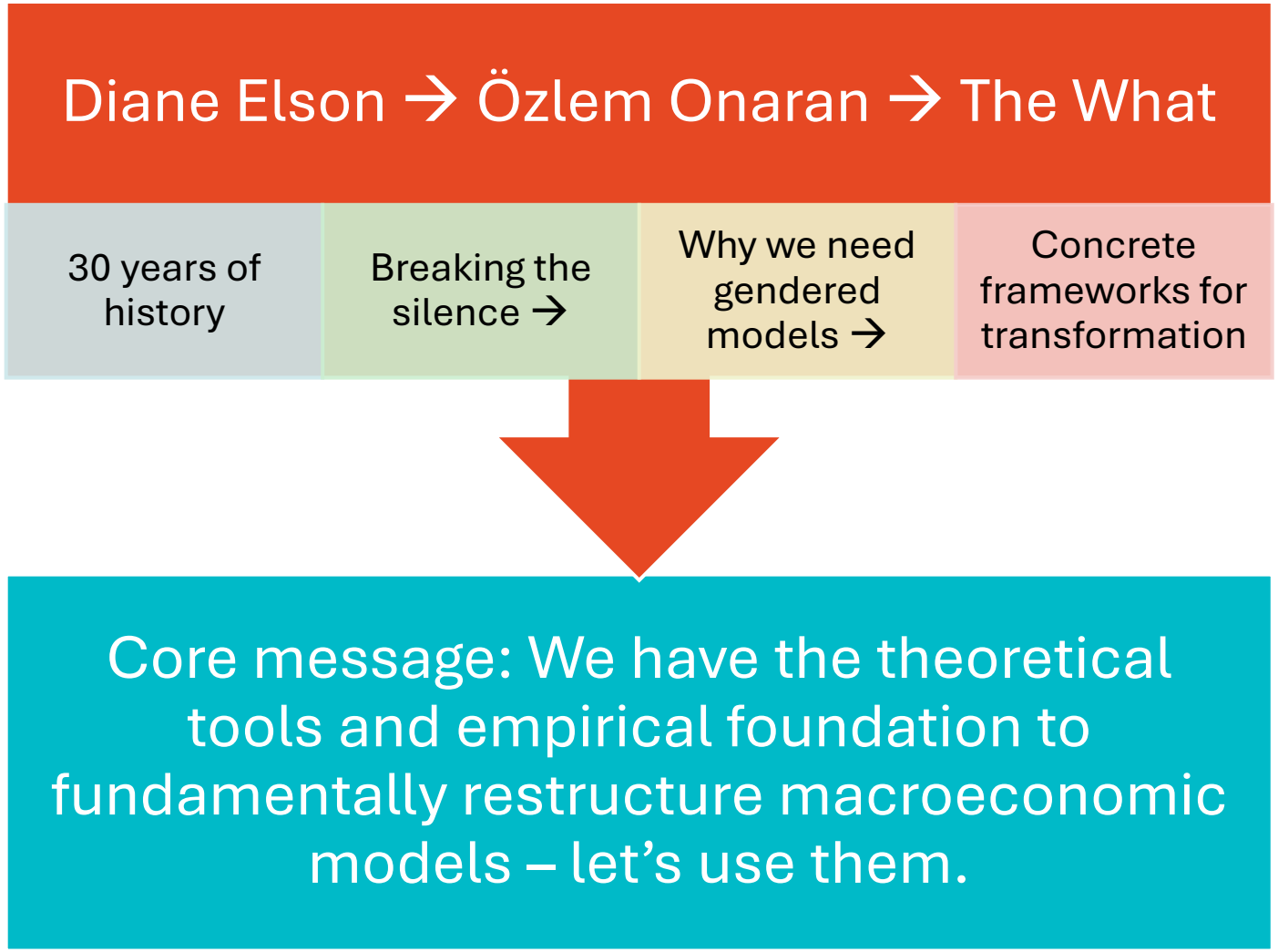
Moving beyond “add women and stir” to fundamentally transform economic theory

Incorporating Care in Economic Models: *A Mostly Macro Agenda*

Building on Our Panel's Overview



Why model at all? The Feminist Dilemma & Opportunity

Models make the invisible visible and the implicit explicit

- Historical skepticism
  - Mathematical formalism as exclusion (Strassmann 1994)
  - Diversity of knowledge creation (Nelson 1996)
  - Complex realities vs. elegant equations
- The rise of empirics
- Revolutionary potential of modeling
  - Reveal hidden assumptions
  - Identify causal mechanisms
  - Testable hypthoses
  - Challenge policy narratives
  - Create new possibilities

