Discussion of *Endogenous Wage Indexation and Aggregate Shocks*, by Carrillo, Peersman and Wauters

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This paper

- Standard DSGE model

+ Workers can choose the indexation scheme of their labor contract
  Can index to:
  - past inflation
  - Central Bank inflation target

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= Non-trivial extension

- Model calibrated and then solved using nonlinear techniques

This paper

- Results

  1. Model matches the available empirical evidence on wage indexation

  2. Workers prefer indexing wages to past inflation when **technology** or **inflation-target** shocks are prevalent

  3. The decentralized equilibrium differs from the planner's
     - Planner prefers indexation to past inflation when **demand** shocks are important

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- State-of-the-art DSGE modeling exercise

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- State-of-the-art DSGE modeling exercise

- Potentially important findings

Why do I say *potentially*? My comments

1. Motivation and evidence

2. Well-executed paper, but little economic intuition for the results

3. Interesting result: inefficiency of private wage indexation choice

1. Motivation

- Large literature on structural breaks in US postwar macro dynamics

- Hofmann, Peersman and Straub (2012)
  - Long-run effect of shocks on prices and wages is stronger in the 1970s than 80s
  - Changes in MP rule not enough to explain this pattern
  - Most likely explanation: higher wage indexation in the 1970s

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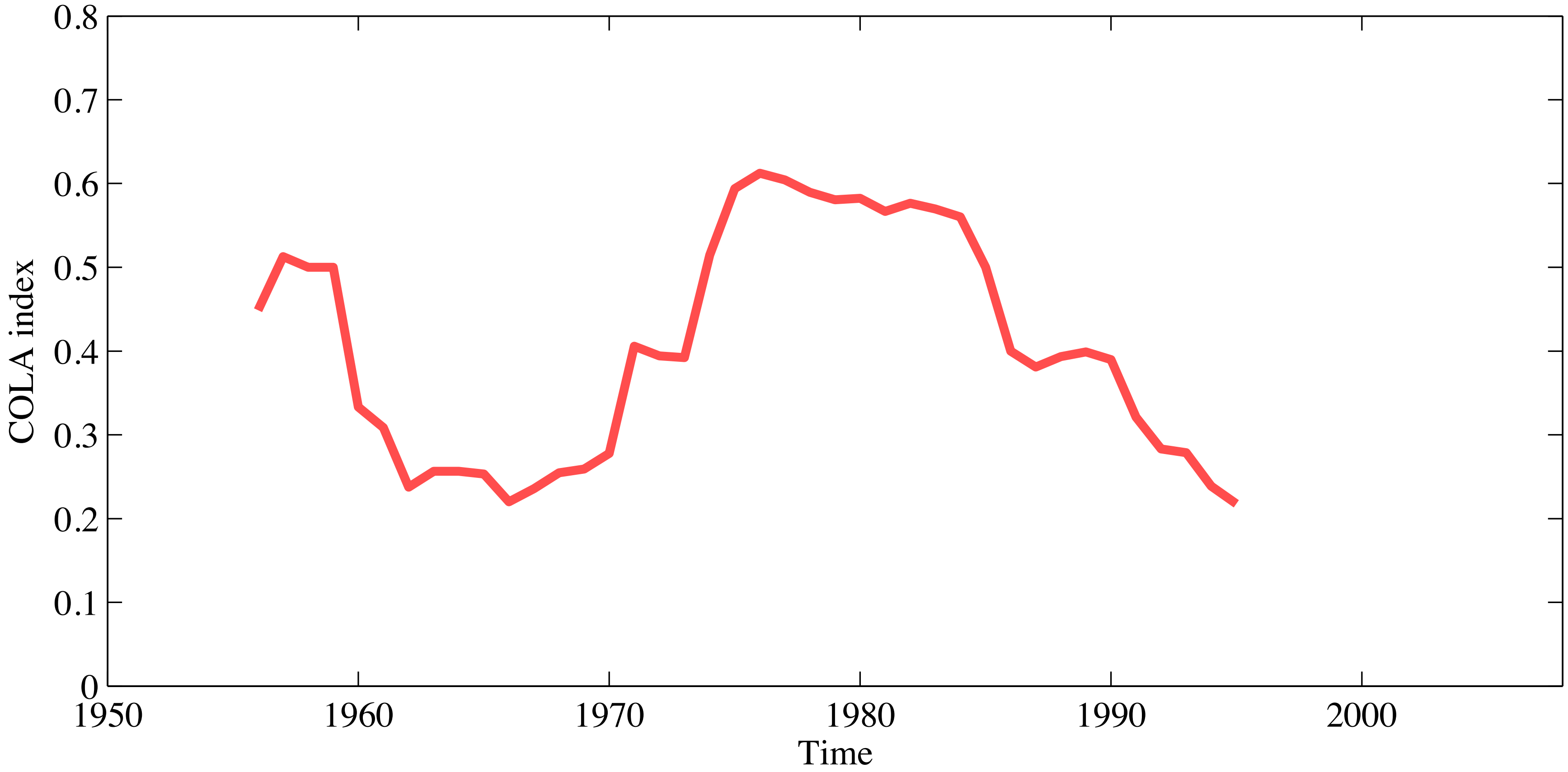
- Natural question: Why did indexation change?

