

Monetary Policy and Macroprudential Policy: Different and Separate

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The views expressed in this presentation are those of the author and do not necessarily represent those of the IMF or IMF policy.

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Questions

- How can different economic policies be distinguished?
- How can monetary and macroprudential policies be distinguished?
- Should monetary policy have a third goal, financial stability?
- Should monetary and macroprudential policies be conducted separately or coordinated?
- Should they be conducted by the same or different authorities?
- What if monetary policy would pose a threat to financial stability?
- Should monetary policy ever “lean against the wind”?

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Questions **and short answers**

- How can different economic policies be distinguished?
- How can monetary and macroprudential policies be distinguished? **They are very different**
- Should monetary policy have a third goal, financial stability? **No**
- Should monetary and macroprudential policies be conducted separately or coordinated? **Normally separately**
- Should they be conducted by the same or different authorities? **Separate decision-making bodies essential**
- What if monetary policy would pose a threat to financial stability? **BoE model: Macroprudential authority judges and warns**
- Should monetary policy ever “lean against the wind”? **Only after thorough cost-benefit analysis**

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How can different economic policies be distinguished?

- Goals, instruments, responsible authorities
- Example: Fiscal policy and monetary policy
- Different goals, different instruments, different authorities
- Considerable interaction
 - Fiscal policy affects inflation and real activity
 - Monetary policy affects government revenues and expenditures
- Conducted separately, not coordinated, Nash equilibrium
- Is the relation between monetary and macroprudential policies any different?

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How can monetary and macroprudential policies be distinguished? Monetary policy

- Goals
 - Price stability and real stability
 - Stabilize inflation around inflation target and unemployment around its long-run sustainable rate
- Instruments
 - Normal times: Policy rate and communication (forecasts, forward guidance, ...)
 - Crisis times: Unconventional measures, balance sheet policies (QE), FX policy (interventions, currency floors) ...
- Authority: Central bank

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How can monetary and macroprudential policies be distinguished? Macroprudential policy

- Goal
 - **Financial stability**
 - Definition: Financial system fulfilling 3 main functions (submitting payments, transforming saving into financing, allowing risk management/sharing) w/ sufficient **resilience** to disturbances that threaten those functions
- Instruments
 - Normal times: Supervision, regulation, communication, stress tests ...
- Authority(ies)
 - Varies across countries: FSA(s), CB, Treasury, ...

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How can monetary and macroprudential policies be distinguished?

- Clearly quite different and distinct policies
- But how closely related?
- Should they really have different goals?

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Should monetary policy have a third goal, financial stability?

- Answer: No
- Economic policies should only have goals that they can achieve
- Monetary policy can stabilize inflation around an inflation target and resource utilization around its estimated long-run rate (thus suitable goals)
- Monetary policy cannot achieve financial stability
- There is no way monetary policy can achieve sufficient resilience of the financial system
- Leaning against the wind? Existing empirical and theoretical evidence says costs higher than benefits
- Effect of policy rate on probability and/or severity of crisis too small

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Should monetary policy have a third goal, financial stability?

- Jeremy Stein (2013):
“[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 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 would kill the economy

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Should monetary policy have a third goal, financial stability?

- But there is interaction between the two policies!
- Macroprudential policy affects financial sector, lending, and housing demand and indirectly, **but not systematically**, inflation and real activity
- Monetary policy affects interest rates, inflation, activity, profits, debt service, balance sheets, leverage and indirectly, **but not systematically**, financial stability
- Argument for conducting each under full information about the other, but not for sharing goals or explicit coordination
- As for fiscal and monetary policies

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Should monetary policy and macroprudential policies be conducted separately or coordinated?

- In normal times: Conducted separately, also when conducted by the same authority
 - But each policy should be fully informed about the conduct and impact of the other policy and take that into account
 - Nash equilibrium rather than coordinated equilibrium (joint optimization)
 - MP more efficient in achieving price and real stability
 - MaPP more efficient in achieving financial stability (Bean 2014)
- In crisis times: Full cooperation and coordination of policies by FSA, CB, MoF, bank-resolution authority, ...

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Should monetary policy and macroprudential policies be conducted by the same authority or different ones?

