

Should Monetary Policy Take Financial-Stability Considerations into Account at the ELB?

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Points

- Economic policies should only have goals that they can achieve
- Monetary policy cannot achieve and maintain financial stability
- Monetary policy should not have financial stability as a goal
- According to current knowledge, using monetary policy to "lean against the wind" (LAW) has costs much larger than benefits
- In a weak economy (with a binding ELB), the costs of LAW are even higher
- In the (rare) case that monetary policy would pose a threat to financial stability, the macroprudential authority should judge and warn if necessary; then the monetary policy authority should decide whether or not to adjust monetary policy. This preserves accountability of macroprudential authority and independence of monetary authority.



Monetary policy cannot achieve and maintain financial stability; should not have financial stability as a goal

- Financial stability requires sufficient resilience of the financial system, including sufficient resilience of lenders and borrowers in the credit market (capital, liquidity, debt-service capacity,...)
- There is no way monetary policy can achieve that resilience
- Economic policies should only have goals that they can achieve
- Monetary policy should not have financial stability as a goal
- To achieve and maintain financial stability, there is no choice but to use macroprudential policy



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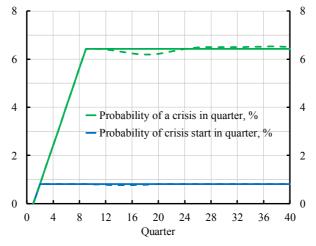
Costs of LAW are higher than benefits, especially with a binding ELB 1

- If no crisis occurs, LAW (a higher policy rate) has costs in terms of a weaker economy (higher unemployment and lower inflation)
- If a crisis occurs, LAW has an *additional* cost, because *the cost of a crisis is higher if the economy is initially weaker* due to LAW
- In a situation with a binding ELB, the economy is initially weak, and the cost of LAW is even higher, whether or not a crisis occurs
- LAW may have benefits in the form of a lower probability or magnitude of a crisis
- But, empirically, the effect of the policy rate on the probability or magnitude of a crisis is very small, so costs are generally much larger than benefits (IMF 2015, Svensson 2016, FOMC 2016)



Costs of LAW are higher than benefits, especially with a binding ELB 2

- Small effect of LAW on probability of crisis (Riksbank, Schularick-Taylor)
- Solid lines: Benchmark without LAW
- Dashed line: With LAW (1 pp higher policy rate for 4 qtrs)

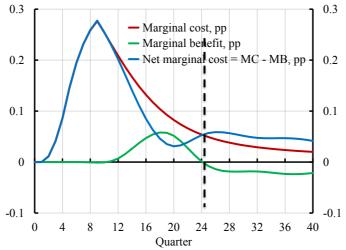


Svensson (2016), "Cost-Benefit Analysis of Leaning Against the Wind: Are Costs Larger Also with Less Effective Macroprudential Policy?" www.larseosvensson.se



Costs of LAW are higher than benefits, especially with a binding ELB 3

- Marginal cost of policy-rate increase much larger than marginal benefit; net marginal cost large
- Also if negative marginal benefit beyond quarter 24 is disregarded

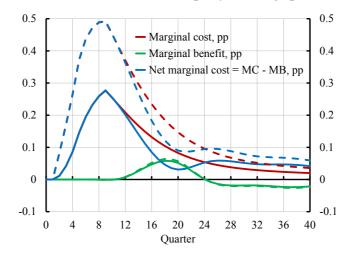


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Costs of LAW are higher than benefits, especially with a binding ELB 3

- Cost larger in weaker economy, with positive unemployment gap
- Solid lines: Benchmark with initial non-crisis unemployment gap = 0
- Dashed lines: Initial non-crisis unemployment gap = +0.25 pp

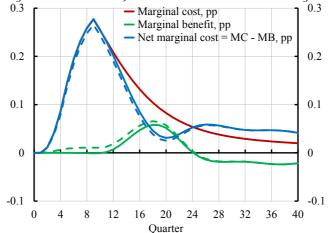


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Costs of LAW are higher than benefits, especially with a binding ELB 4

- Taking into account the possible effect on the magnitude
- Solid lines: Benchmark disregarding effect on magnitude
- Dashed lines: With effect on magnitude (Flodén 2014, Krishnamurthy-Muir 2016, Jorda-Schularick-Taylor 2013)



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Costs of LAW are higher than benefits, especially with a binding ELB 5

- Jeremy Stein (2013), best *theoretical* case for LAW: "[W]hile monetary policy may not be quite the right tool for the job, it has one important advantage relative to supervision and regulation namely that [the interest rate] gets in all of the cracks."
- But the above *empirical* evidence indicates that a modest policy-rate increase will barely cover the bottom of those cracks
- To fill the cracks, the policy rate would have to be increased so much that it might kill the economy
- Instead, use macroprudential policy



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Debate on LAW continues: Recent response by BIS (86th Annual Report, 2016)

- Box IV.B, pp 76-77, criticism of this approach:
 - (1) Uses credit growth instead of "financial cycle"
 - (2) Assumes exogenous magnitude of crisis
 - (3) Just examines one-off policy-rate increase instead of systematic optimal LAW
- On (1): No principle difference between credit growth and "financial cycle." Crucial issue is empirical: Best predictor of financial crisis? Policy-rate impact on that predictor? Also, debt/GDP component of financial cycle. But impact on debt/GDP smaller than impact on debt and likely to be positive (!)
- On (2): Endogenous magnitude of crisis *is* examined: Empirically policy-rate impact on magnitude too small to matter
- On (3): Optimal policy is examined: Set MC=MB. Does not involve LAW



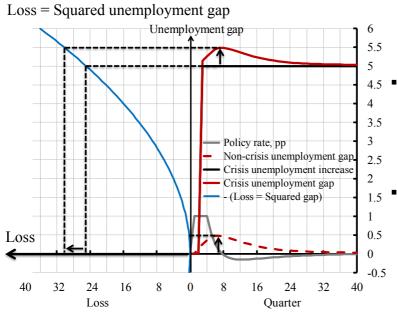
What if monetary policy nevertheless would pose a threat to financial stability?