➥ This paper endogenizes wage indexation choice

1. Empirical evidence

- COLA coverage
  - Proportion of union workers in large collective bargaining agreements with explicit contractual wage indexation clauses

COLA coverage



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- Alternative approach: different wage-setting model altogether
  - Christiano, Eichenbaum and Trabandt (2015): real wages are determined by alternating offer bargaining

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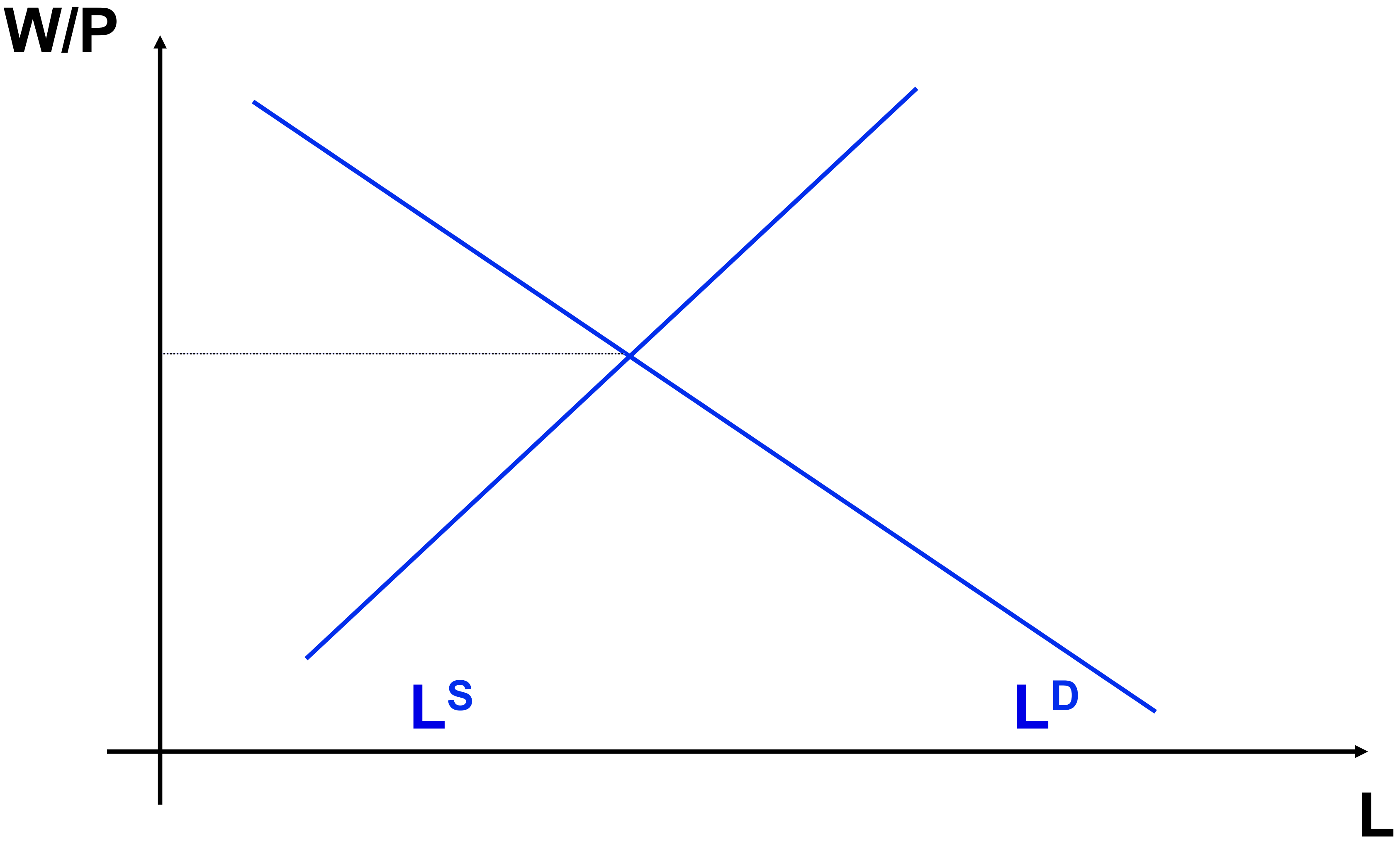
2. My (static) intuition

- For simplicity, assume
  - Economy with only technology shocks
  - The economy is in steady state

- Worker *i* is randomly selected to re-set her wage
  - Will set wage to steady state
  - Subsequent periods: she has to be ready to supply as much labor as demanded

