

Inflation: Conflict and Spirals

Guido Lorenzoni and Ivan Werning

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**Our two papers:
try to understand general
transmission mechanisms...
... get under hood of equations**

- **Inflation is Conflict (Lorenzoni-Werning, 2023) ← Now**
- Wage-Price Spirals (Lorenzoni-Werning, 2022)

Inflation Is Conflict

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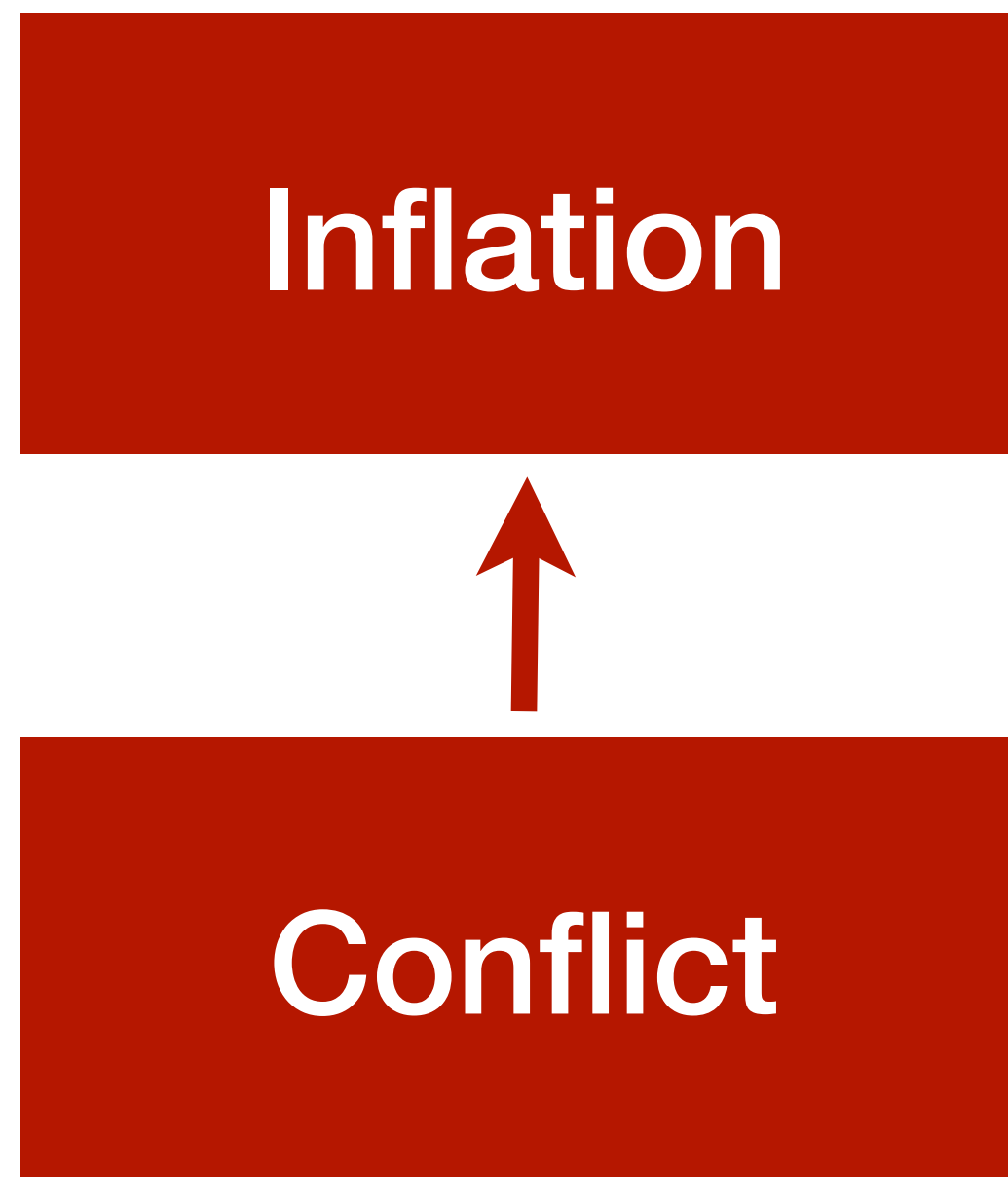
■ Our contribution...

- General conflict + creates bridge to modern macro
- Isolate conflict in a stylized model
- Network economy, non-stationary, inflation expectations, REE, stability

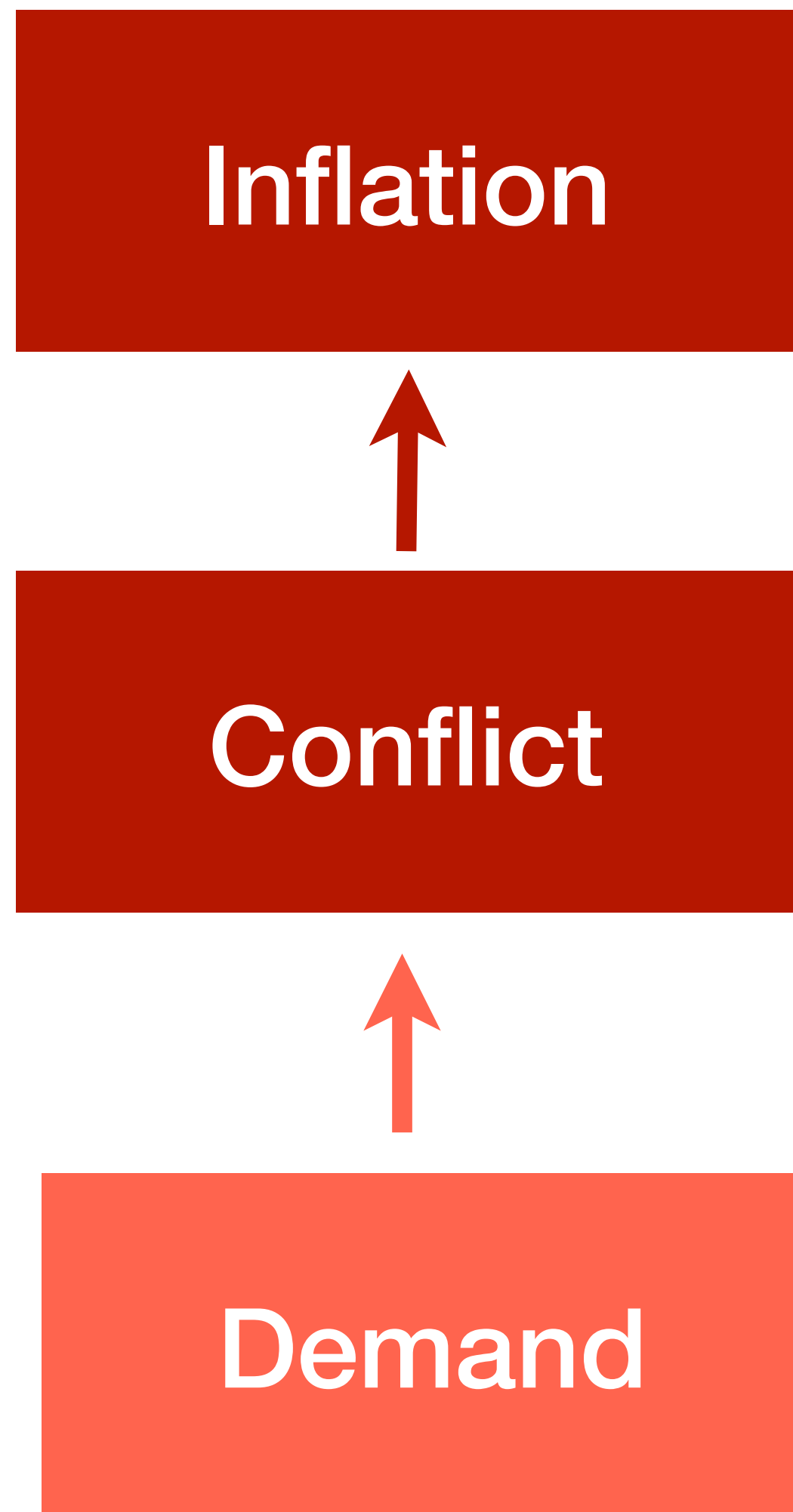
Causality (DAG)

