monetary policy

- Multi-purpose weapon of “modern” economic policy
- Generic target: Provision of a means of exchange
- Other targets
  - Government financing
  - Debt-monetization
  - Boosting employment
  - Business-cycle stabilization
  - Systemic financial stability
  - ...

- Monetary policy
  - Today: Key price of capitalist system manipulated by central banks
  - Back to simple money supply rules?

What about Tinbergen?
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Macroeconomics and terminology

- Risks of macroeconomic misperceptions
  - Aggregating/averaging the problems away (e.g. aggregate production function approach)
  - Losing touch with microeconomic principles (e.g. key role of price mechanism)
  - Over-interpreting national accounts concepts (e.g. identities tell nothing about causality or interdependency)
  - Ignoring production structures (netting out intermediate consumption)

- Language (terminology) and reasoning (theory)
  - Words can be misleading
  - Wording matters
Applications (1/2)

- Potential production/output gap estimations
  - Disaggregated approaches (marketable production possibilities)
  - Market revaluations compared to national accounting data

- Capital stock distortions as flipside of financial crisis
  - Repairing intertemporal discoordination problems
  - New light on “austerity” debate

- Non-neutrality of money/monetary policy
  - Monetary theory of the business cycle
    (systematic investment failures due to excessive credit creation)
  - “Capital gives money time to cause trouble” (Garrison)
  - Scenario of globalizing monetary policy (multilateral swap agreements)
Applications (2/2)

- International macroeconomic imbalances
  » Current account vs. financial account (capital vs. trade flows)

- Global macroeconomic imbalances: The savings glut debate
  » Negative natural interest rates ahead?
  » Need for more public debt to fill the global “investment gap”?

- Global business cycle and regional/national impact
  » Top/down view:
    Economic activity within countries derived from global dynamics
  » National specialization and impact of capital restructuring
A coordinationist macroeconomic paradigm

- Key research and policy question: Evidence for hampered market coordination processes?
  - Coordination efficiency vs. macroeconomic management
  - Important role of intertemporal coordination (capital and interest)
  - Path-dependency of economic activity via capital allocation

- Beyond the demand-side vs. supply-side controversy
  - Coordinationist macroeconomics is not a cheerleader for growth
  - Intermediary step to linking macroeconomics and well-being
    - Overcoming the production-biased view
      (production serves consumption, not vice versa)
    - Putting consumers/households back in the center
    - Value theory remains key pillar
      (whether preferences are exogenous or endogenous)
Saving and growth

Source: Garrison (2005)