

Discussion of “The Great Recession : A Self-Fulfilling Global Panic”

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Conference on Macroeconomics – Understanding low growth
Bank of England 2013



Paper's contribution

Two key elements

- ▶ **Very rich paper**
- ▶ Full of ideas, mechanisms, results
- ▶ I will limit myself to the discussion of what I considered are its two key elements.

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1. A theory for “panic” equilibria
2. A theory for the international transmission of shocks

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1. A theory for “panic” equilibria

The Keynesian “cross”

- ▶ The Keynesian “cross” model is a good metaphor for all the paper



$$c = c(y)$$

$$c = y$$

1. A theory for “panic” equilibria

The Keynesian “cross”

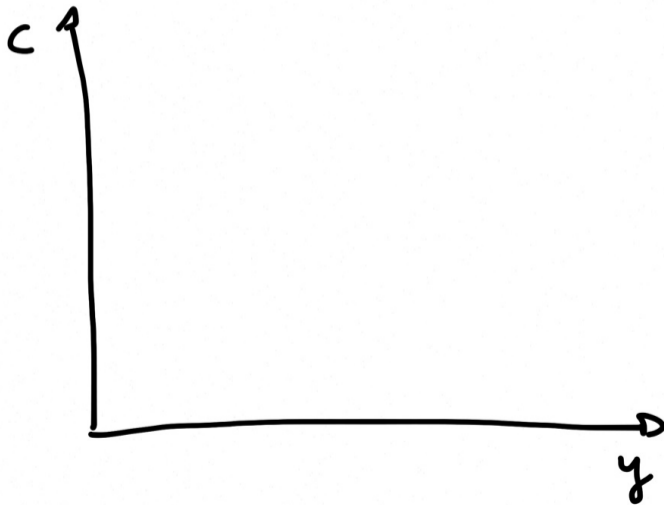
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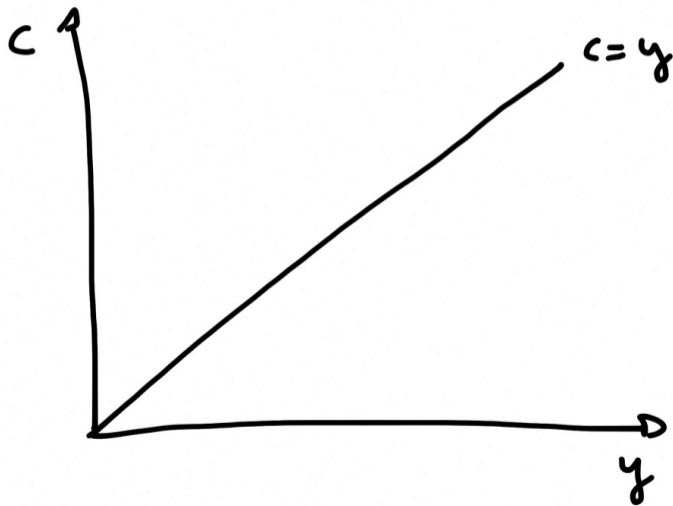
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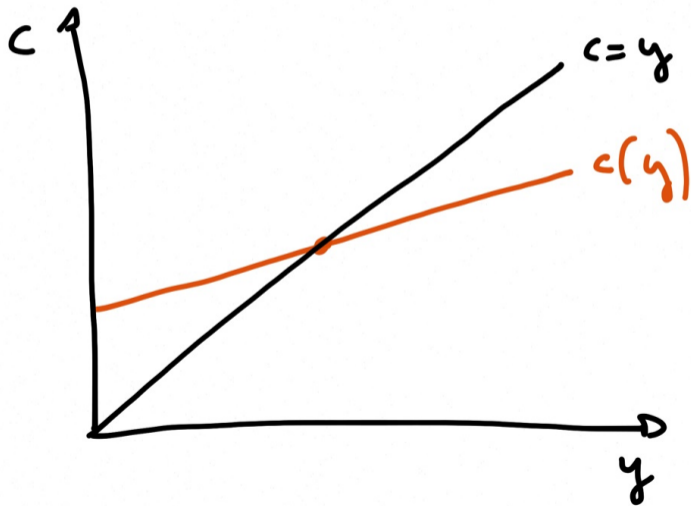
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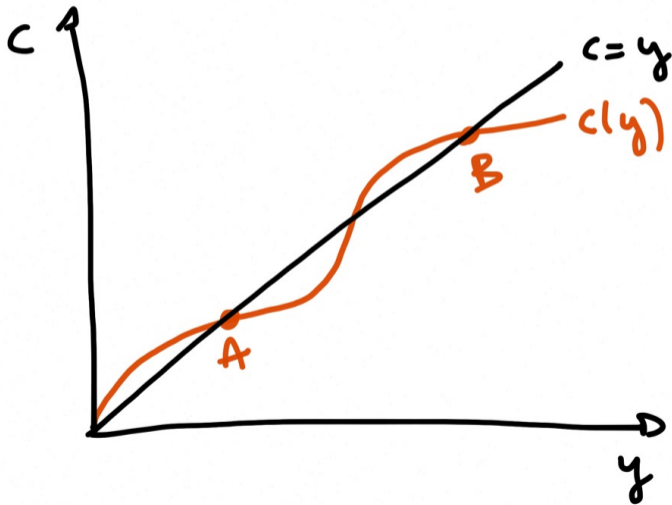
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Multiplicity