- Separate decision-making bodies w/ separate goals and instruments
- Accountability and efficiency justifies all macropru instruments in one authority
- Two clean models that should work well: UK and Sweden
- UK model described by Don Kohn
- Here Swedish model

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Swedish model

- Gov't Aug 2013: New strengthened framework for financial stability
- Swedish FSA
 - Main responsibility for financial stability
 - All macro- and microprudential instruments
 - Boundary between macro- and microprudential policy unclear, especially in Sweden (oligopoly of 4 banks dominate financial sector)
 - Efficiency and accountability: Micro- and macropru together, in one authority
 - But legal authority remain to be fixed
- Riksbank
 - No macroprudential instruments
- Financial Stability Council
 - Members: MoF (chair), FSA, NDO (bank resolution authority), RB
 - Forum for discussion and exchange of information, not decisions
 - Published minutes, reports from workgroups
 - FSC will lead crisis management in crisis

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

- BoE model, Aug 2013, forward-guidance promise
- 3rd knockout: FPC would judge that MP poses a significant threat to financial stability that it cannot contain with its instruments
- It should be the macroprudential authority, not the monetary policy one, to make judgment and to warn the
- Monetary policy authority may then adjust monetary policy or not
- Effectively “comply or explain”
- Preserves independence of monetary policy

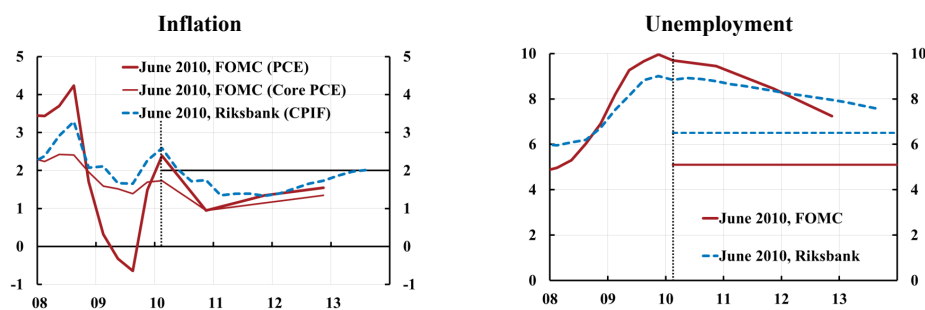
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Should monetary policy ever lean against the wind for financial-stability purposes

- Leaning against the wind for financial stability purposes strongly promoted by BIS
- Skepticism against leaning elsewhere (Bernanke, Evans, Williams), but debate continues
- Sweden a case study: Quite aggressive leaning since summer 2010, because of concerns about household debt
- Not supported by any analysis of policy-rate effect on household debt; estimates at the time indicated high costs and small effects on debt
- Outcome now: Zero or negative inflation, very high unemployment, most likely higher real debt, negative policy rate
- Costs and benefits of Riksbank leaning?

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Fed and Riksbank forecasts June 2010