Models as Revolutionary Tools

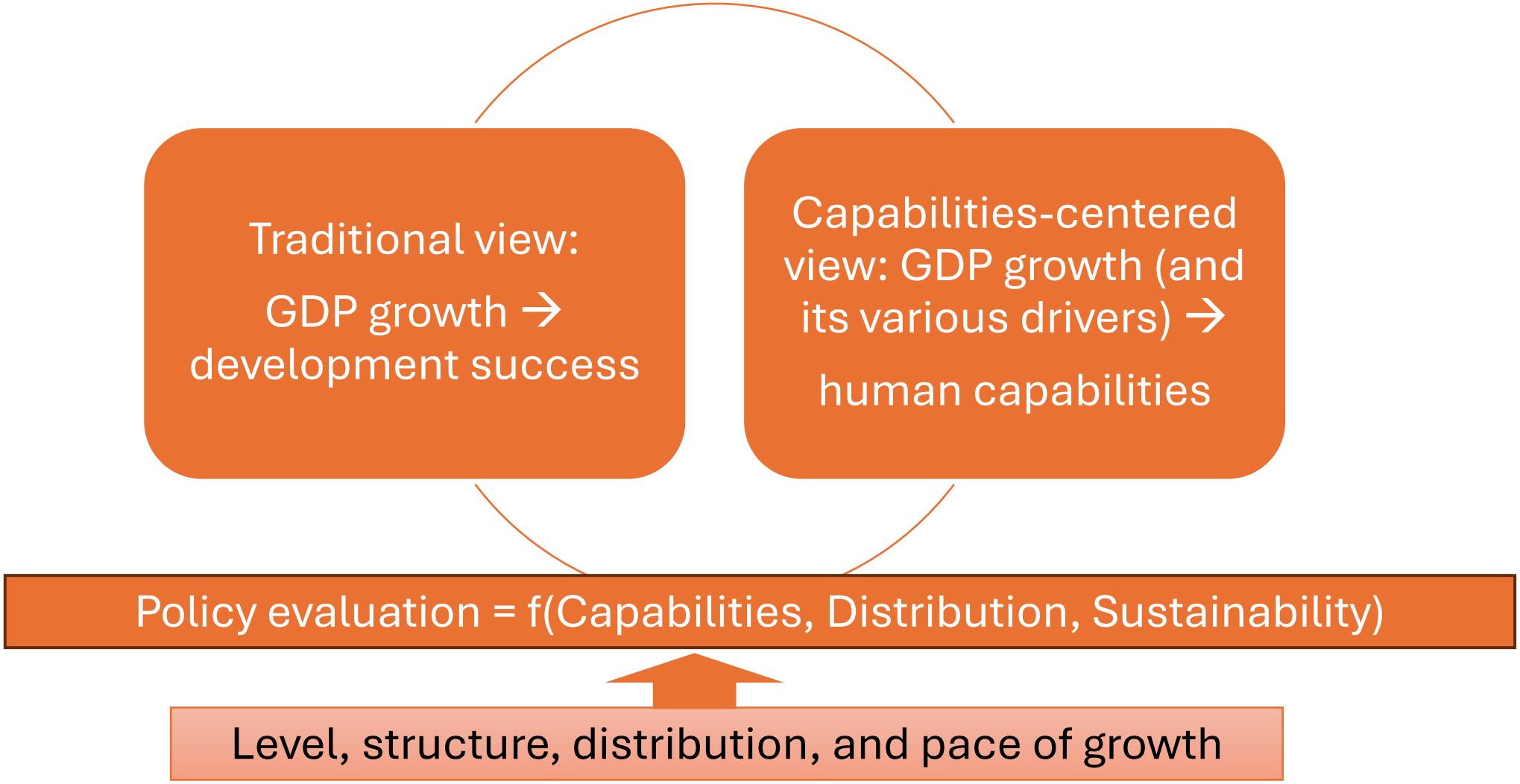
- Case Study: Structural Adjustment Programs
  - Hidden Assumption: Unlimited supplies of women's unpaid labor
  - Revealed by models: False efficiency of cuts → capability depletion → lower growth

Sources: Elson (1991, 1995); Benería & Feldman (1992); Floro (1995)