- ▶ Multiplicity is indeed not so difficult to obtain.
- ▶ Consider a static GE model of yeoman farmer (*the YEOMAN FARMER model*)
- ▶ N farmers with preferences

$$U(C_i) - L_i^{1+\gamma}$$

- ▶ C_i is a CES aggregator of C_{ij}
- ▶ Each farmer has monopoly power on good i
- ▶ Technology is

$$\begin{aligned}C_{i,(1)} &= AL_i^\alpha \\C_{i,(2)} &= AL_i^\beta - C\end{aligned}$$

with $\alpha < \beta$

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- ▶ The model is solved by deriving the best response function

$$P_i = P_i^*(P)$$

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- ▶ If farmer i expects the price of the competitors to be high, then he expects demand to be low.
- ▶ It will be not profitable to operate with technology 2 as it required high scale of production to cover the fixed cost.
- ▶ Therefore the farmer will operate with the high marginal cost technology.
- ▶ Therefore prices will be high.

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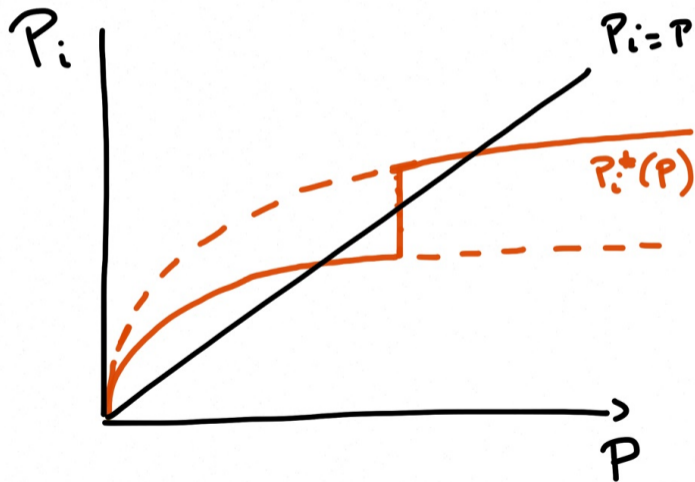
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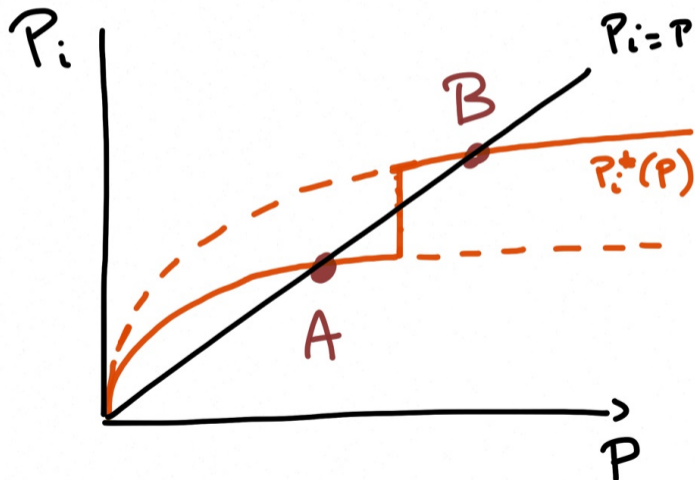
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- ▶ In those coordination games, shocks are amplified even when the equilibrium is unique (Cooper and John).