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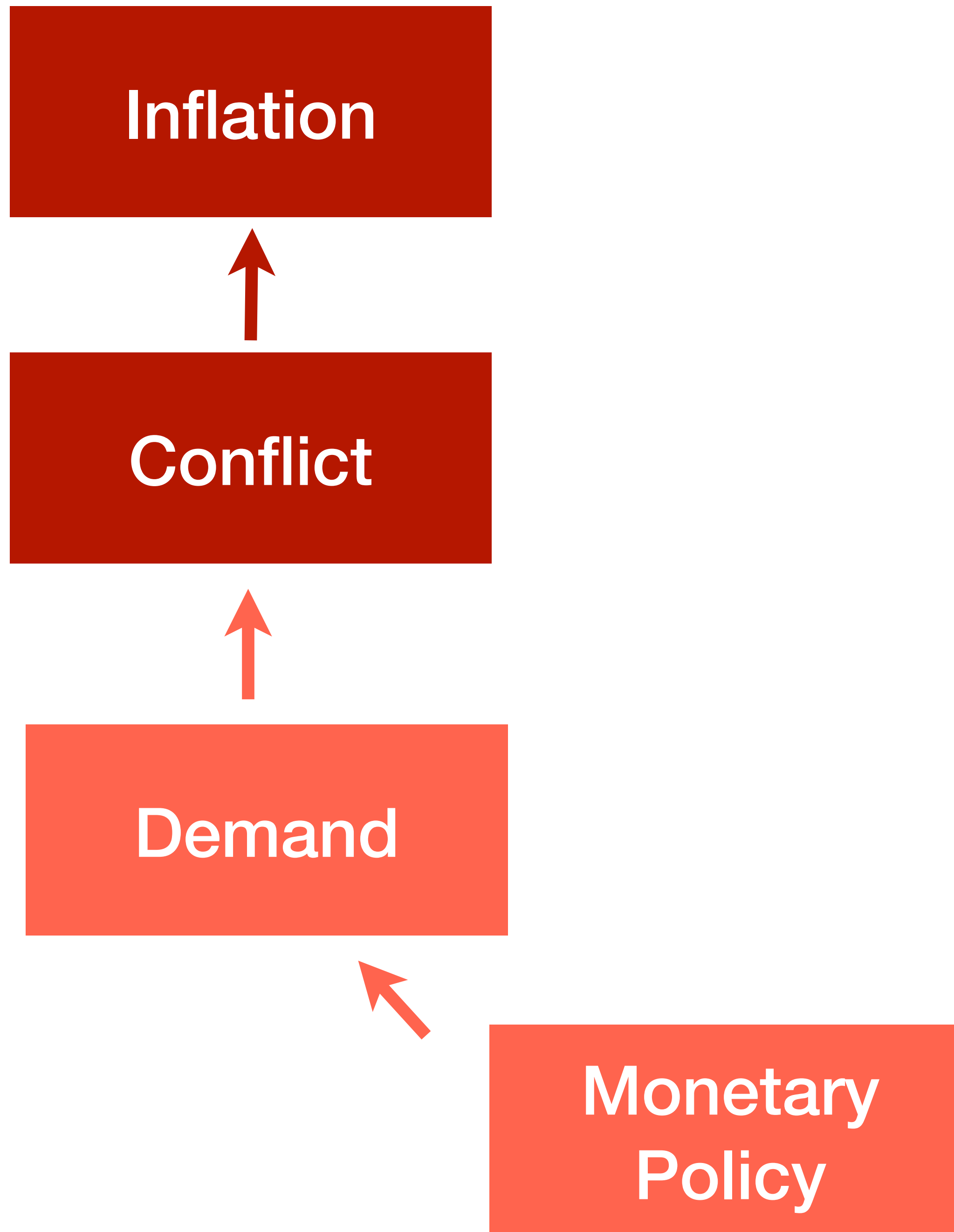
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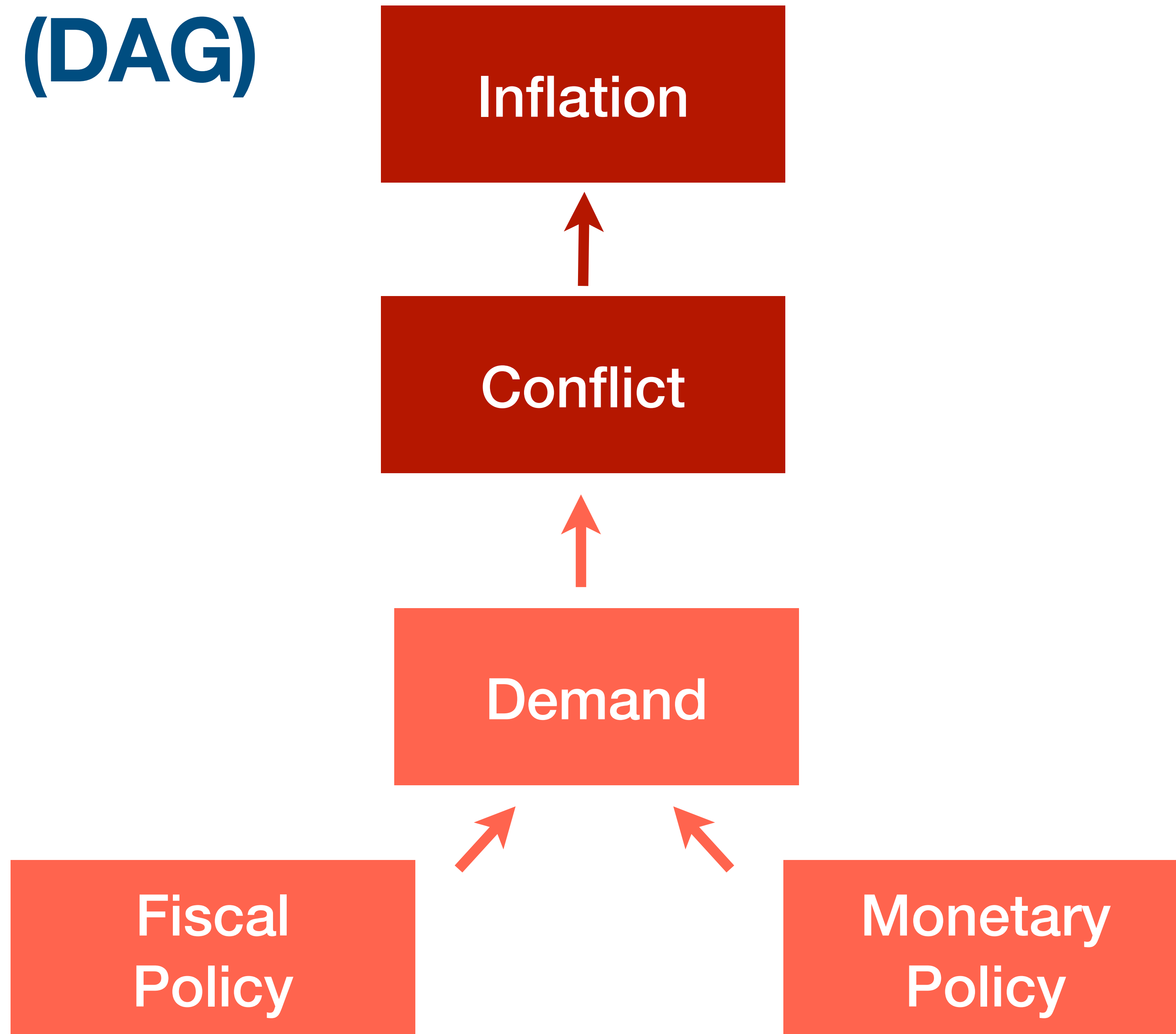
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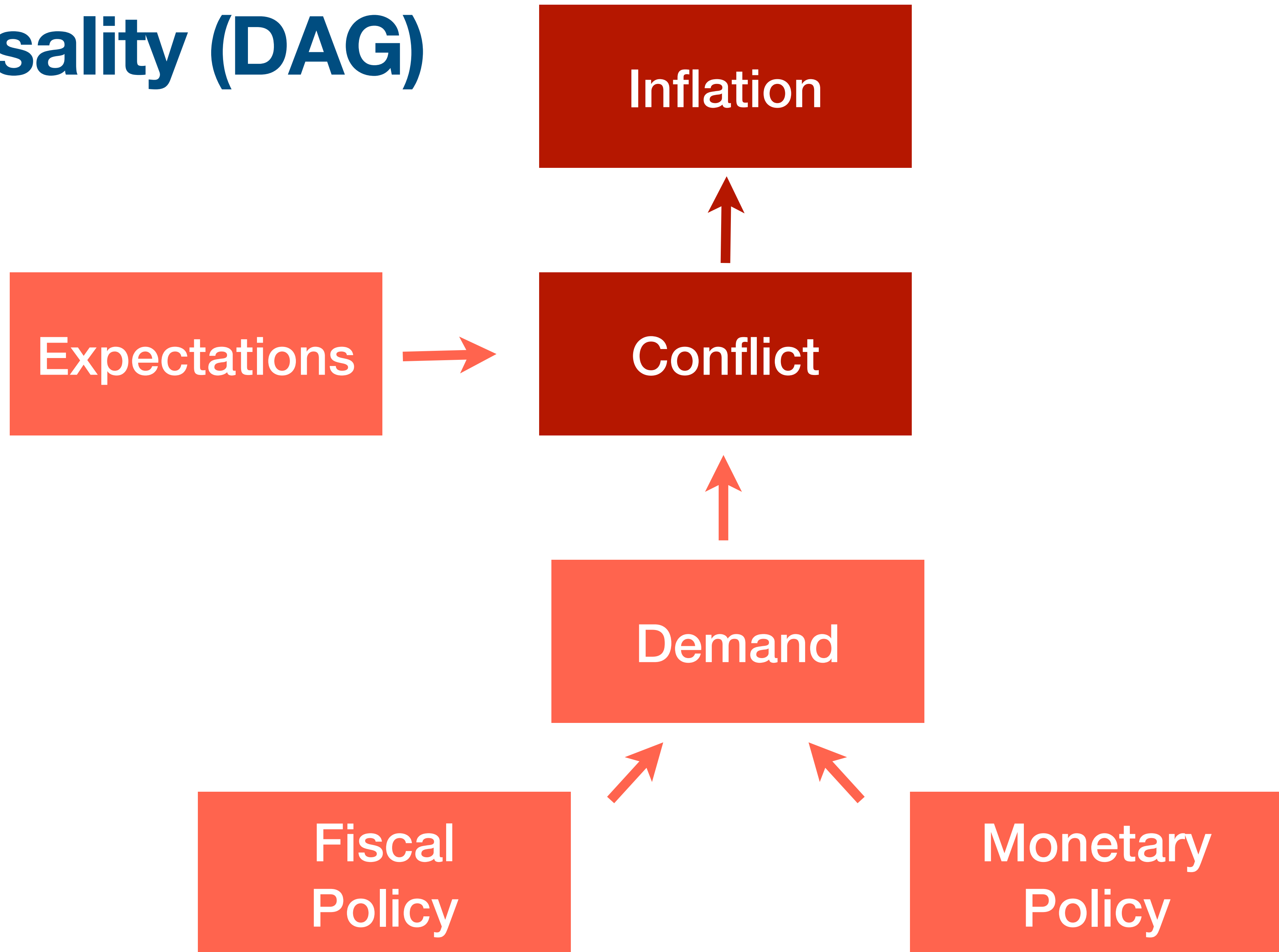
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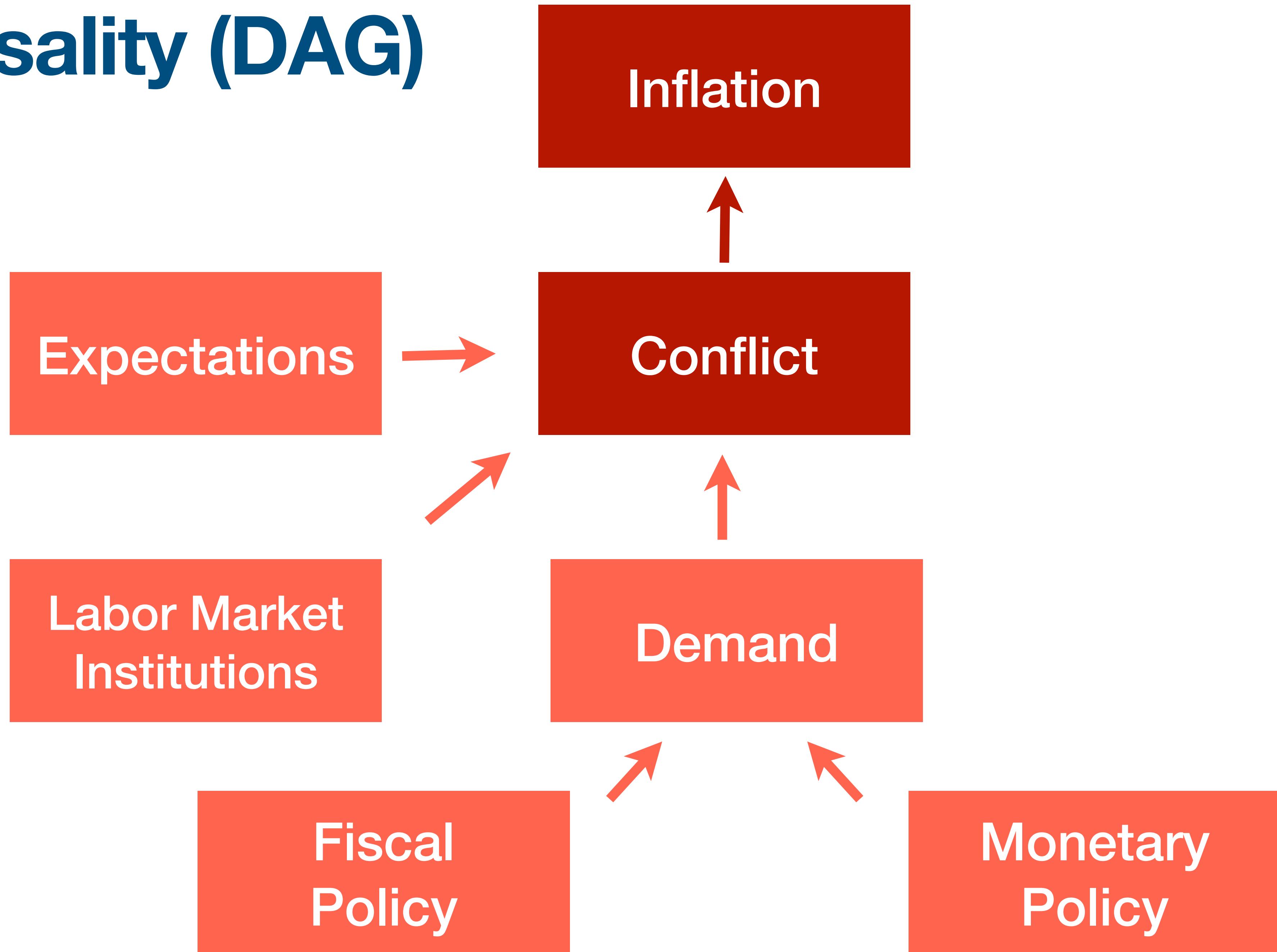
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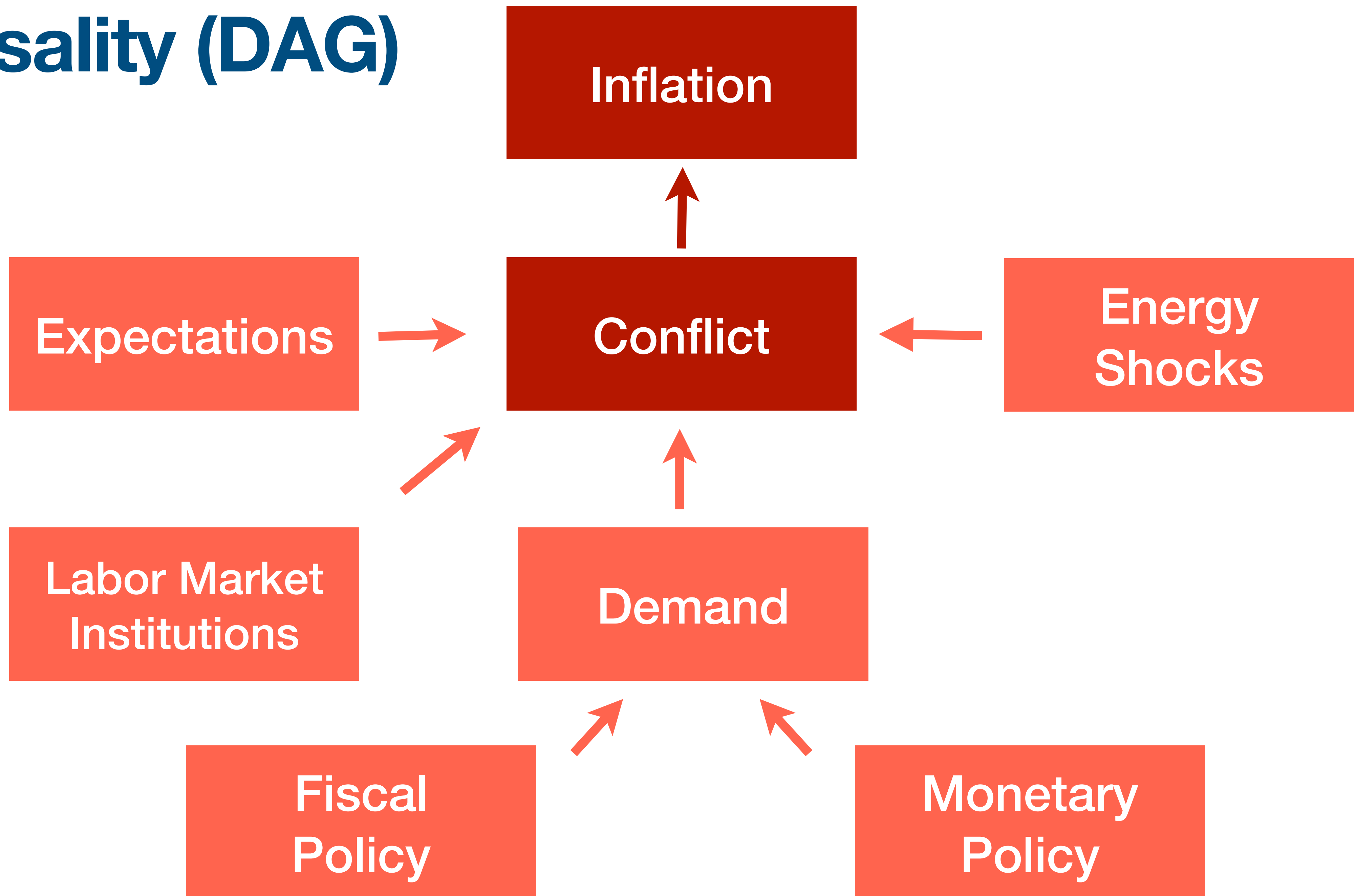
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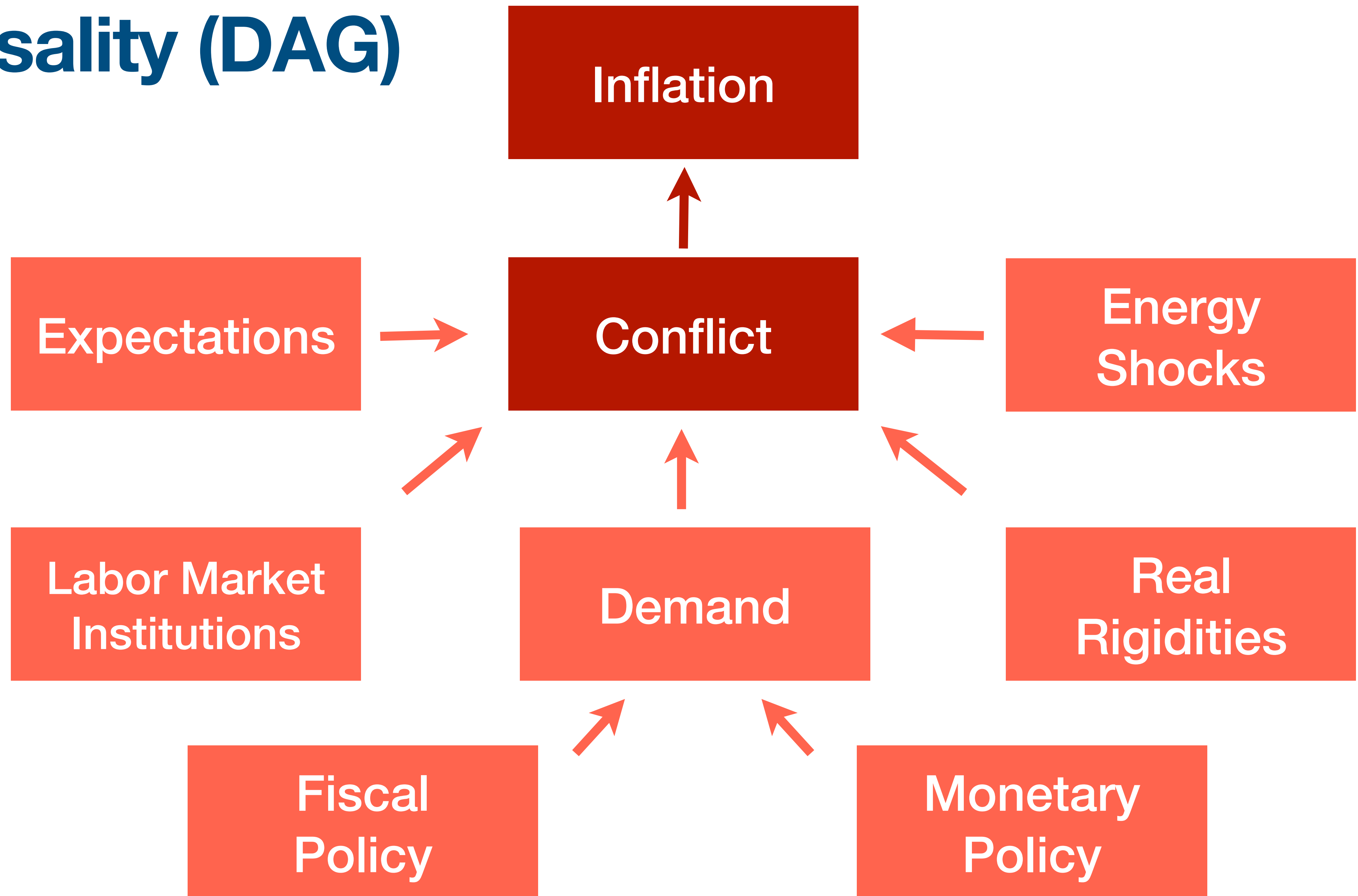
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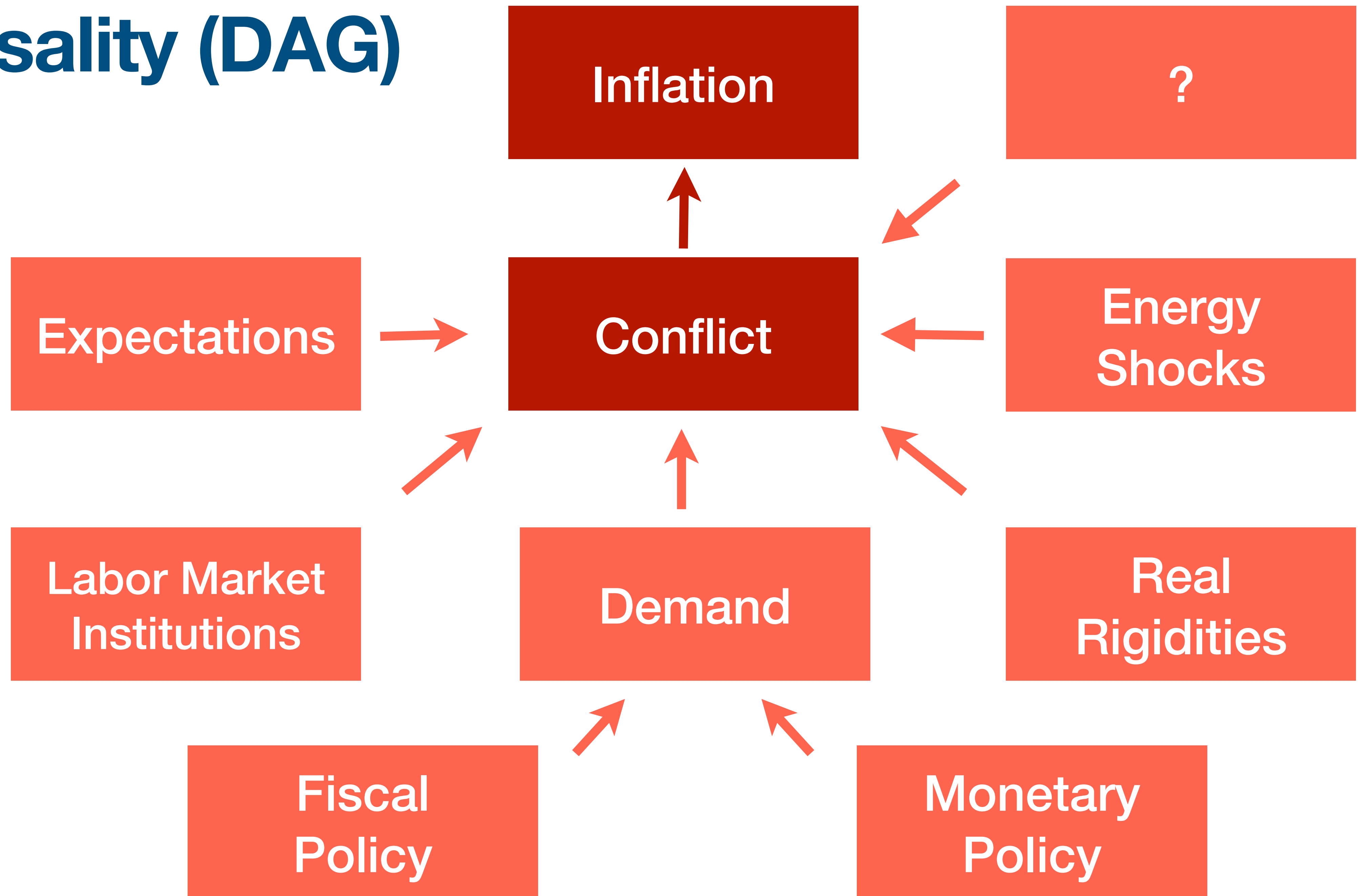
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Conflict Perspective: Two Parts