2. Static intuition: A positive technology shock



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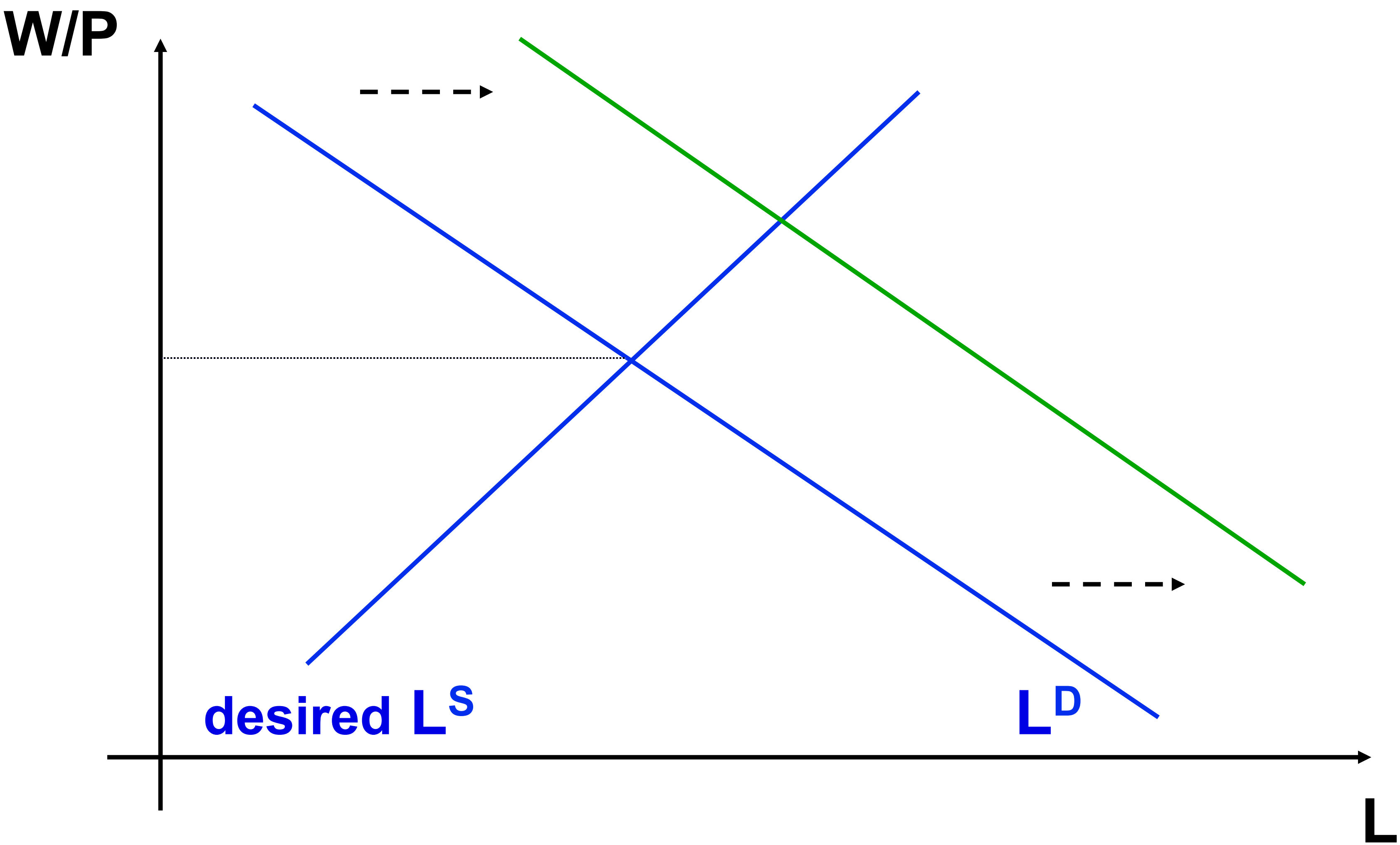

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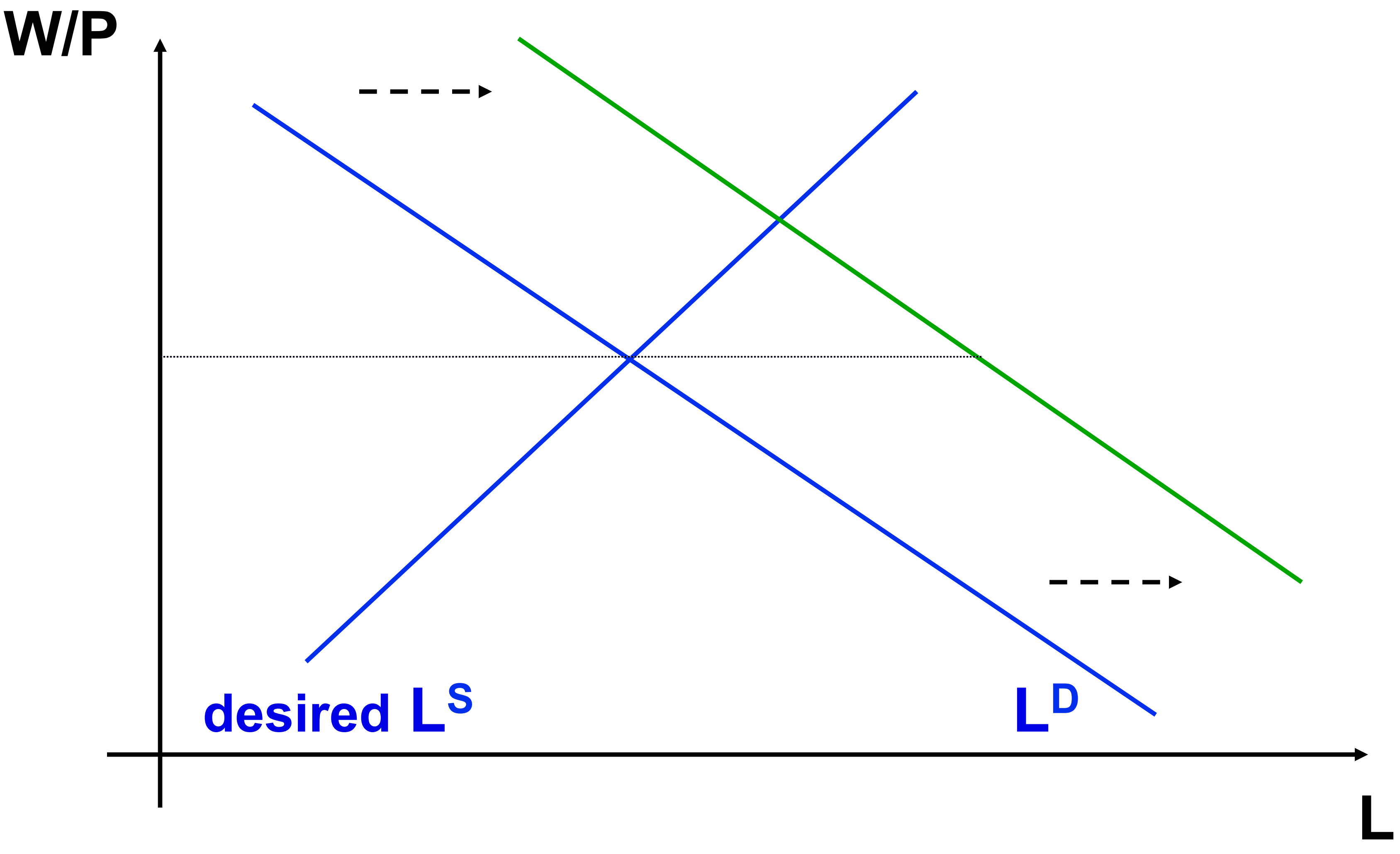