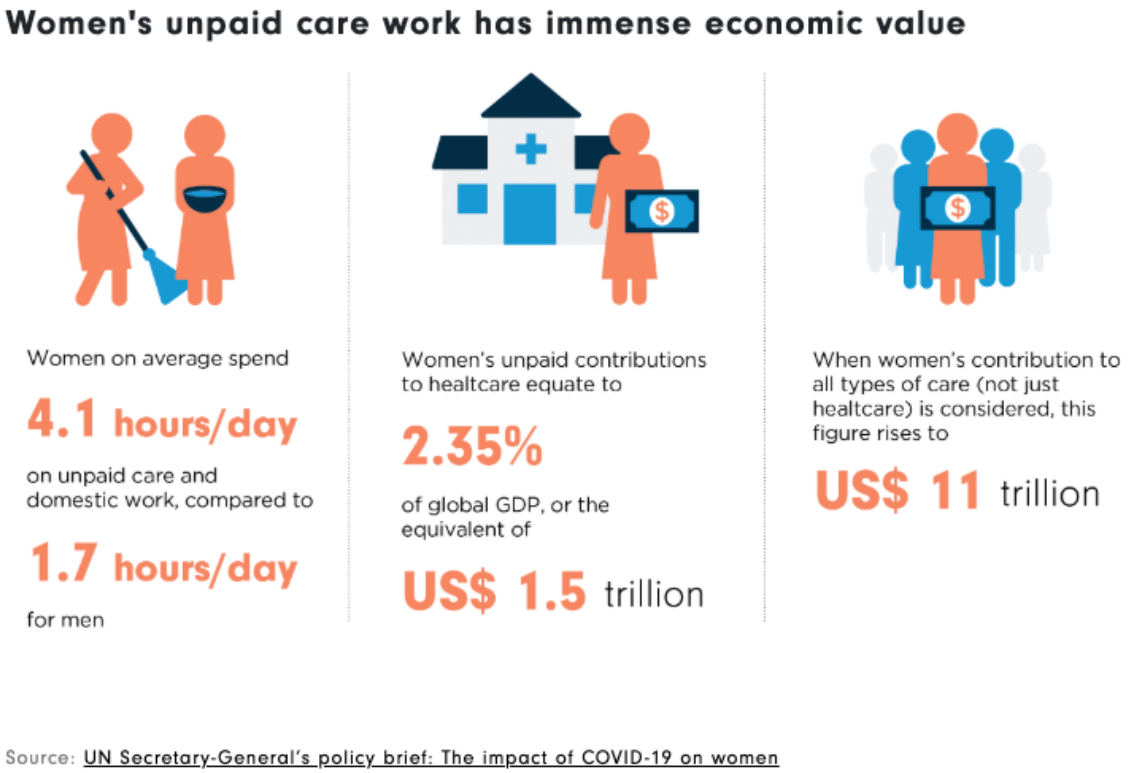
Integration challenges

1. Reconceptualizing economic fundamentals

GDP as a means, not an end



Beyond GDP: The Missing Trillions



Satellite accounts that include household production est. between 1/3 – ½ of total economic activity in OECD countries.

What we measure	• Market transactions • Government spending • Formal investment
What we miss	• Unpaid care work • Household production • Community provisioning
Policy implication	• Economic policies based on partial data lead to partial solutions.

Integration challenges

2. Reformulating economic variables and relationships

Extending the investment concept: Valuing human capabilities development

Traditional investment	Human capital	Human capabilities
• Physical capital • Technological innovation • Buildings • Infrastructure	• Education • Training • Skills development	• Health & wellbeing • Care provisioning • Social cohesion • Agency & freedom

Key insight:
Capabilities have both intrinsic value AND instrumental returns.

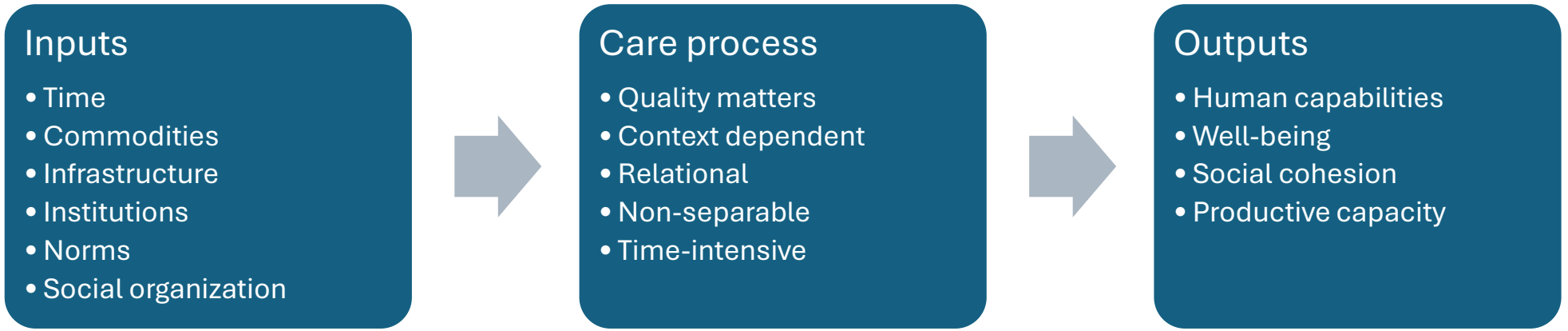
Gender-aware fiscal multipliers

- Standard channels
  - Direct spending effects
  - Income multiplication
  - Crowding in/out
- Additional care channels
  - Labor supply effects (esp. women)
  - Productivity through capabilities
  - Long-term human development
- Empirical evidence: Social infrastructure multipliers > physical infrastructure multipliers