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- stylized, simple, conceptual, “intuition pump”, “shock to the system”
- far from standard traditional models (on purpose)
no money, no credit, no savings, no interest rates, no output, no employment
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■ #2 General Framework...

- akin to macro models...
- but stripped down and N sectors (fewer special assumptions)
- result: decomposition of conflict and adjustment inflation
- **Goal:** conflict → standard modern macro *bridge*

Staggered Pricing Block



Staggered Pricing Block

aspirations



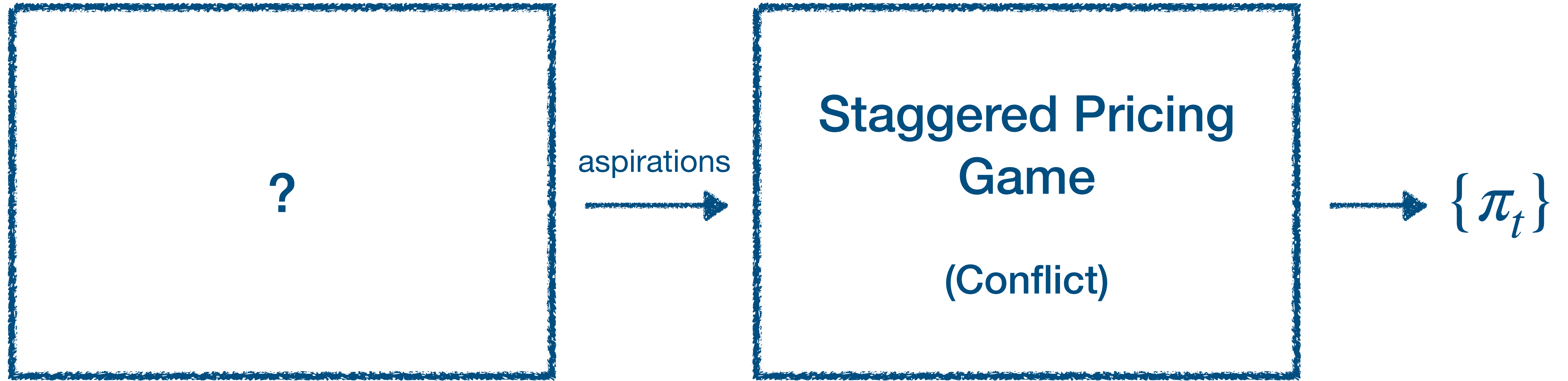
Staggered Pricing
Game

(Conflict)