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2. A theory for the international transmission of shocks

A two-country Keynesian Cross

- ▶ A fraction ψ of home consumption is in home goods
- ▶ A fraction $1 - \psi$ of home consumption is in foreign goods
- ▶ A fraction ψ of foreign consumption is in foreign goods
- ▶ A fraction $1 - \psi$ of foreign consumption is in home goods
- ▶ Equilibrium is given by

$$\begin{aligned}y &= \psi c(y) + (1 - \psi)c^*(y^*) \\ y^* &= \psi c^*(y^*) + (1 - \psi)c(y)\end{aligned}$$

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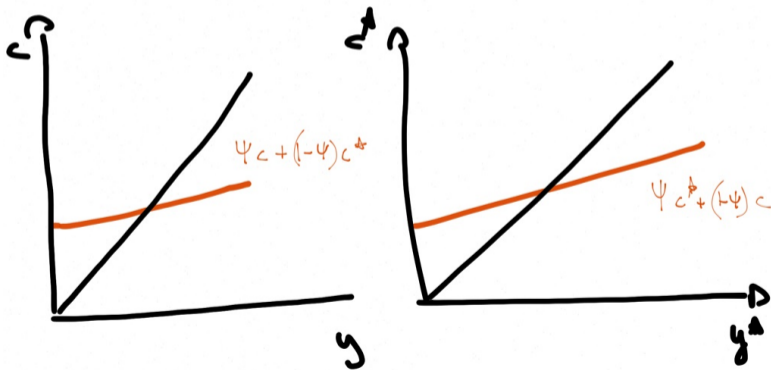
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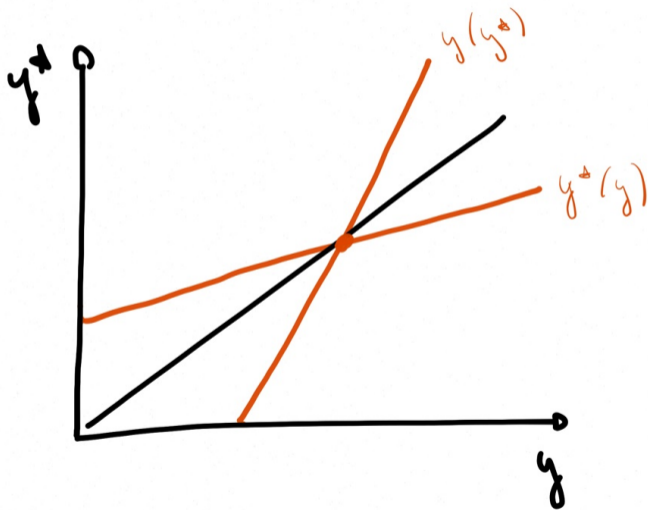
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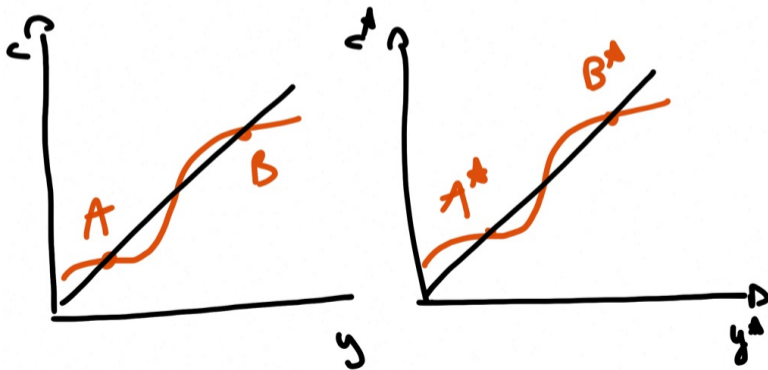
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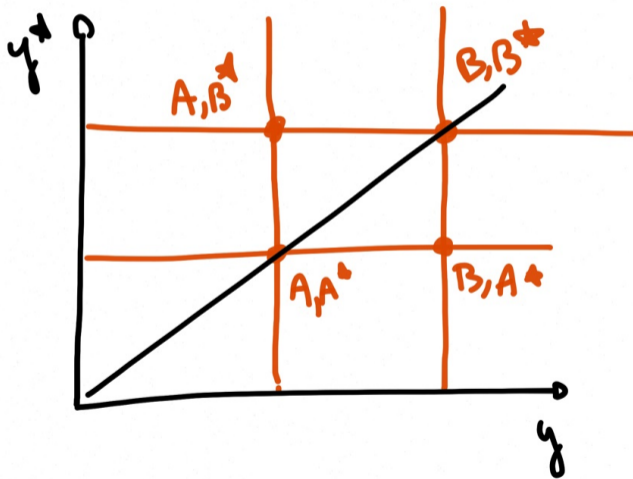
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2. A theory for the international transmission of shocks