- BoE model, Aug 2013, forward-guidance promise
- 3rd knockout: FPC would judge that monetary policy poses a significant threat to financial stability that the FPC cannot contain with its available instruments
- It should be the macroprudential authority, not the monetary policy one, to make the judgment and to warn if necessary
- Monetary policy authority may then decide whether to adjust monetary policy or not
- This preserves accountability of macroprudential authority and independence of monetary policy
- Without such a warning, monetary policy should not deviate from its goals



Extra slides

Cost: Unemployment gap in non-crisis and in crisis, for 1 pp higher policy rate for 4 quarters (Riksbank estimates)



Unemployment gap: From 0 to 0.5 pp Loss: From 0 to 0.25 Loss increase: 0.25

Crisis:Unample

Unemployment gap: From 5 to 5.5 pp Loss: From 25 to 30.25

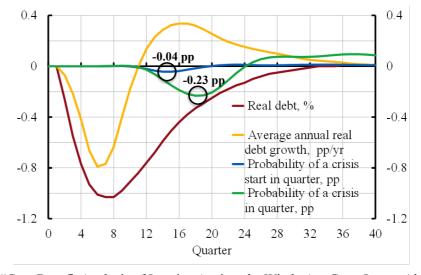
Loss increase: 5.25

Additional cost of LAW: Crisis loss increase is 11 times non-crisis loss increase

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Compare with the small and temporary reduction of the probability of a crisis from a higher policy rate



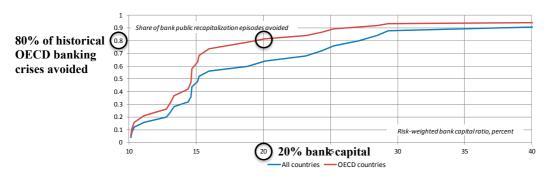
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3. Macroprudential policy may be quite effective in achieving resilience of both lenders (banks) and borrowers (households) 1

 20% bank capital relative to RWA might have avoided 80% of the historical banking crises in OECD since 1970 (Dagher, Dell'Ariccia, Laeven, Ratnovski, and Tong, IMF SDN 16/04)

Figure 7. Share of Public Recapitalizations Avoided, Depending on Hypothetical Precrisis

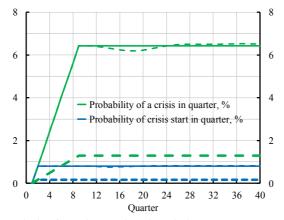
Bank Capital Ratios





3. Macroprudential policy may be quite effective in achieving resilience of both lenders (banks) and borrowers (households) 2

- Compare with the small and temporary reduction of the probability of a crisis from a higher policy rate (leaning against the wind)
- Solid lines: Without leaning against the wind
- Thin dashed line: With leaning against the wind
- Thick dashed line: 80% reduction of probabilities from 20% bank capital



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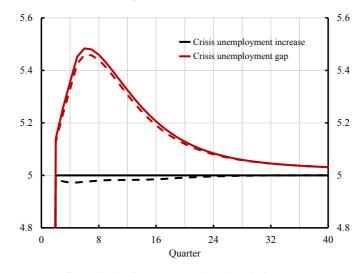
Distinguish central banks and monetary policy 1

- Should monetary policy have financial stability as a goal? No
- Should *central banks* have financial-stability as a goal?
 - Depends on whether the central banks have suitable instruments
 - Crisis *management*: Yes, since CBs have lending of last resort (liquidity support)
 - Crisis *prevention*: Depends of whether CBs have suitable instruments
 - Riksbank example: No crisis-prevention instruments; should hence not have a financial-stability mandate for crisis prevention and normal times, only for crisis management



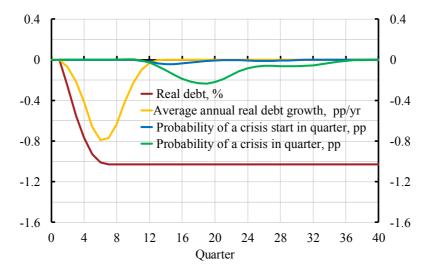
Benefit: Less deep crisis?

- Using Flodén (2014): 1 pp higher DTI ratio 2007 is associated with 0.02 pp higher unemployment increase 2007-2012 in OECD
- From solid to dashed, hardly noticeable effect



Benefit: Lower probability? Household debt, debt growth, probability of crisis start, and probability of crisis from 1 pp higher policy rate (Riksbank, Schularick and Taylor 2012) 2

Robust to permanent effect on real debt (monetary nonneutrality)



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