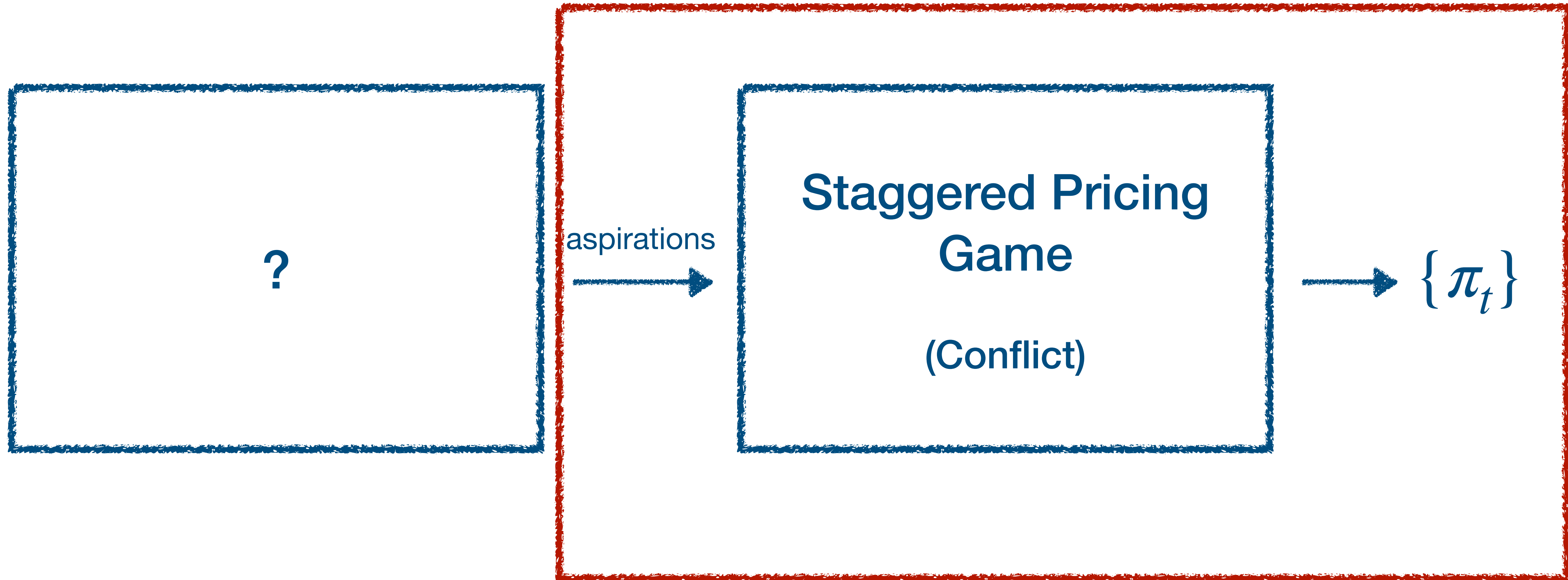


$\{\pi_t\}$

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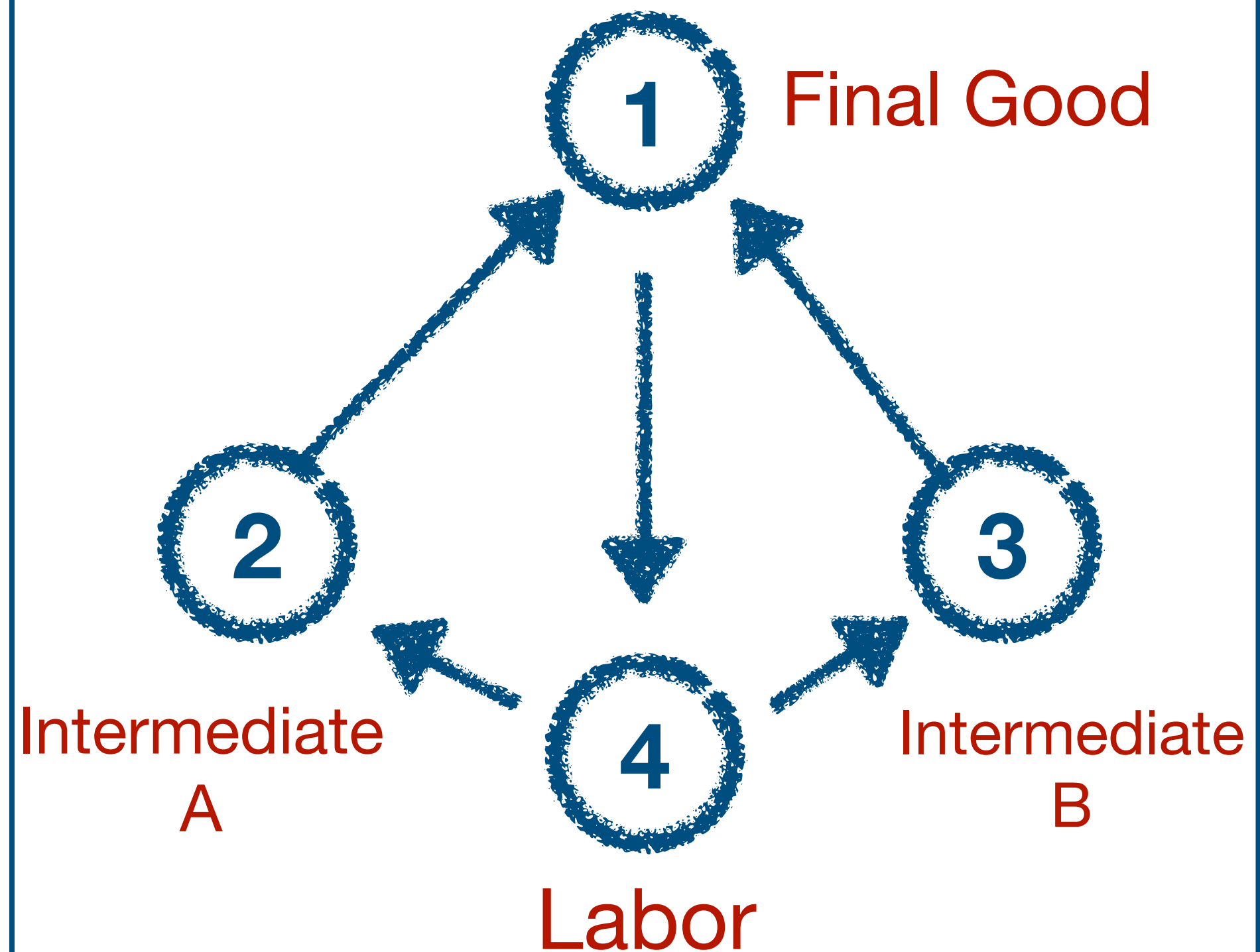
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- Each sector...

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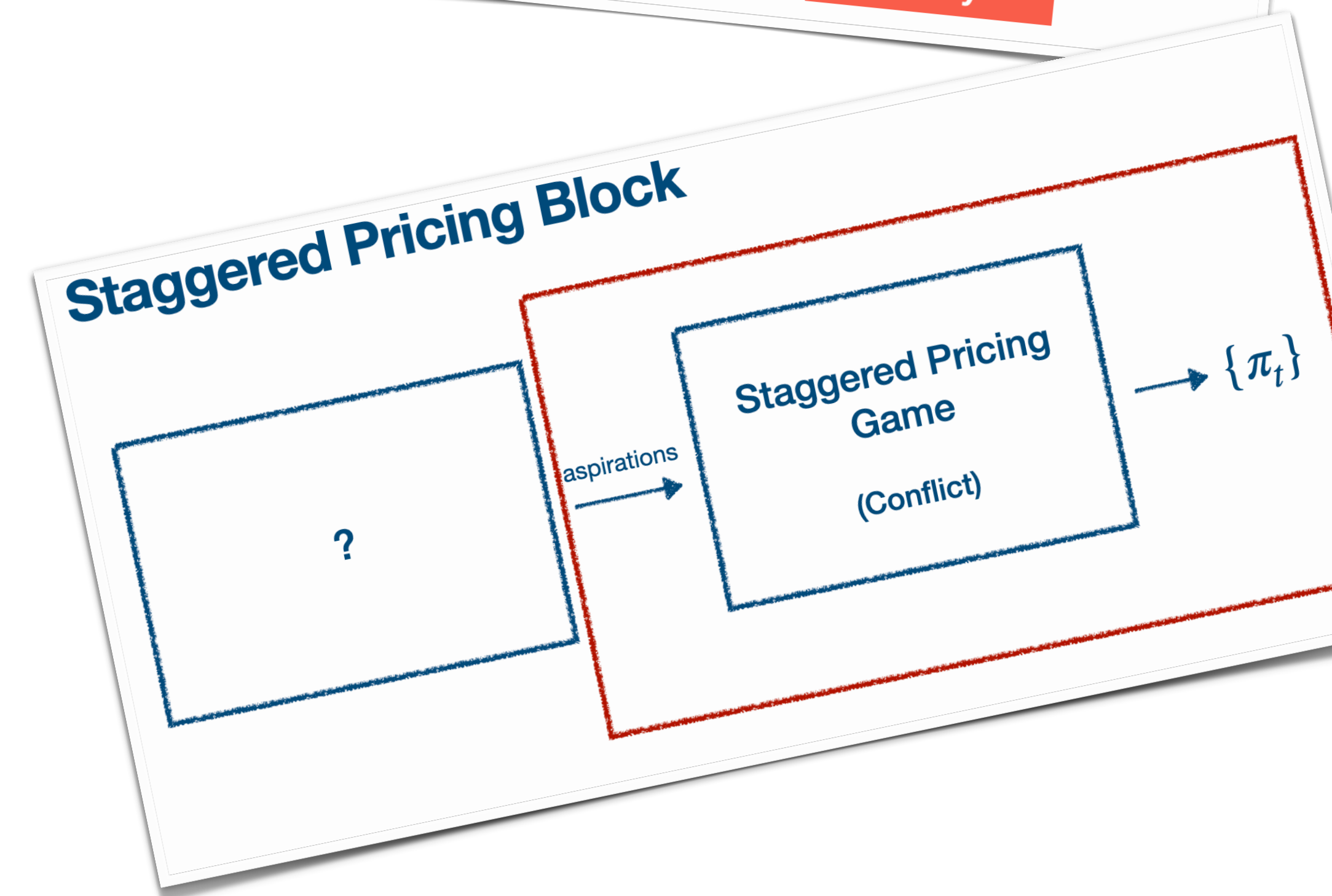
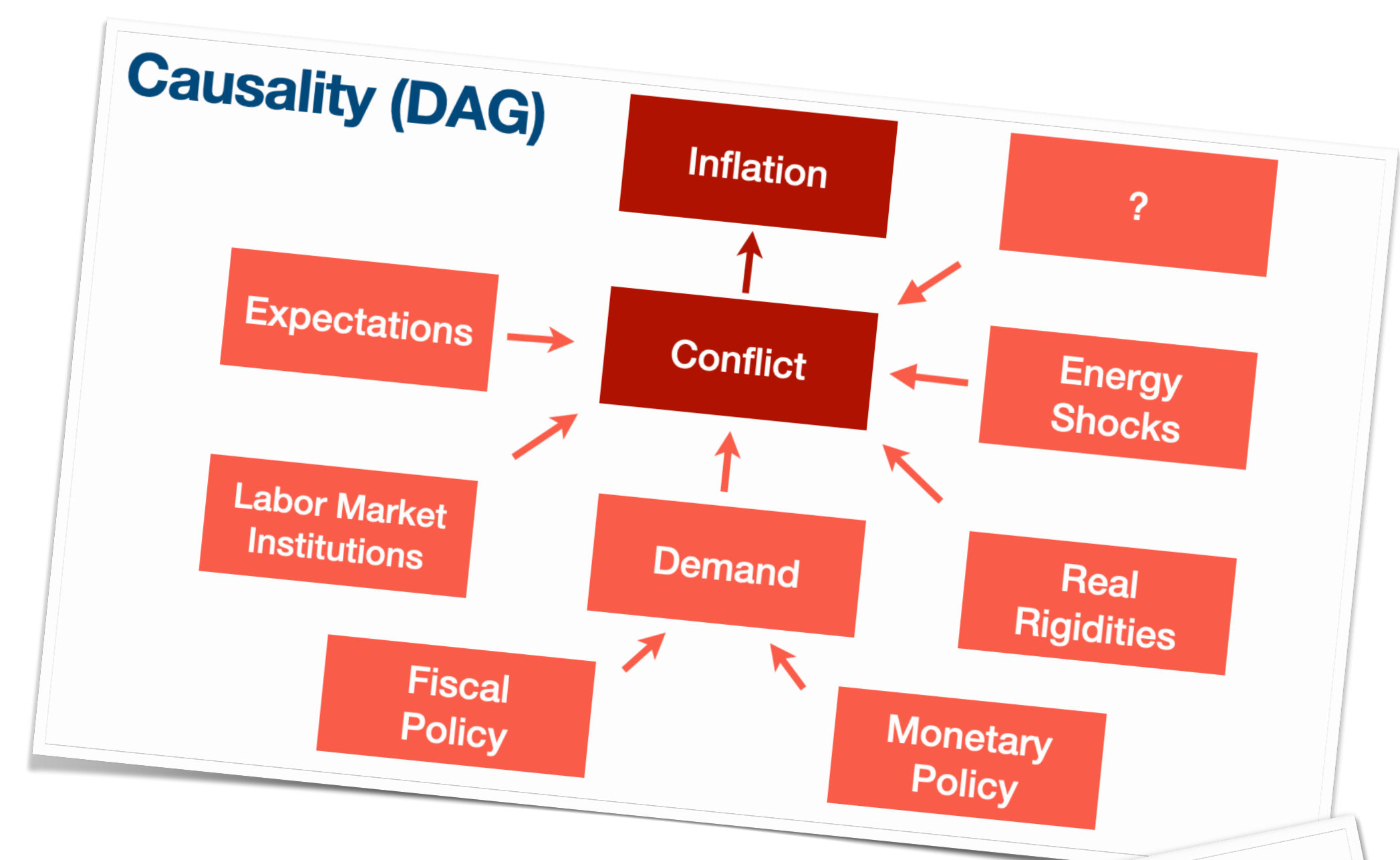
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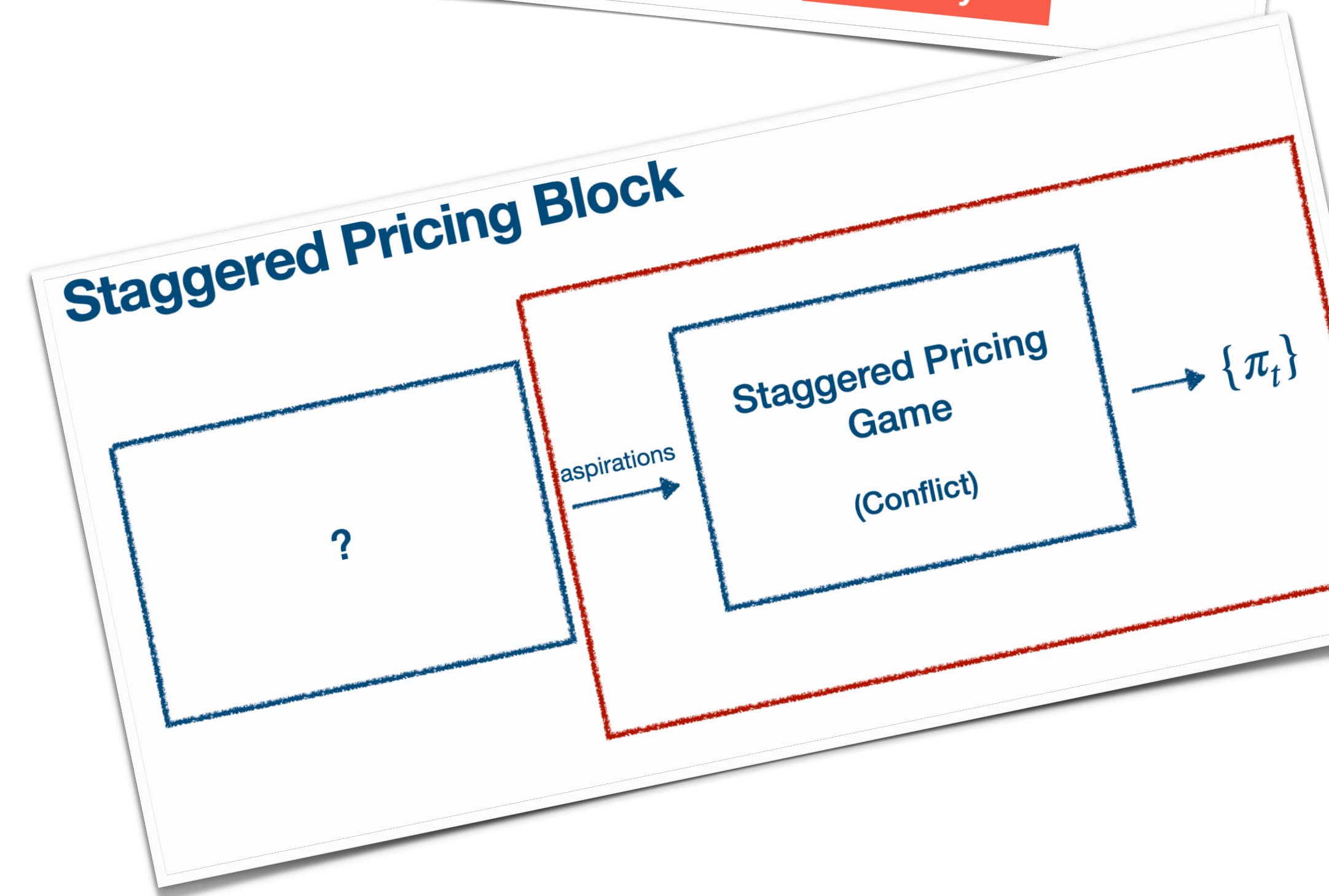
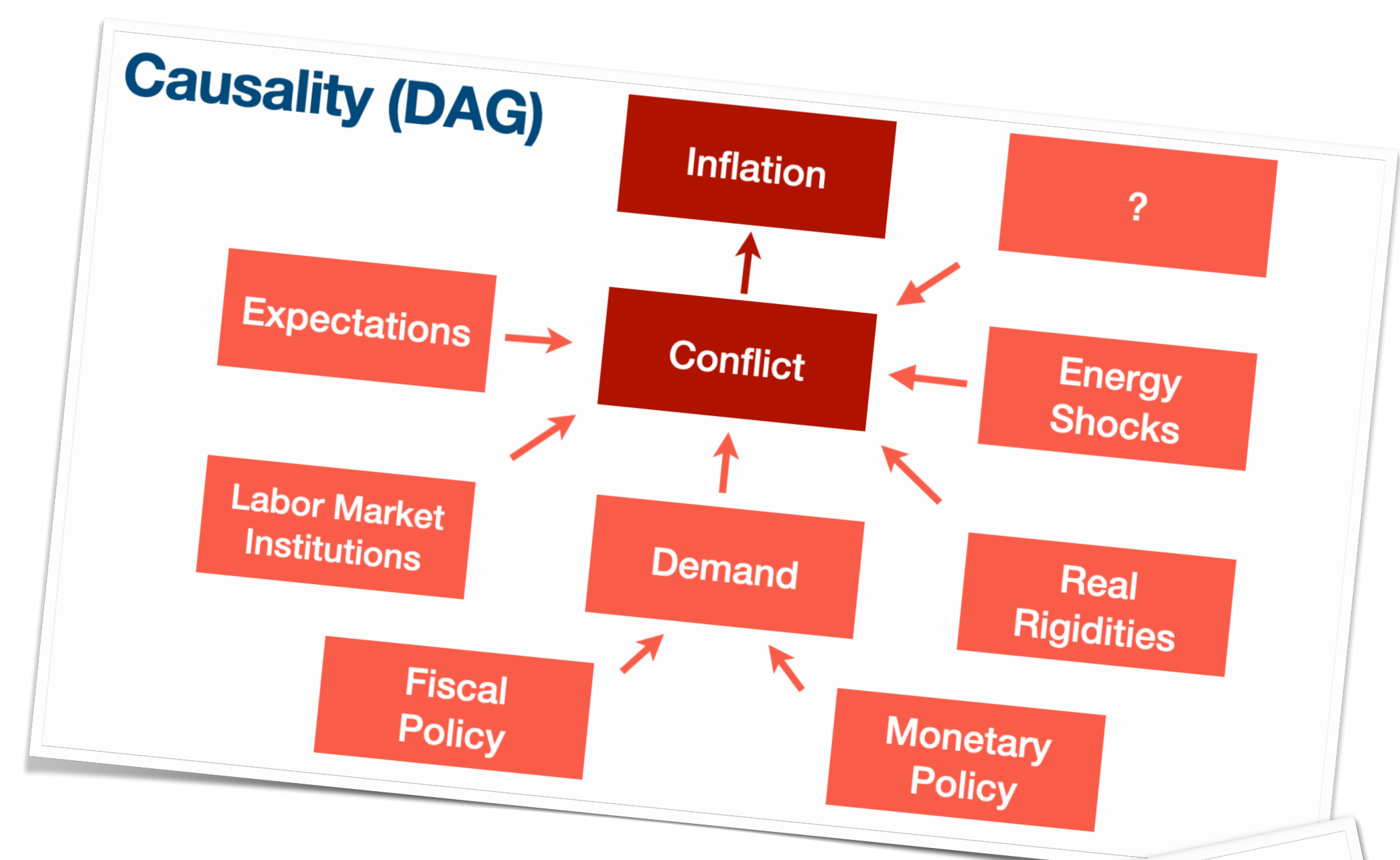


