Comments on

Vojtěch Molnar, Price Level Targeting with Imperfect Rationality

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Introduction

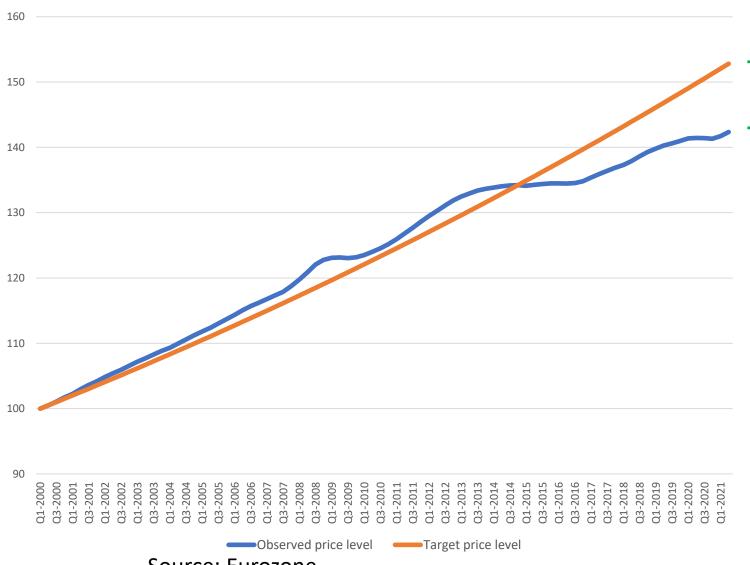
- This is a very interesting and original piece of research
- One of the problems of mainstream macroeconomics is that many of its practioners construct models based on the central idea that individuals **should** have rational expectations (RE).
- In other words: instead of asking the question of how agents **actually behave**, they impose the conditition that agents **should be** rational.
- Making assumptions that deviate from this dogma is deemed to be ad-hoc and therefore not interesting.
- It is refreshing to read a paper that is not ashamed of departing from RE
- and of using a model that comes closer to what agents actually do

Price level targeting (PLT)

- PLT has been advocated by many macroeconomists
- It has been shown that in the context of RE-models PLT has a number of attractive features
- In general it leads to more long term stability of the price level
- This should increase welfare.

- It is useful to look at the data first
- And to ask the question what if...
- What if the central bank (I'll choose the ECB) followed the PLT strategy today and was confronted with a sudden surge of inflation as it does today
- See next chart

Observed and target price level in Eurozone



Source: Eurozone

Note: PLT assumes target inflation = 2%

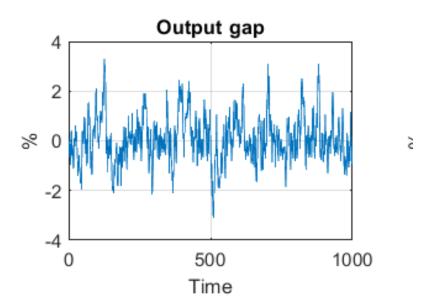
ECB would come to judgment 7.5% • today that the sudden surge of inflation is welcome

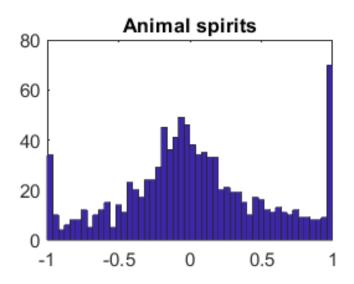
- It brings us very close to the **PLT**
- Not much should be done
- Would agents understand this strategy?
- Would that be a credible strategy?
- These are the questions analysed by Vojtěch

Main results of the paper

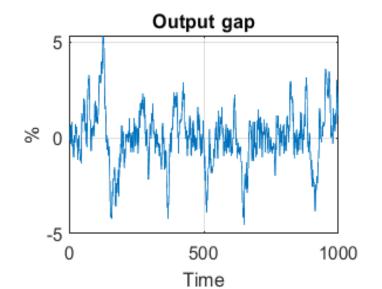
- In normal times and assuming agents understand the nature of the targeting rule: PLT leads to less volatility of output and prices
- And thus increases welfare relative to inflation targeting
- But even then there is a significant tail risk:
 - The model predicts divergence in about 20% of the cases
 - Actually this should be called an unstable outcome (rather than divergent)

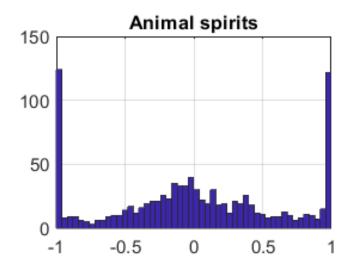
Price level targeting





Inflation targeting





- If agents do not understand the nature of the regime and continue to forecast inflation, PLT leads to unstable outcomes.
- The reason is that the disconnect between what central bank does (PLT) and what agents do leads to a loss of credibility of the central bank
- In that case, which is the realistic one, PLT leads to more turbulence of output and inflation and is clearly inferior to inflation targeting

- This is a powerful result
- It may explain why PLT has not been observed much in actual policymaking
 - although the Fed came closest to announcing "average inflation targeting"
 - but since the inflation surge has clearly abandoned it.
- This is quite paradoxical: mainstream models using RE usually find that PLT is superior to inflation targeting
- Yet policymakers seem to distrust this result
- They rightly distrust this result as it is based on an implausible rationality assumption.
- Vojtěch's research confirms that policy-makers should distrust this result

Some additional comments

- 1. It is unclear to what extent the results of this model depend on the particular numerical values of the parameters used in the simulation exercises
- What is lacking is a sensitivity analysis
- This is necessary to gain insight in the robustness of the results
- Example: higher values of the output parameter in the Taylor rule typically reduce the boom bust nature of business cycle
- A higher value may eliminate the explosive character of the PLT regime
- Suggestion: perform a sensitivity analysis for the key parameters of the model

2. Is this the right model?

- There may be many alternative behavioural models
- What is the empirical evidence?
 - Negative: Liu and Minford(2014)
 - Positive: Jang and Sacht (2016) and Kukacka et al.(2018)
- The jury is still out
- But behavioural macro is the future
- Where is the key of the house?

Le meilleur est l'ennemi du bien (the best is the enemy of the good)

- Mainstream models tell us that in ideal conditions
 - where ideal = agents have RE and thus understand the rule the PLT rule leads to the best possible outcome
- But this rule will not work well when conditions are not ideal,
 - that is when agents have cognitive limitations
- Under non-ideal conditions it is not right to use a rule that can only function under ideal conditions.
- Persisting in this ambition leads to outcome that is inferior to a rule that recognizes the cognitive limitations of agents