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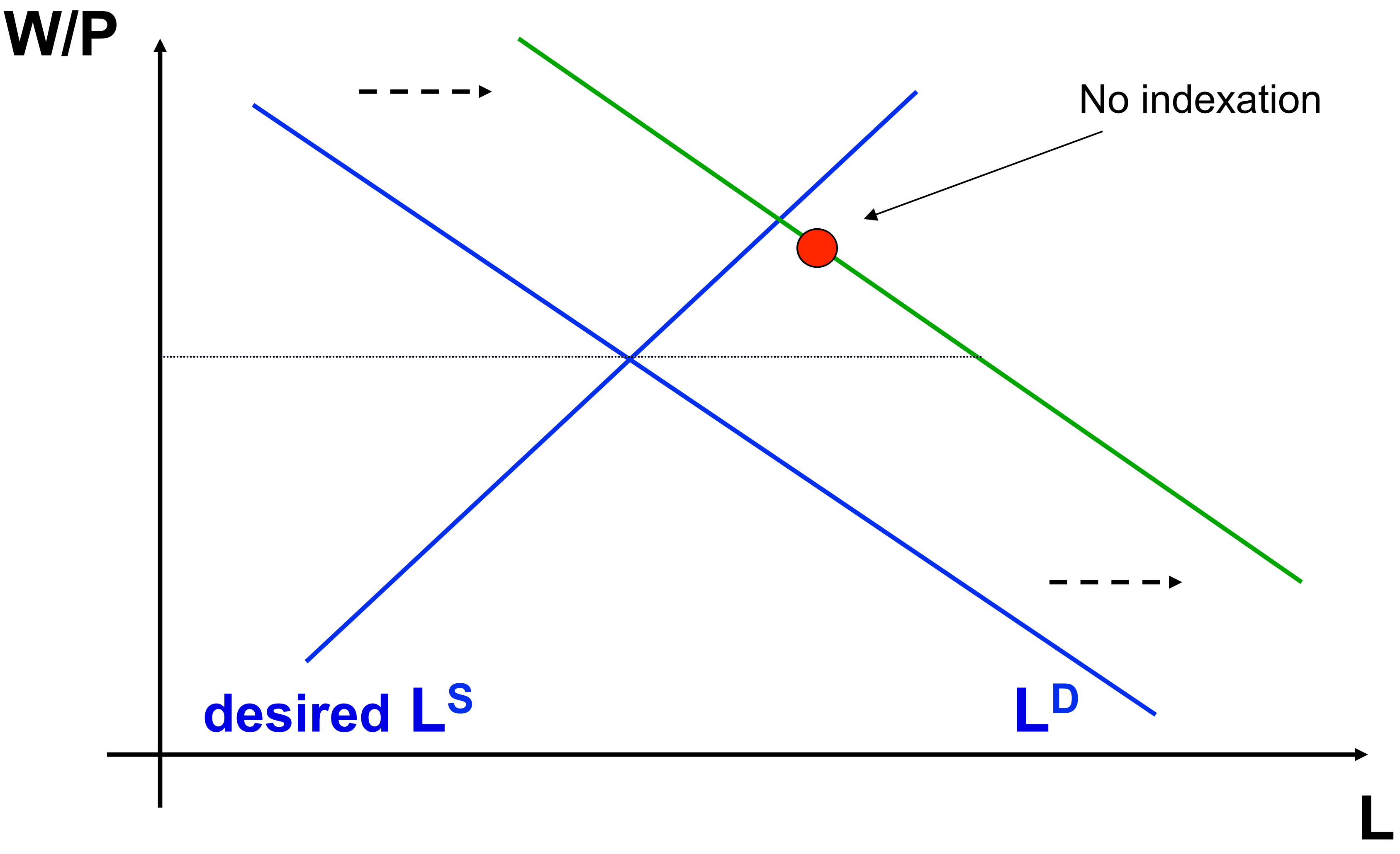