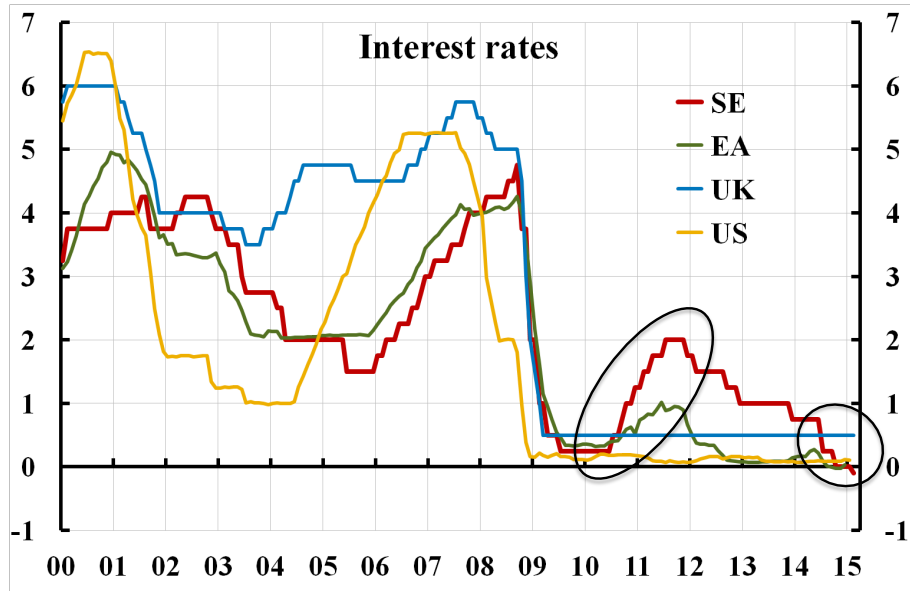


- Riksbank and Fed forecasts quite similar
- Policies very different
 - Fed: Continue to keep policy rate between 0 and 0.25%, forward guidance, prepare QE2
 - Riksbank: Start raising the policy rate from 0.25 to 2% in July 2011
 - Imagine if it had been the other way around?

Source: Svensson, Lars E.O. (2011), "Practical Monetary Policy: Examples from Sweden and the United," *Brookings Papers on Economic Activity*, Fall 2011, 289-332.

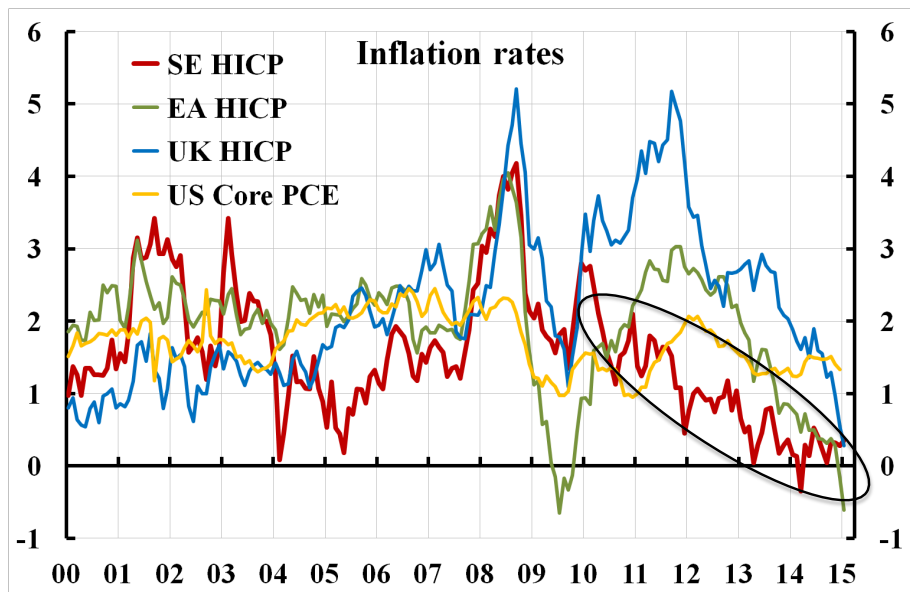
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The leaning: **Policy rates** in Sweden, UK, and US;
Eonia rate in euro area



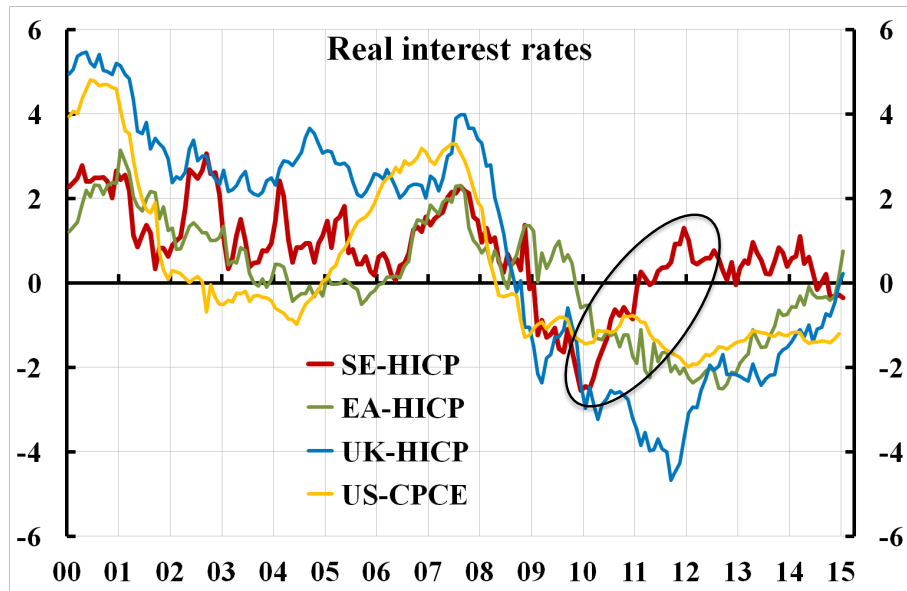
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The leaning: **Inflation** in Sweden, euro area, UK,
and US