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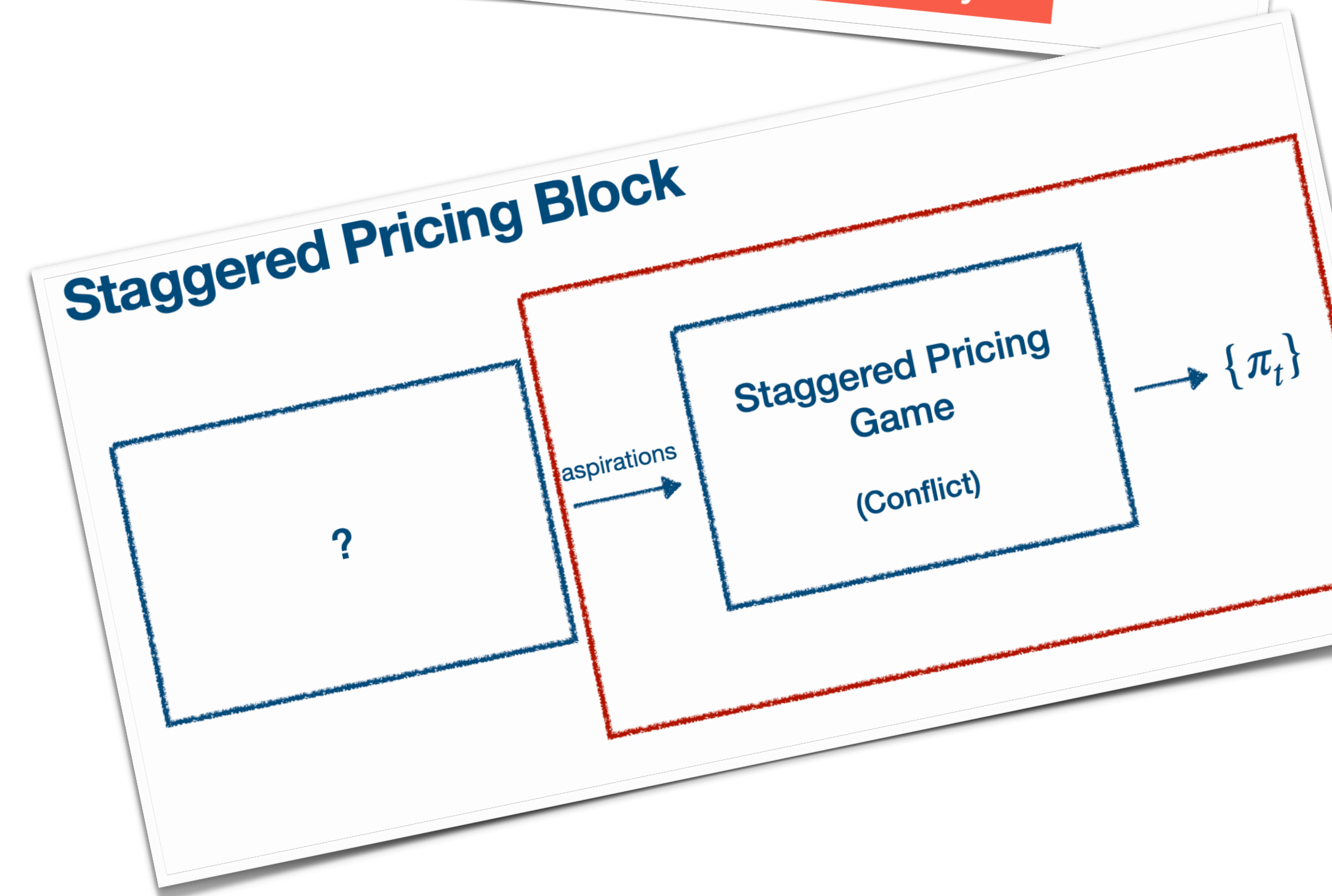
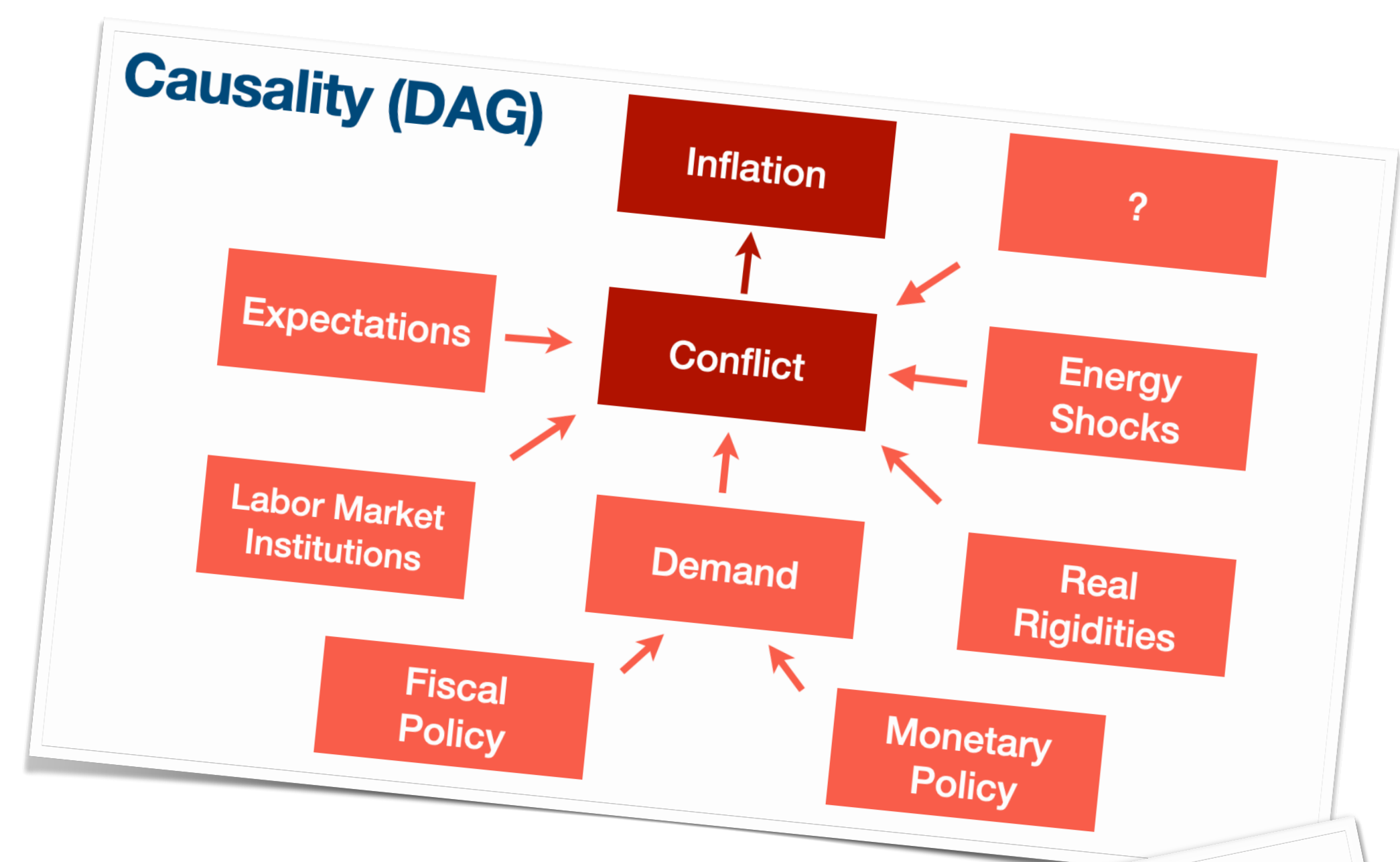