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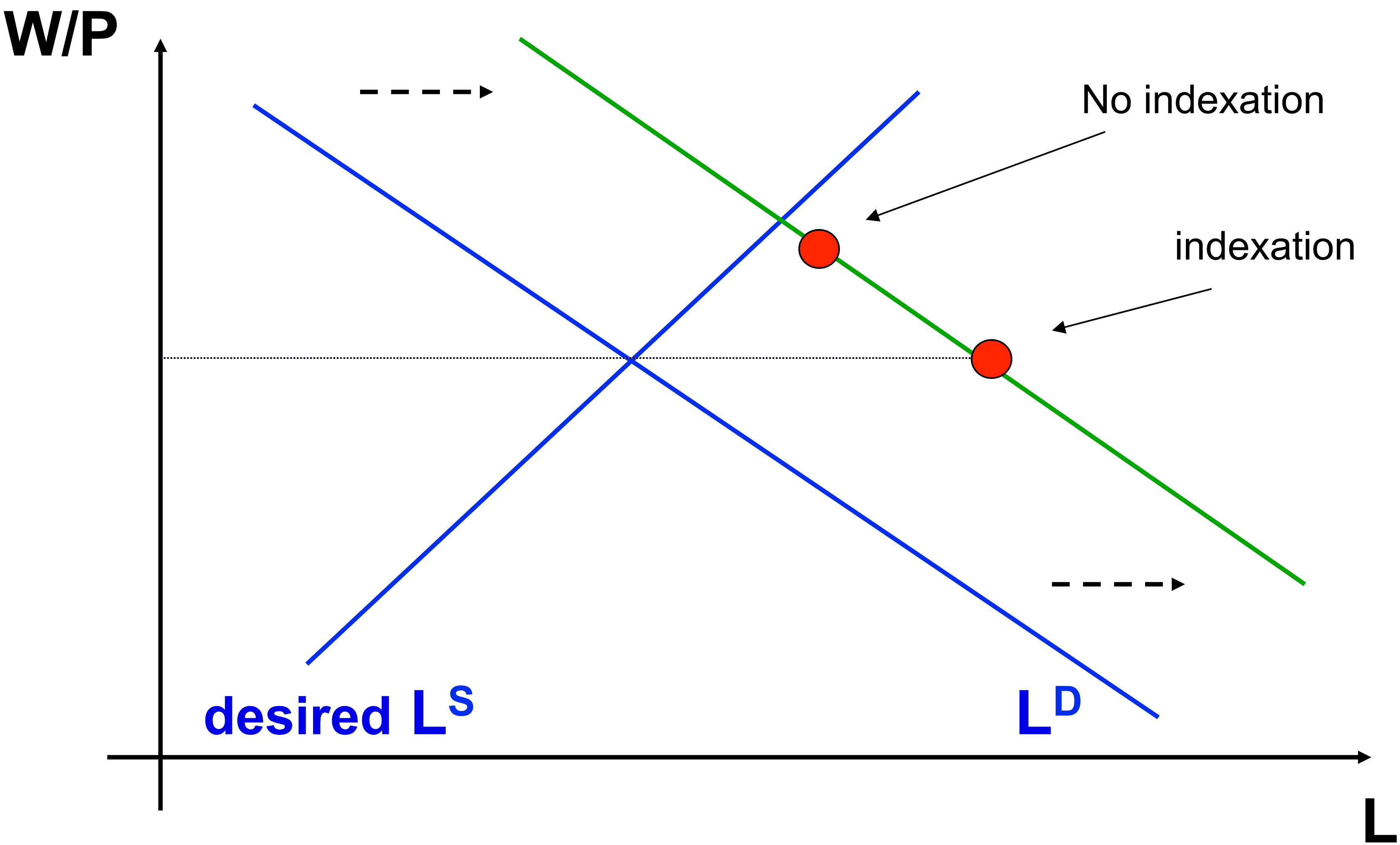

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- Suppose now the economy is hit by a positive technology shock
  - Labor demand ⬆ $\Rightarrow$ she must work more at the same nominal wage
  - Inflation ⬇ $\Rightarrow$ her real wage ⬆ $\Rightarrow$ less costly to work more

- Will she choose to index her wage to inflation?
  - If she does, real wage approx constant and she is more off her labor supply
  - The opposite of the paper's findings