Coordination

- ▶ One can be doubtful that sunspot create so discrete jumps in economic activities
- ▶ This requires a lot of coordination between agents
- ▶ It is even more improbable that the low equilibrium is selected *simultaneously* but the two economies
- ▶ Philippe and Eric have a nice result :
 - × High integration eliminates asymmetric equilibria
 - × Intuition : if integration is total, we are back to a close economy
 - × the model assumes full coordination within a country
 - × A more economic story : if home is pessimistic, the foreign economy will be pulled down (low external demand), and B^* will disappear.

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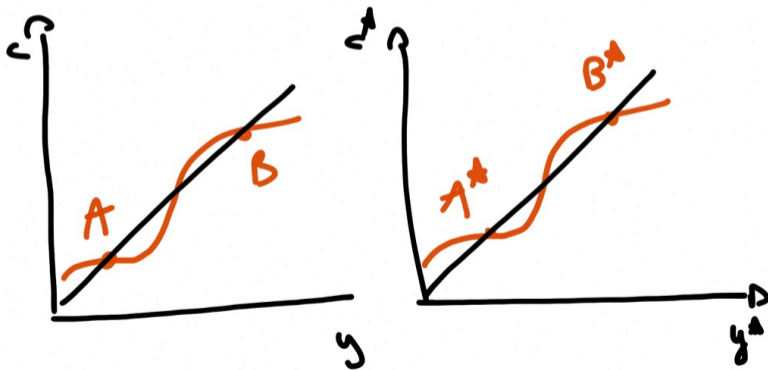
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A two-country Keynesian "Cross", high integration



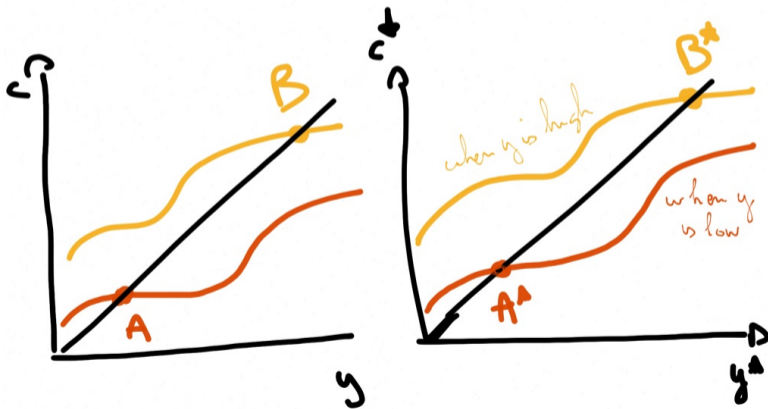
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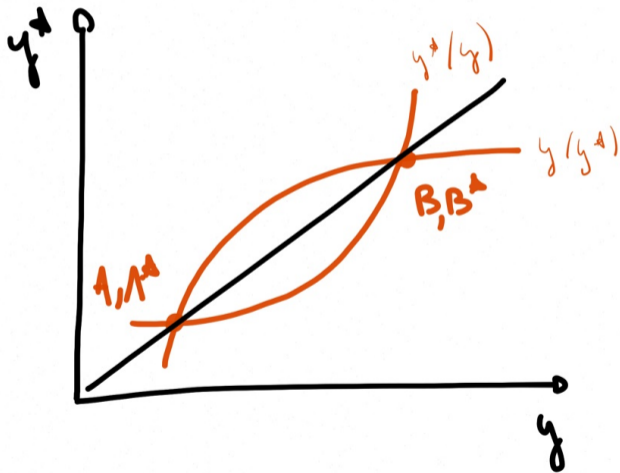
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2. A theory for the international transmission of shocks