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$\hat{a} \rightarrow a$
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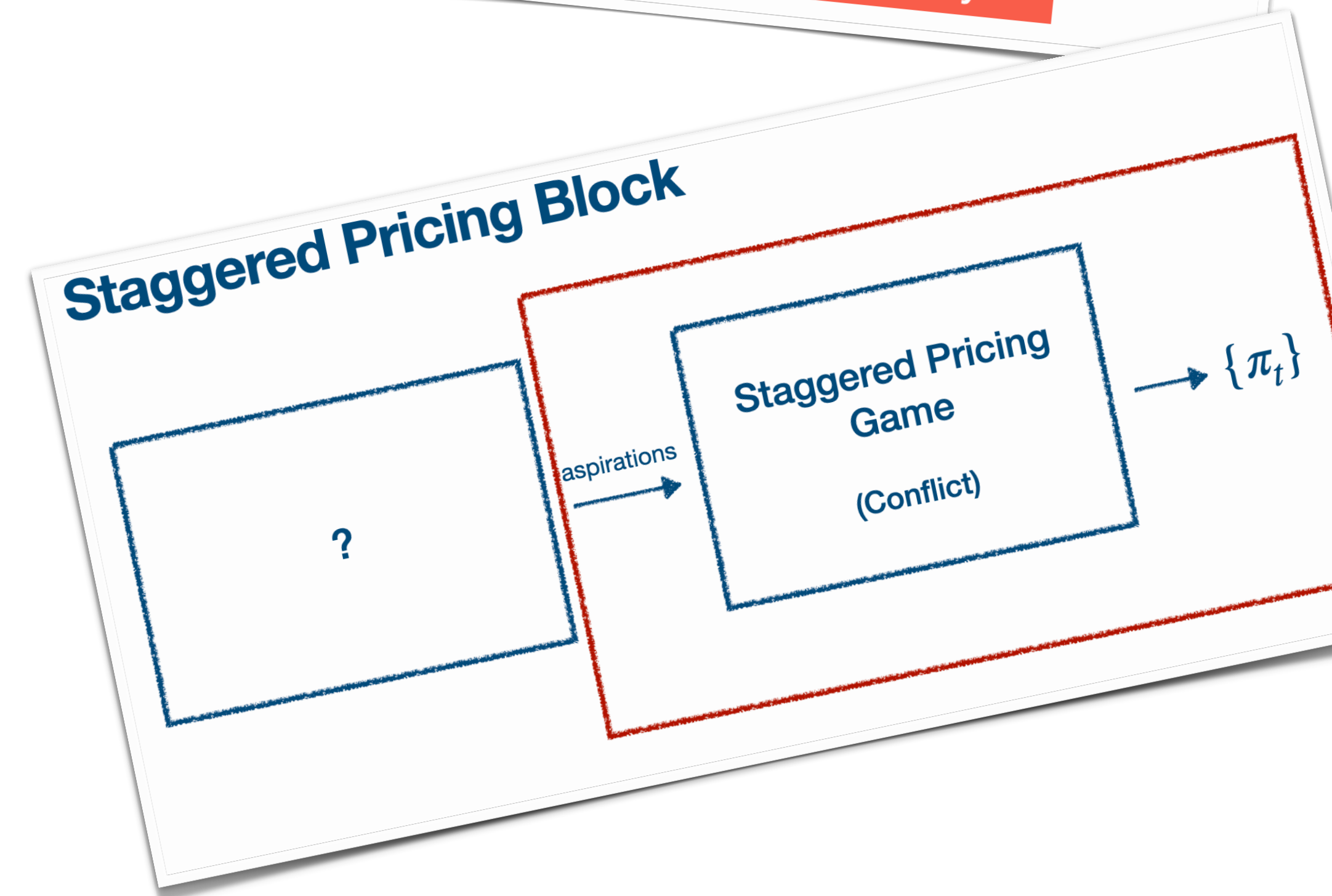
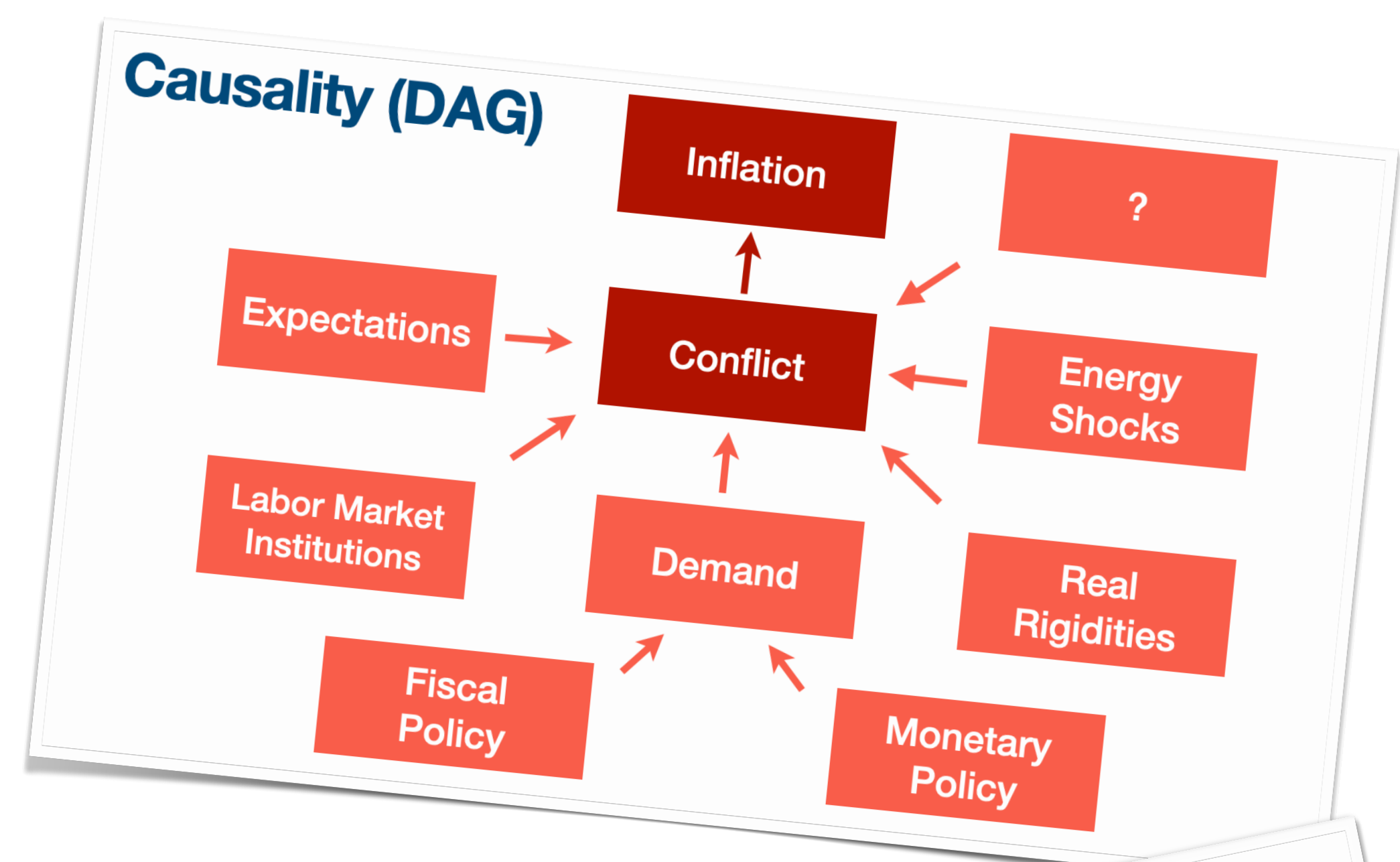


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- Less conventional possibilities?
 - real wage rigidities (Blanchard-Gali)
 - ... ?



- Inflation is Conflict (Lorenzoni-Werning, 2023)

- **Wage-Price Spirals (Lorenzoni-Werning, 2022) ← Now**

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 - will this fuel price inflation and reverse it's trend?