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The leaning: **Real policy rate** in Sweden, UK, and US, real Eonia rate in euro area



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Cost-benefit analysis of leaning against the wind?

- Costs of higher policy rate: Lower inflation, higher unemployment, both if no crisis *and* if crisis occurs
- Possible benefit: Lower real debt growth and lower crisis probability (Schularick and Taylor 2012)
- Costs in most cases much higher than benefits (Svensson, IMF Staff Paper)
- Somewhat surprisingly, less effective macroprudential policy with larger probability and severity of crisis *may increase costs of leaning more* than benefits
- Any leaning against the wind should be supported by thorough cost-benefit analysis

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Simple example: Quadratic loss (squared unemployment gap); Cost, benefit, and net cost of policy-rate increase

A simple example of cost-benefit analysis of a leaning against the wind					
Parameters, input		Future non-crisis state		Future crisis state	
Initial non-crisis ugap, pp (1)	0	Initial unemployment gap, pp (7) = (1)	0	Initial ugap, pp (13) = (7)+(3)	5
Initial crisis probability, % (2)	6.0	New ugap, pp (8) = (7)+(4)*(6)	0.5	New ugap, pp (14) = (8)+(3)	5.5
Crisis ugap increase, pp (3)	5	Initial loss (9) = (7) ²	0	Initial loss (15) = (13) ²	25
d(ugap)/di (4)	0.5	New loss (10) = (8) ²	0.25	New loss (16) = (14) ²	30.25
d(Crisis probability)/di (5)	-0.1	Loss increase (11) = (10)-(9)	0.25	Loss increase (17) = (16)-(15)	5.25
Policy-rate increase (di), pp (6)	1	Prob-weighted loss incr. (12) = [1-(2)]*(11)	0.235	Probability-weighted loss incr. (18) = (2)*(17)	0.315
				Cost (19) = (12)+(18)	0.55
				Crisis probability reduction, pp (20) = -(5)*(6)	0.10
				Crisis loss increase (21) = (17)-(11)	30
				Benefit (22) = (20)*(21)	0.03
				Net Cost = Cost - Benefit (23) = (22)-(19)	0.52
				Benefit / Cost (24) = (22)/(19)	0.055
				Net Cost, ugap equivalent, pp (25) = sqrt(23)	0.72

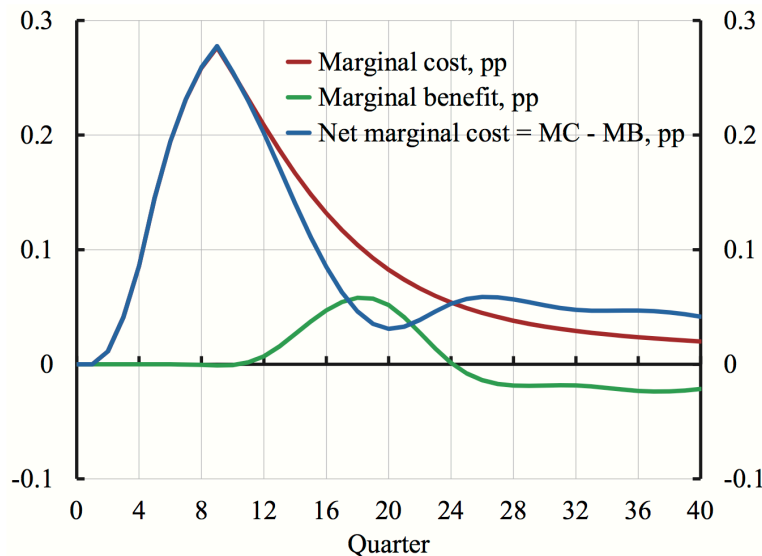
Note: Loss is the squared unemployment gap. "Cost" is the expected loss increase at the initial probability of a crisis. "Benefit" is the reduction in the expected crisis loss increase due to a reduction in the probability of a crisis. "Net Cost" is "Cost" less "Benefit". The square root of "Net Cost" is its unemployment-gap equivalent.