Coordination

- ▶ **Demand linkages eliminate the non-symmetric equilibria**
- ▶ Demand linkages related to change in expectations create comovements
- ▶ With Paul Beaudry and Martial Dupaigne, we have found evidence of expectations coordinating economies
- ▶ We have identified US *news* about future TFP
- ▶ We have shown that it creates a boom in the US as well as in Canada
- ▶ Same result with Germany and Austria
- ▶ If the news is global (in all agents information sets, then expectations are coordinated).

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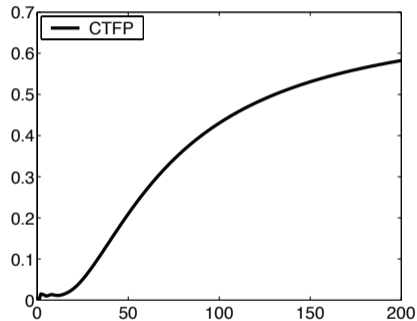
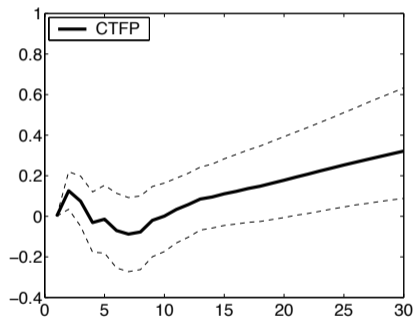
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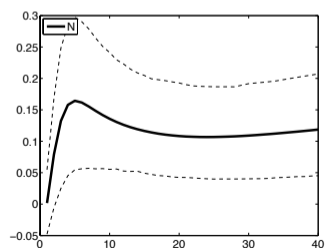
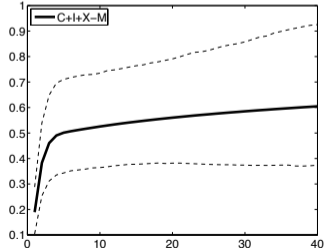
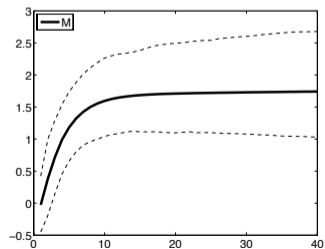
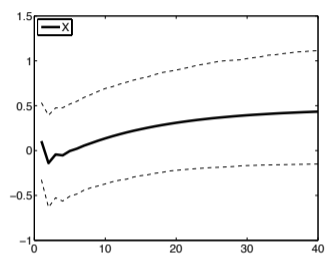
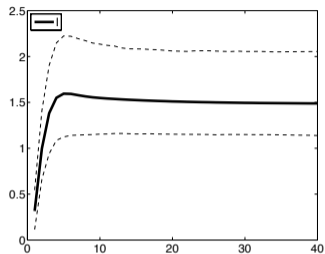
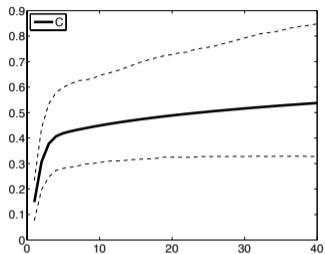
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The response to a US technological news in the US