Integration challenges

3. Care as a production process: Quality, complementarity, and substitutability

Care provisioning as a production process



Critical Insight:
Unlike widgets, care quality cannot be separated from the process of provision

The Quality Challenge

- Quality-quantity tradeoffs
  - Time per care recipient
  - Emotional availability
  - Customization vs. standardization
  - Relational continuity
- Policy tensions
  - Efficiency vs. effectiveness
  - Cost containment vs. quality
  - Scale vs. personalization
  - Productivity metrics?

Quality depends on:
- Time intensity
- Skill
- Emotional connection/capability
- Continuity
- Compensation

Substitutability & Complementarity

When can market/state replace family/community care?

- Substitutability
  - High?
    - Routine physical care
    - Standardized education
    - Basic health services
  - Low?
    - Identity formation, cultural transmission
    - Emotional support
  - Differences depend on:
    - Working conditions
    - Care recipient needs
    - Care provider skills
    - Larger social contexts
- Complementarity - goods & services that make care more effective or efficient
  - Goods: Washing machines, nutrition products
  - Services: Drop-in care, senior day care centers

Integration challenges

3. Methodology & Microfoundations

The Microfoundations challenge

Care is/produces a public good

Macro as Micro(foundations)

Microfoundations contributions

- Household heterogeneity matters
- What we need – power, choice, conflict
  - Diverse household types
  - Intra-household bargaining
  - Life-cycle dynamics
  - Class-gender-race/ethnicity intersections
- The tractability problem
  - Computational complexity
  - Data requirements
  - Parameter proliferation
  - Lost intuition
- Solution: Strategic simplification preserves key insights while maintaining analytical power.

Optimal complexity = max(insight) s.t. tractability

Beyond representative agents

- Stratified reproduction
  - Class differentiated care
  - Reproduces inequality
  - Care chains
- Agent-based models
  - Emergent patterns
  - Network effects
  - Adaptive behavior
- System dynamics
  - Feedback loops
  - Stock-flow consistency
  - Delayed effects

Methodological pluralism:
Different questions require different tools

Dynamic Considerations

1. Demography & Depreciation

Demography & Depreciation

- Human capability depreciation (without care investment)
  - Health deterioration
  - Skill obsolescence
  - Social disconnection
- Policy responses to the demography & depreciation
  - ↑ Female LFP… but who provides care?
  - ↑ Retirement age… but capability limits?
  - ↑ Productivity… through what mechanism?

Dynamic Considerations

2. Productivity growth & structural transformation

Can Services Lead Structural Transformation?

- **Manufacturing's historical role**
  - Economies of scale & unconditional convergence
  - Productivity spillovers & linkages
  - Export potential
  - Formal employment generation
- **Services' potential & limits**
  - High-value segments only (IT, finance) – not a lot of employment
  - Limited tradability
  - Baumol's cost disease: Care costs tend to rise over time relative to other sectors
  - Quality-productivity tensions
- **India's Cautionary Tale**
  - High GDP growth BUT insufficient quality employment → inequality ↑
- **Care Services Paradox:** Essential for capabilities but challenging for conventional productivity metrics

Sources: Rodrik & Sandhu (2024); Ghosh (2024)

Resolving the Productivity Paradox

Baumol’s cost disease vs. long-term capability returns

- Short-term view
  - Rising relative costs
  - Labor intensive
  - Limited automation
- Long-term returns
  - Healthier population
  - Higher cognitive skills
  - Social cohesion
  - Innovation capacity
- **Time horizon matters: Care investment pays off over generations**
- **→ Models & policy to connect care-sector wages to social value**

Towards a Transformative Economic Framework

Key Takeaways

Care is both intrinsically valuable AND instrumentally critical

Production, maintenance, and development of human capabilities through care work is the foundation upon which all economic activity rests.

Social organization of care shapes ALL macroeconomic outcomes

Social organization of care – across markets, households, communities, and the state – profoundly shapes macroeconomic outcomes

Cannot address 21st century challenges without care lens

Demographic transitions, technological change, structural transformation, ecological sustainability

This isn't about adding variables to existing models. It's about transforming how we understand economic systems.

We need to develop macromodels that (are):

Analytically rigorous

Embrace methodological pluralism

Practically tractable

Build on improved data collection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