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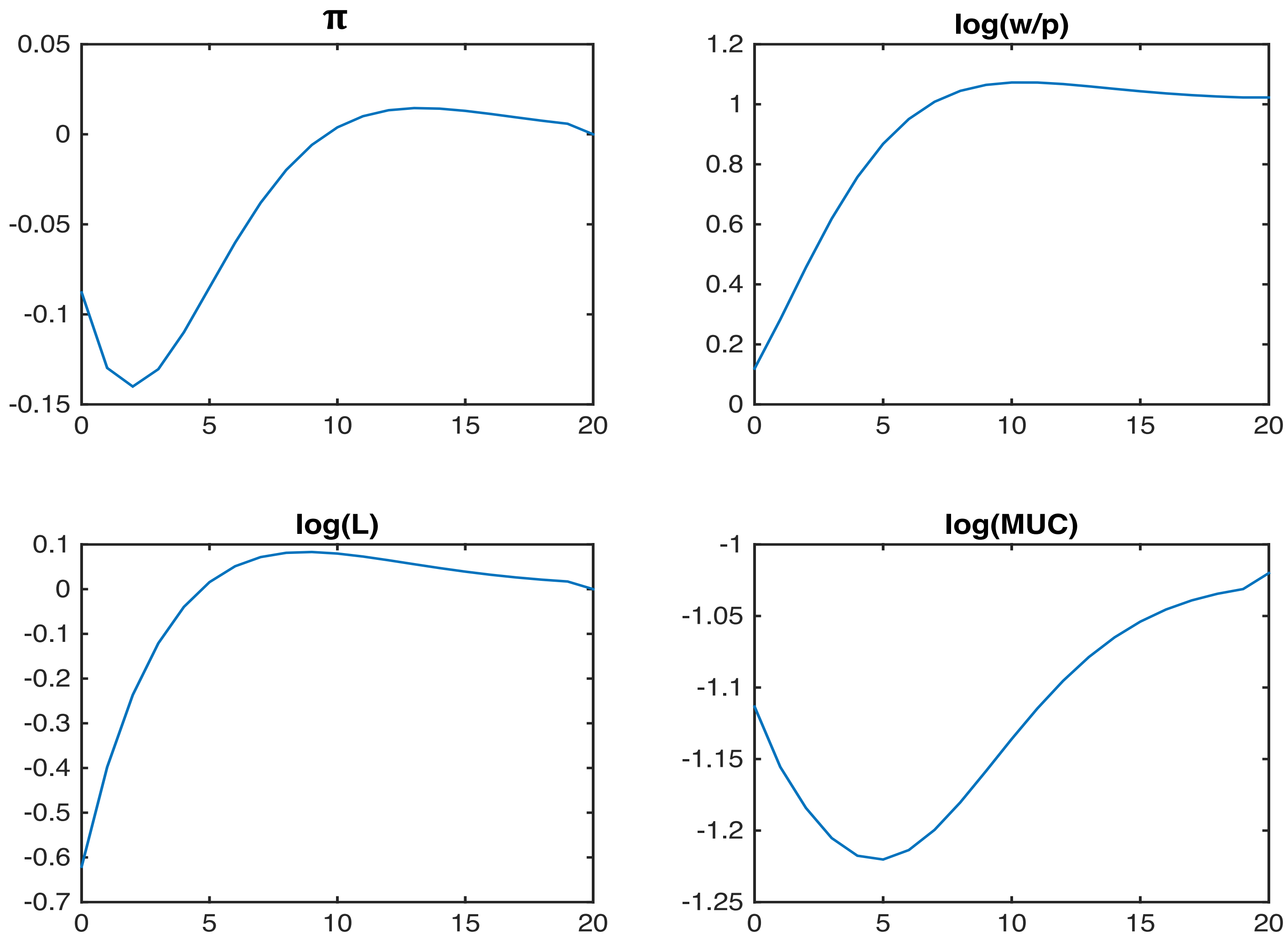
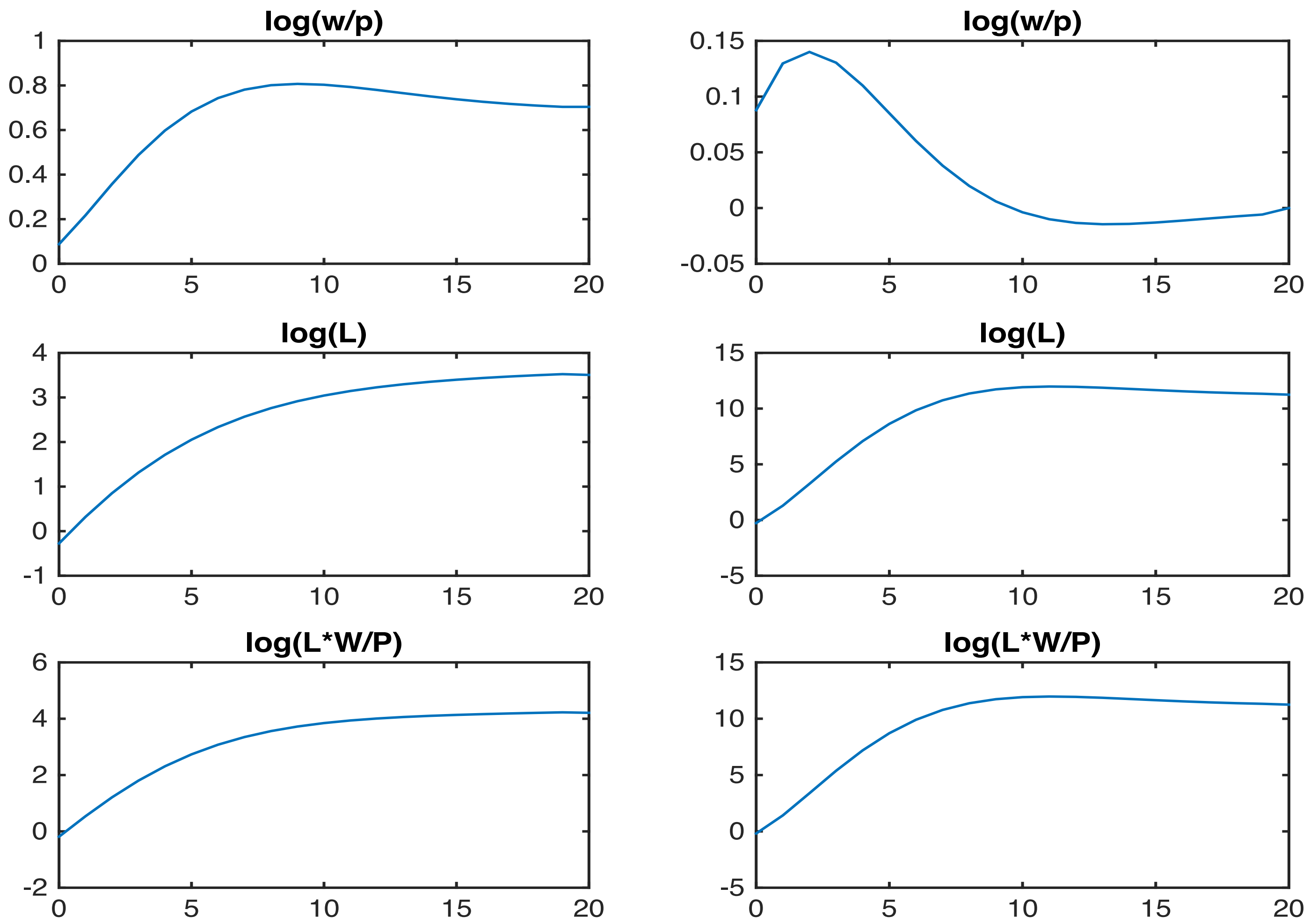
Response to a technology shock **in the aggregate**