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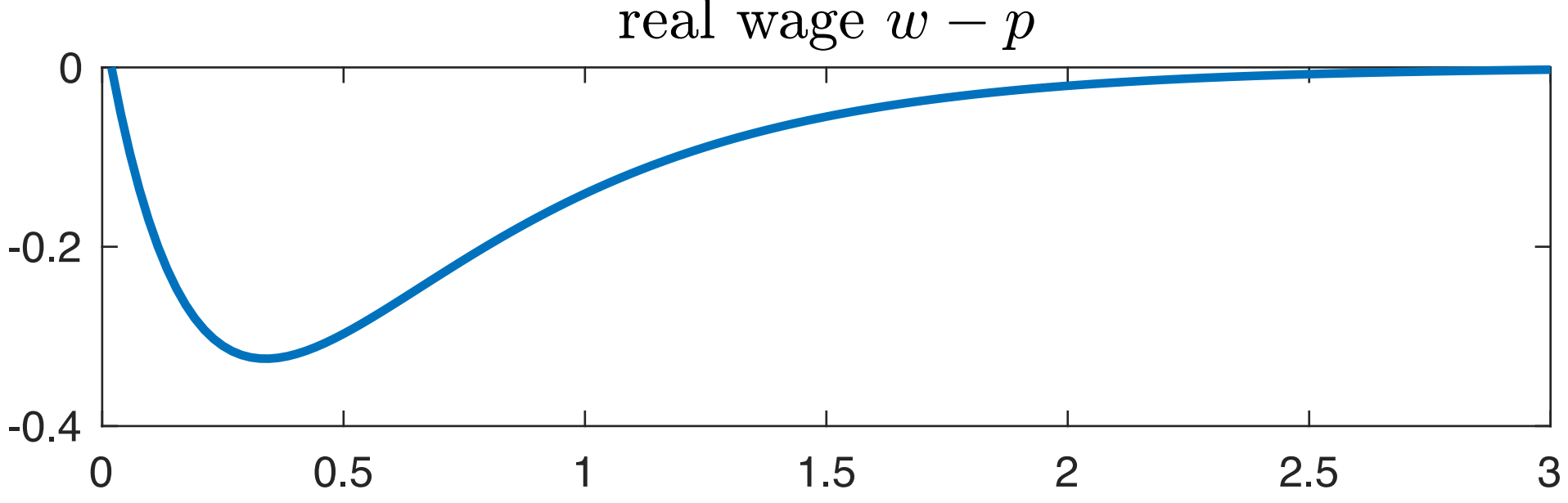
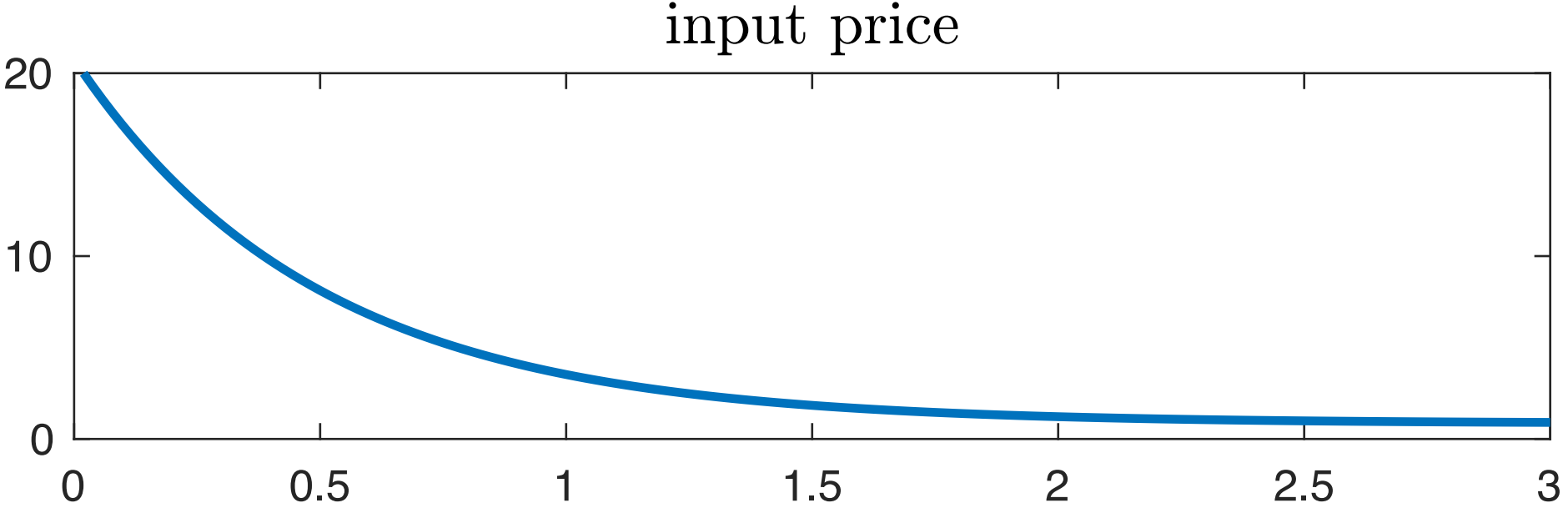
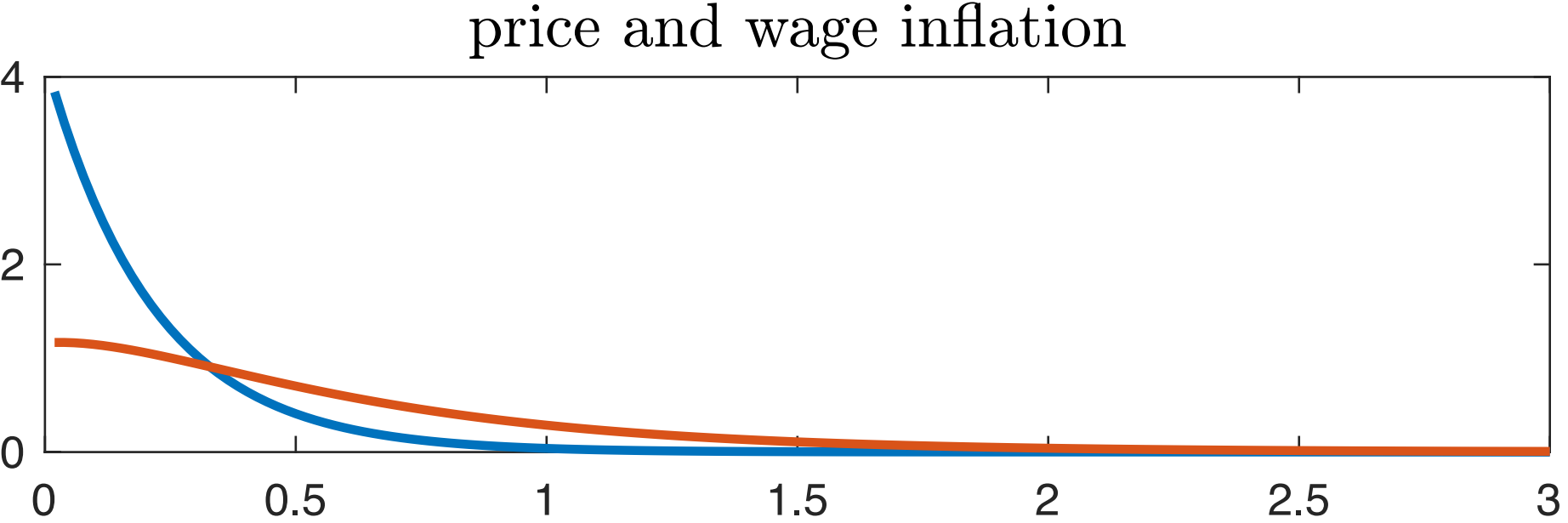
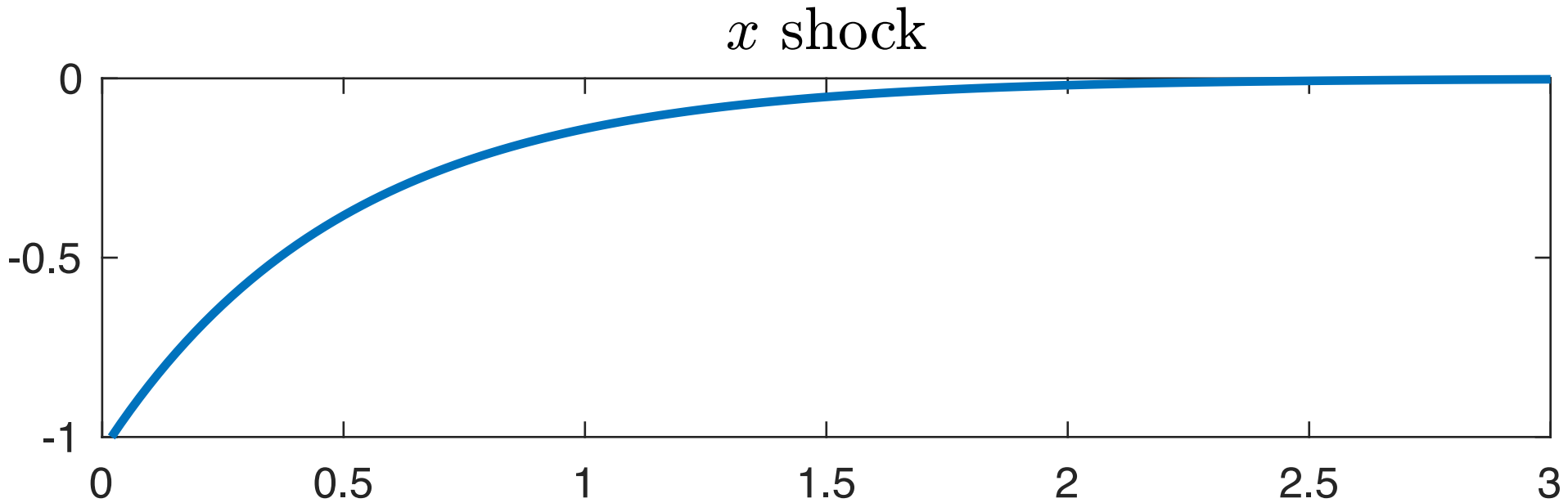
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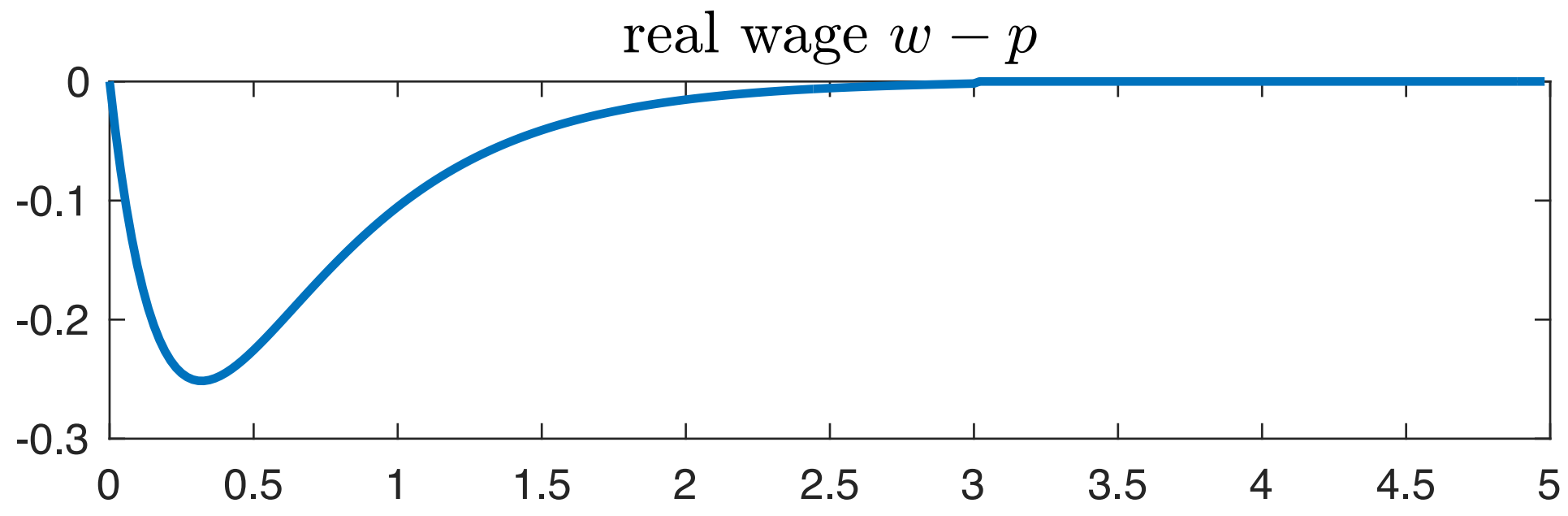
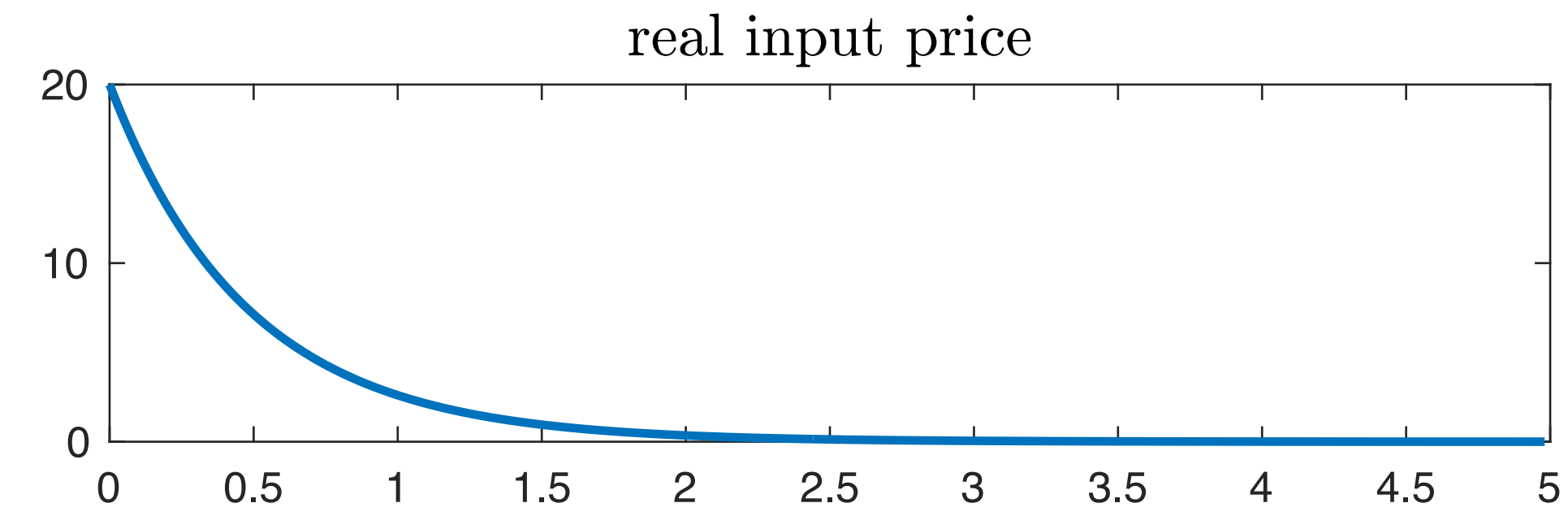
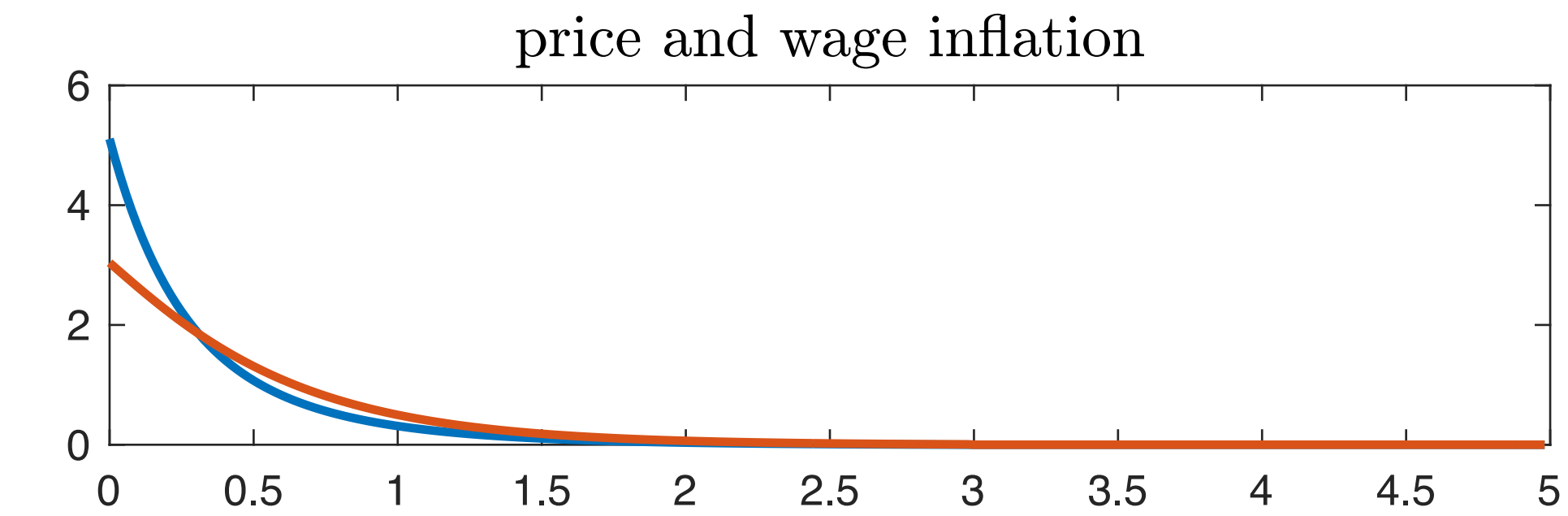
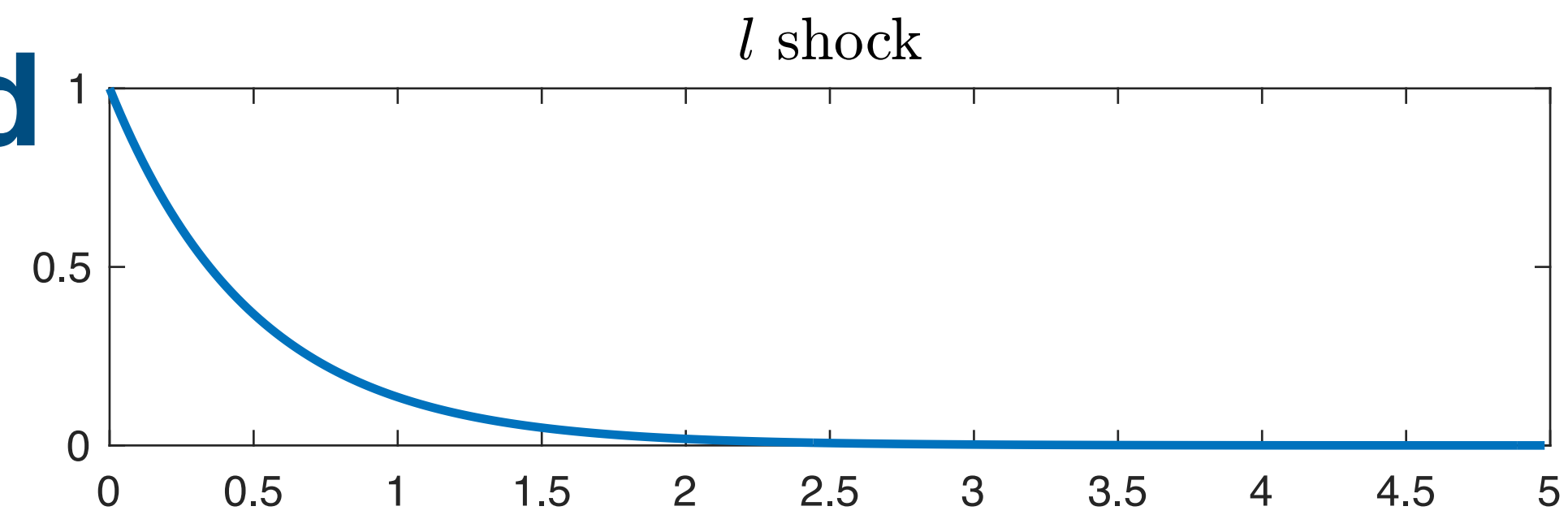
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- **Exercise:** demand and supply shocks, impulse responses, results on W/P