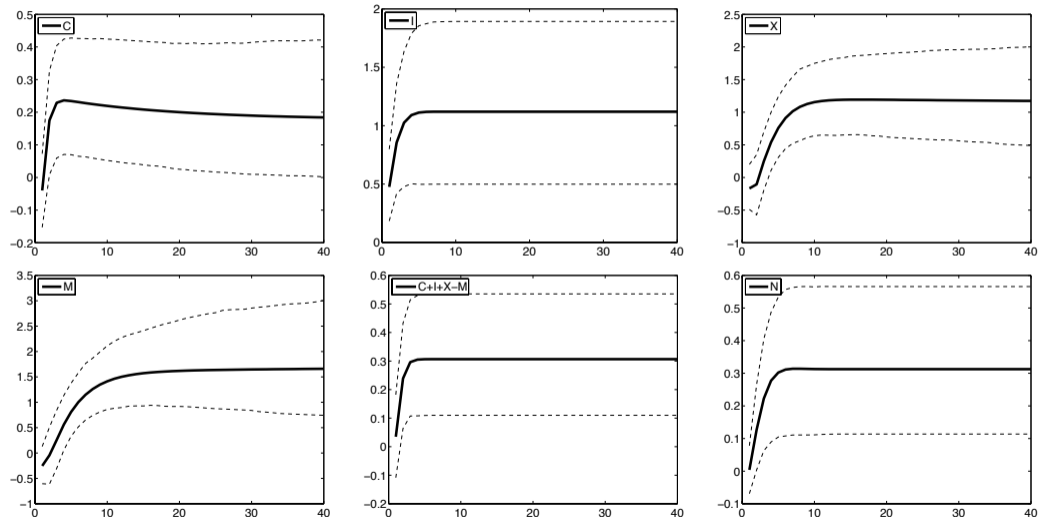
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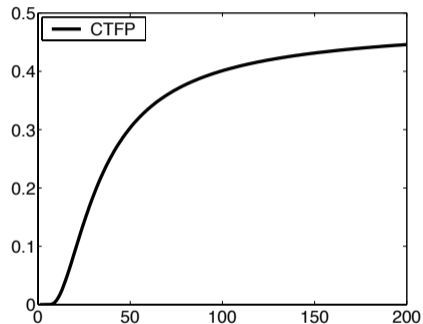
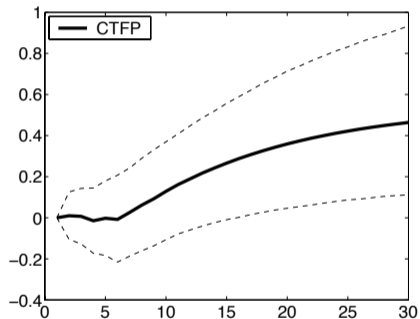
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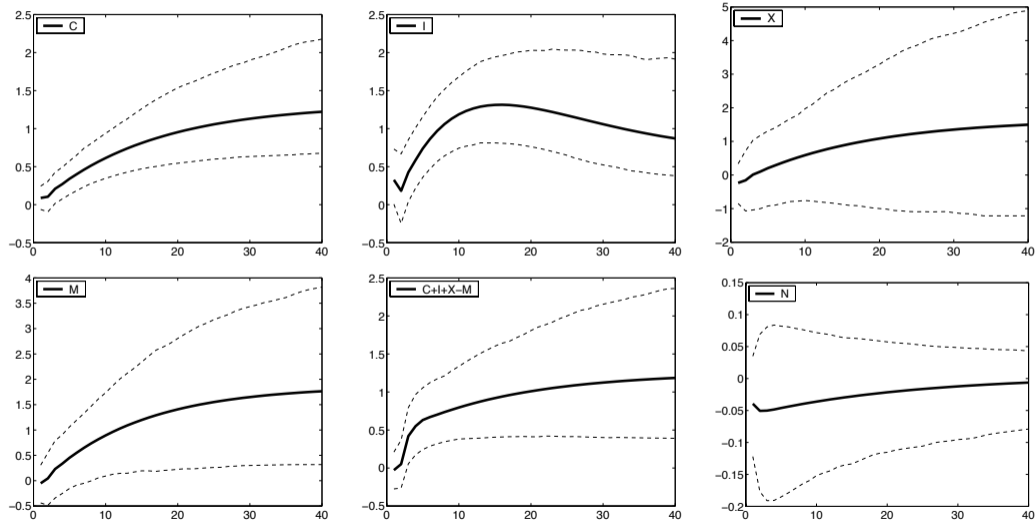
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The response to a German technological news in Germany



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The response to a German technological news in Austria