Response to a technology shock for the "Calvo" worker

No indexation | **Indexation**



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  - Is the labor supply schedule really flat?

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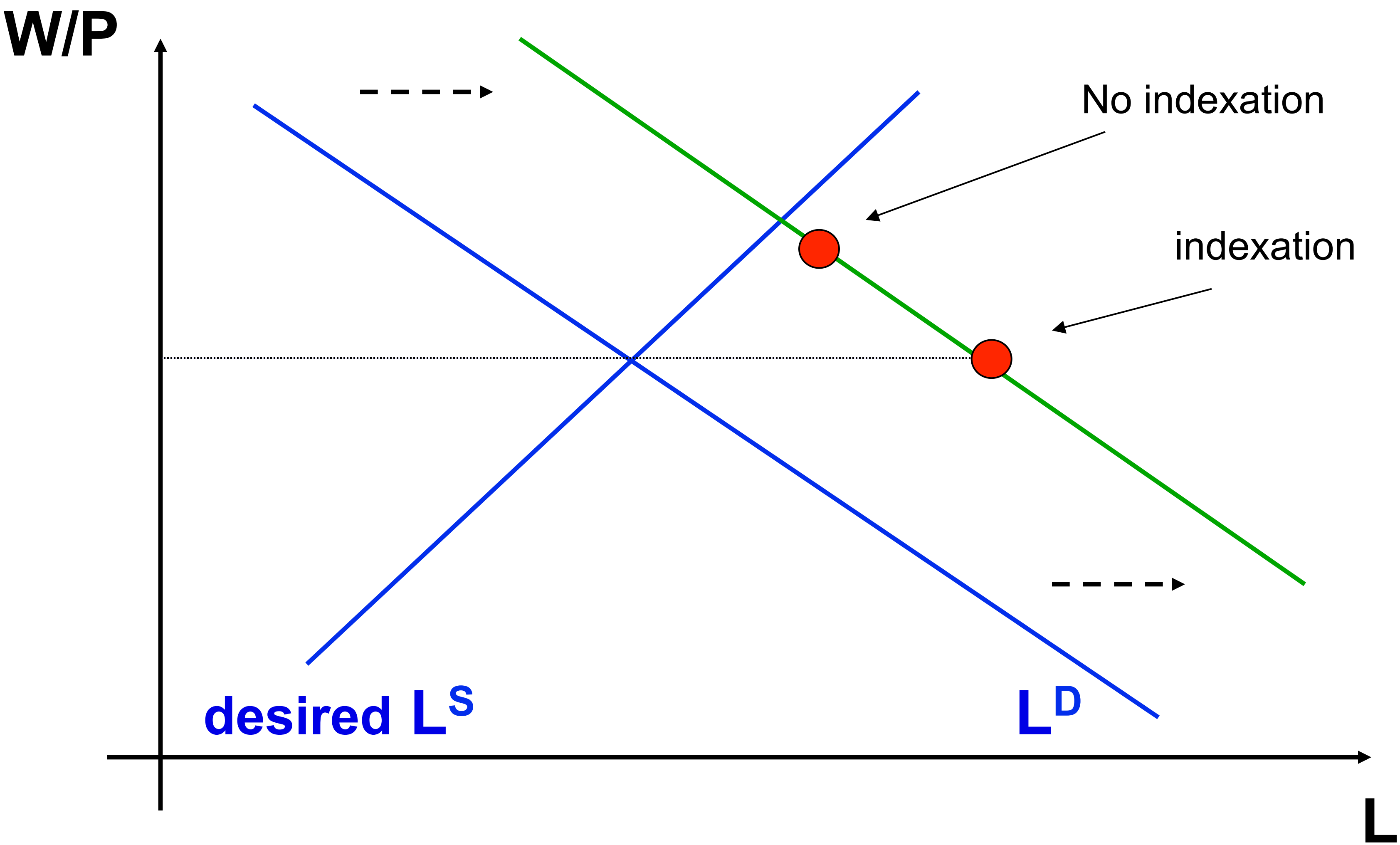