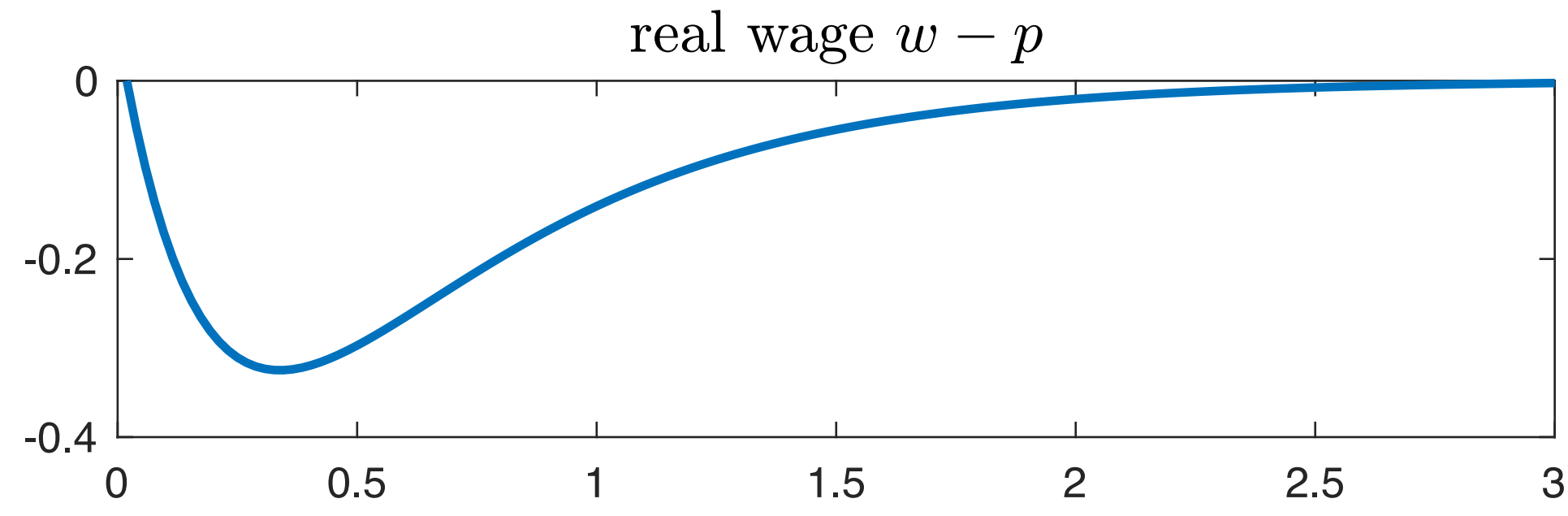
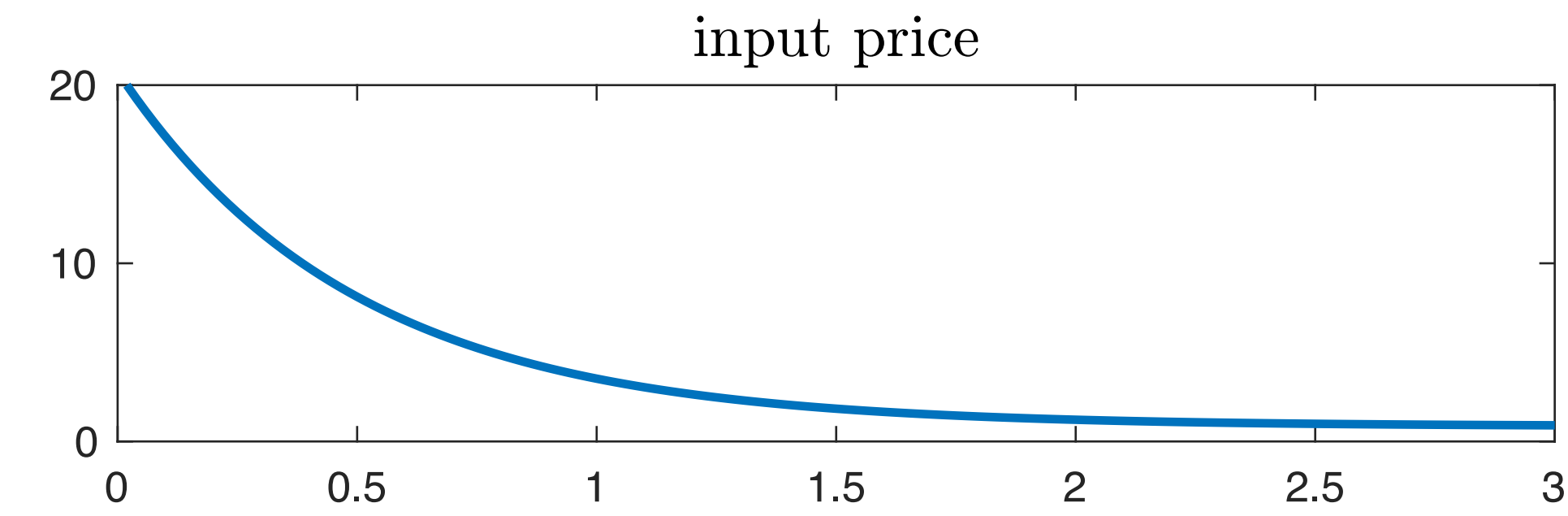
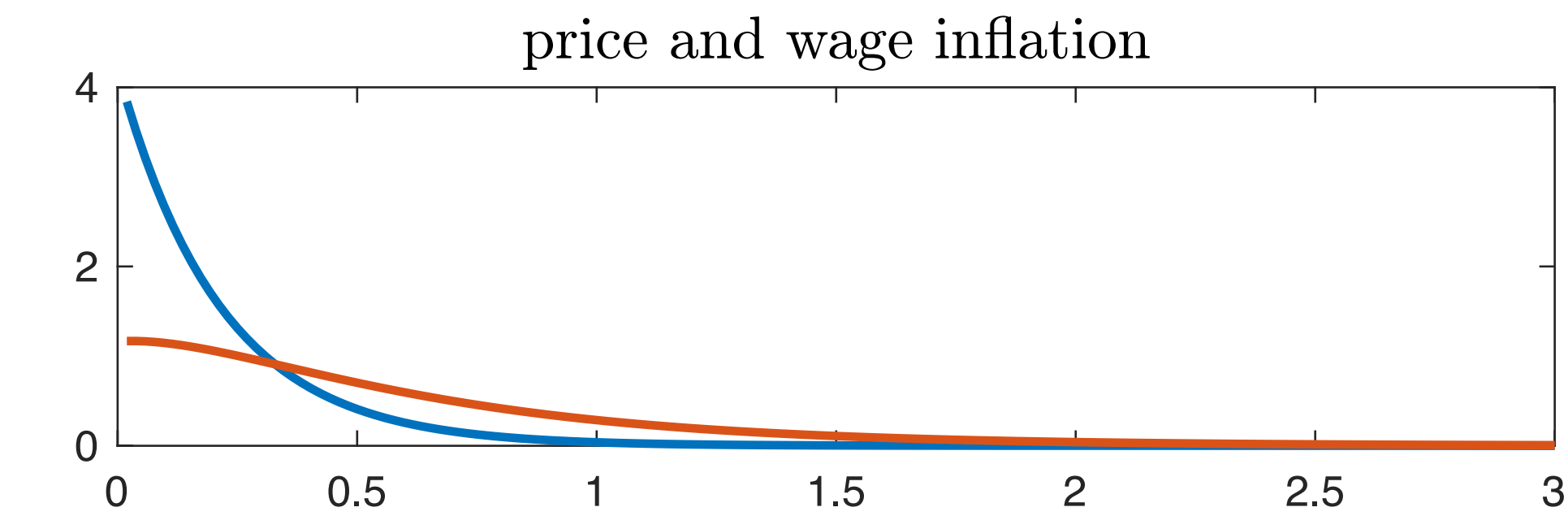
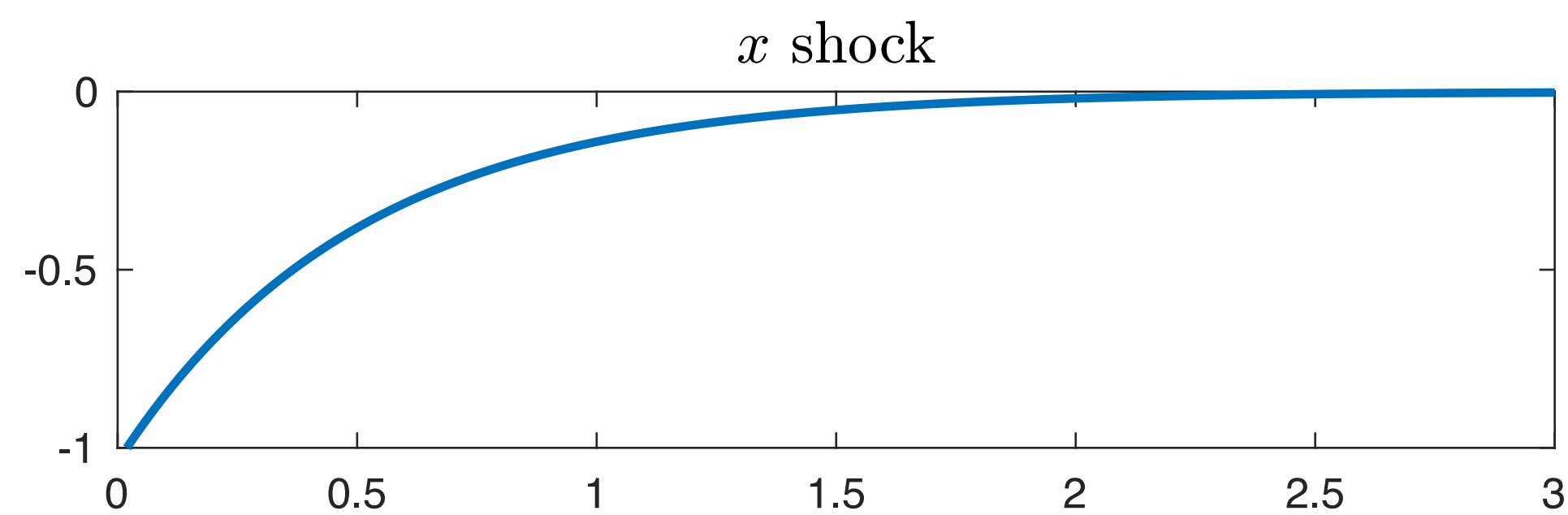
Supply Shock



Demand Shock



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- Caveat: non-rational expectations + real rigidities (see paper) \rightarrow more persistent π

Real Wage Falls When...

(supply-constrained demand shock)

$$\frac{\Lambda_p s_X}{\Lambda_w \epsilon} > \sigma s_L + \eta$$

Sticky
Prices
vs
Wages

input
high share or
low elasticity

Low response of
real wages (MRS) to
hot labor market

$$\hat{a}_t^p = -mpl_t = \frac{s_X}{\epsilon} dn_t$$

$$\hat{a}_t^w = mrs_t = (\sigma s_L + \eta) dn_t$$

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(supply-constrained demand shock)

$$\frac{\Lambda_p s_X}{\Lambda_w \epsilon} > \sigma s_L + \eta$$

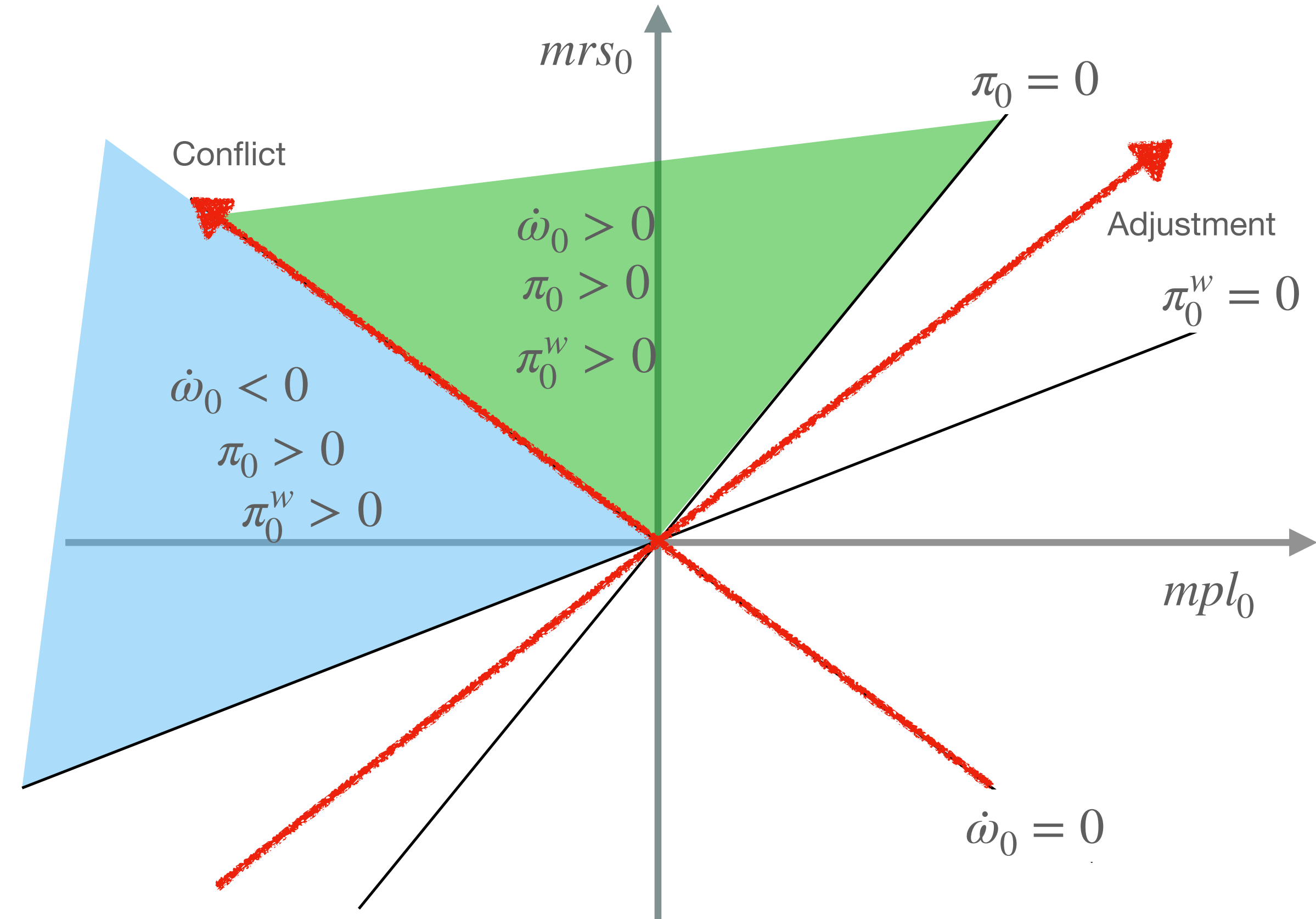
Sticky
Prices
vs
Wages

input
high share or
low elasticity

Low response of
real wages (MRS) to
hot labor market

$$\hat{a}_t^p = -mpl_t = \frac{s_X}{\epsilon} dn_t$$

$$\hat{a}_t^w = mrs_t = (\sigma s_L + \eta) dn_t$$



Spirals and Conflict Inflation

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■ Conflict inflation captures **two-way feedback** between W and P...

- zero if $\lambda^w = 0$ or $\lambda^p = 0$
- maximal at $\lambda^w = \lambda^p$ given $\lambda^w + \lambda^p$
- equal to inflation at steady state (plus, previous results)
- other “adjustment component”: does not have these properties

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 - W growth $>$ P inflation \rightarrow P inflation rise? **No** W/P may needs to recover!

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- more to be done!