- Cost exceeds benefit by substantial margin
- Higher initial crisis probability and/or higher crisis unemployment gap (because of less effective macroprudential policy) increase cost more than benefit; make case against leaning against the wind even stronger

Simplified example from Svensson (2015), "Cost-Benefit Analysis of Leaning Against the Wind: Are Costs *Always* Larger Than Benefits, and Even More So with a Less Effective Macroprudential Policy?" working paper.

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Marginal cost, marginal benefit, and net marginal cost of increasing the policy rate; Quadratic loss



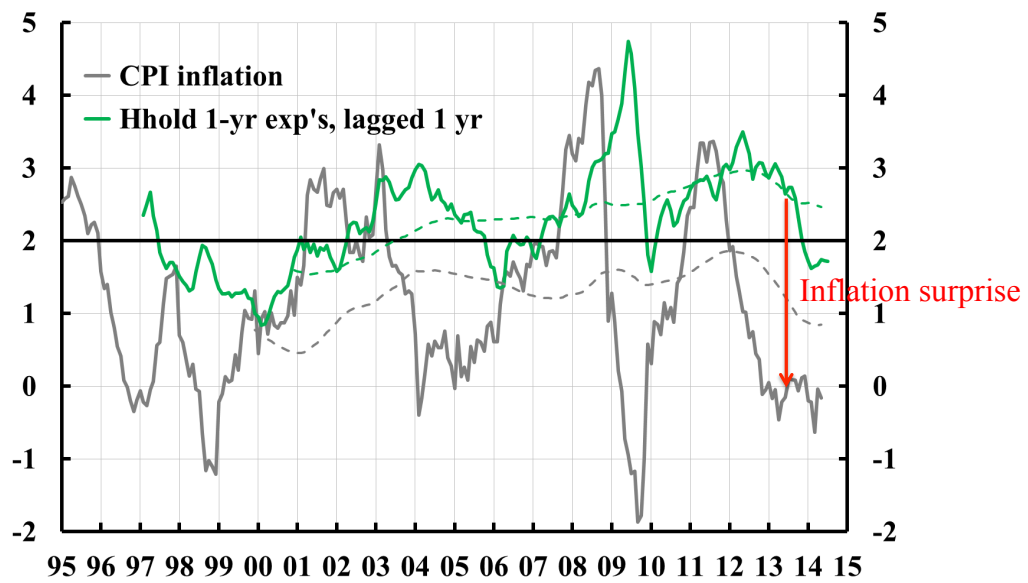
Source: Svensson (2015), "Cost-Benefit Analysis of Leaning Against the Wind: Are Costs *Always* Larger Than Benefits, and Even More So with a Less Effective Macroprudential Policy," working paper.

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Conclusions

- Do not ask too much of monetary policy; it cannot achieve financial stability. It should not have financial stability as a goal
- Monetary and macroprudential policies: Very different policies, with different goals and instruments
- Considerable interaction, but not systematic
- Efficiency and accountability considerations support that the two policies are normally best conducted separately, with separate decision-making bodies, but with full information about each other (like monetary and fiscal policies)
- UK and Sweden: Two alternative clean models that should work well
- If monetary policy would pose a threat to financial stability? BoE: Macroprudential authority judges and warns, monetary-policy authority decides whether to act (effectively “comply or explain”)
- At current state of knowledge, little or no support for leaning against the wind for financial stability purposes. Any such leaning only if justified by a thorough cost-benefit analysis. Burden of proof should be on the advocates of leaning.

Additional cost: Inflation below household's expectations has increased household real debt burden



Note: Dashed lines are 5-year trailing moving averages