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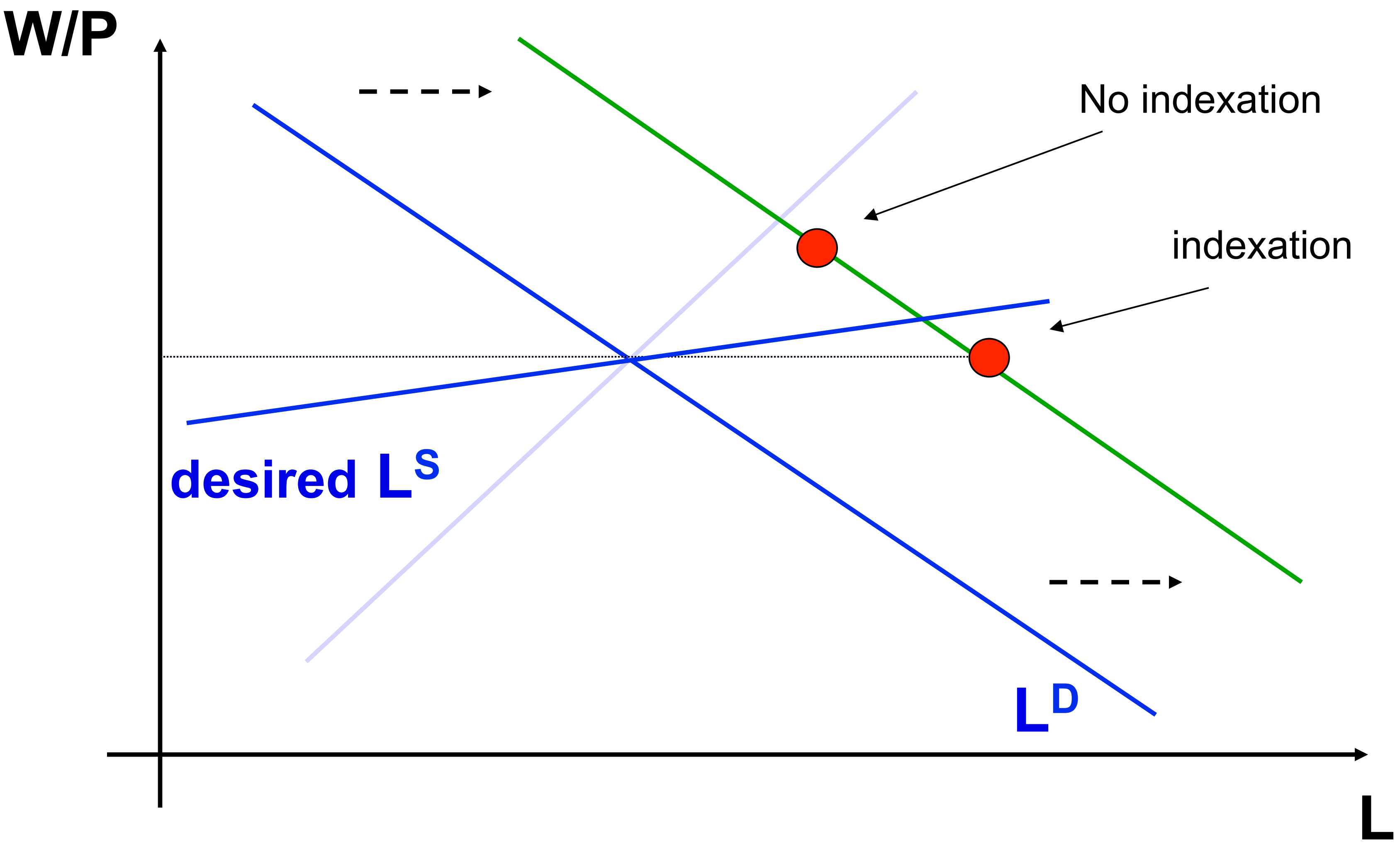

3. Decentralized equilibrium vs planner's solution

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- Planner's solution is easier to understand
  - Planner wants to achieve the first best:
    - Economy should respond to technology shocks
    - Economy should not respond to "demand/inefficient" shocks
  - Indexation reduces the variation of real wages
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- Conjecture: Planner's ranking of indexation schemes might be more robust that private ranking

My comments

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   - Evidence of wage indexation in non-union sector?

2. Well-executed paper, but little economic intuition for the results
   - Intuition is important to evaluate generality of the findings

3. Interesting result: inefficiency of private wage indexation choice
   - Conjecture: Planner's ranking of indexation schemes might be more robust than private ranking