

# **Macroprudential Policy**

## **Practice in the absence of theory and a framework**

Richard Barwell

RBS

### **DISCLAIMER:**

The views expressed in this presentation do not reflect those of RBS.

# The science of monetary policy

## Consensus over how to *do* monetary policy

We take a stand on the structure of the economy which pins down

- ❑ preferences (loss function) of policymakers
- ❑ constraints (model) under which the policymaker is operating
- ❑ the transmission mechanism of official interest rates

We are then in a position to talk about optimal policy, and if we acknowledge our uncertainty about the structure of the economy we can talk about robust policy too

Academics and policymakers may disagree about the inputs to and the output of this process; **for example, conducting monetary policy in models which rule out financial stability may not have been robust.** But I don't think anyone disagrees that policymakers should try to stick to this discipline as far as possible

# The science of macroprudential policy

What should we be looking for

- ❑ a macroprudential loss function
- ❑ model(s) of the system which are fit for purpose
- ❑ knowledge of the transmission mechanism of macroprudential instruments

**Basic message of this presentation: we are not applying this 'scientific' (academic) discipline to macroprudential policy**

This is **NOT** an argument for doing nothing (see Disclaimer).

Indeed, one might conclude that until we are ready to take a scientific approach to macroprudential policy we might have to take a more conservative approach to microprudential policy and monetary policy, i.e.,

- ❑ much higher microprudential capital standards
- ❑ enforce credible living wills
- ❑ lean against financial cycle with interest rates

**Loss function**

# Macroprudential loss function

Your guess is as good as mine..

Define high level objectives

Define concepts

Define targets

Define loss

# Macprudential loss function

Your guess is as good as mine..

## Define high level objectives

- ❑ Systemic perspective on the resilience of the banks
- ❑ Systemic perspective on the resilience of the financial system
- ❑ Smooth the provision of core financial services
- ❑ Smooth debt stocks
- ❑ Smooth asset prices / risk premia

## Define concepts

## Define targets

## Define loss

# Macroprudential loss function

Your guess is as good as mine..

**Define high level objectives**

**Define concepts**

- ❑ Resilience? Are we worried about near failure as well as failure?
- ❑ Financial system? Which non-bank institutions and markets ?
- ❑ Core financial services? Are we sure investment banks are socially useless?
- ❑ Are we worried about the variation in the provision of services across population?

**Define targets**

**Define loss**

# Macroprudential loss function

Your guess is as good as mine..

**Define high level objectives**

**Define concepts**

**Define targets**

- ❑ What is the optimal failure rate of the system?
- ❑ What is the optimal provision of core financial services?
- ❑ What is the optimal stock of debt?

**Define loss**



# Macprudential loss function

**Your guess is as good as mine..**

**Define high level objectives**

**Define concepts**

**Define targets**

**Define loss**

- ❑ What is the welfare loss when outcomes deviate from the targets?
- ❑ Is the loss symmetric?
- ❑ What is the relative importance of resilience versus credit smoothing?
- ❑ **How much do we care about insufficient provision to specific groups?**

# **Model of the system**

# A model of the system

that is fit for purpose in policy institutions

## In the monetary arena

- ❑ Need *some* nominal rigidity
- ❑ Right combination of nominal and real rigidity to match business cycle facts
- ❑ .... *Not clear it matters where those rigidities lie ?*
- ❑ ..... *Except in retrospect perhaps the exclusion of credit markets?*
- ❑ Instrument set needs to feature in the model
- ❑ .... *How do we do QE and forward guidance in the forecast model?*

**Now apply the same logic to the macroprudential arena**

# **A model of the system**

**that is fit for purpose in policy institutions**

**Need a model – and if you want policy to be robust many models – of socially inefficient financial instability**

# A model of the system

that is fit for purpose in policy institutions

Need a model – and if you want policy to be robust many models – of socially inefficient financial instability

Must feature the irreducible set of market failures that contribute to financial instability

- ❑ Rule of thumb behaviour
- ❑ Asymmetric information
- ❑ Incomplete and flawed contracts
  - ❑ Cash bonuses for bankers
  - ❑ Nominal yield targets for fund managers
- ❑ Regulatory arbitrage
- ❑ Risk homeostasis

Just because you put a bank in your model doesn't mean you put a banker in your model

# A model of the system

**that is fit for purpose in policy institutions**

**Need a model – and if you want policy to be robust many models – of socially inefficient financial instability**

**Must feature the irreducible set of market failures that contribute to financial instability**

**Must be sufficiently granular to capture the location and transmission of financial instability**

- ❑ Cannot aggregate the balance sheets of individual banks together
- ❑ Indeed, must be careful aggregating within the balance sheet of a given bank
- ❑ Need to incorporate universe of non-bank financial institutions and markets
- ❑ Need to worry about pockets of vulnerability within household sector

# **The intersection of preferences and constraints**

# Calibrating the regime

## Active vs. passive

**The UK framework: the FPC should protect and enhance the resilience of the financial system, subject to not having a significant adverse effect on the capacity of the financial sector to contribute to economic growth in the medium term**

### Two fundamental questions

#### 1.) Can you monitor and forecast systemic risk?

- ❑ Are the indicators reliable? Are they sufficiently leading for you to respond
- ❑ Remember central bankers were sceptical beforehand

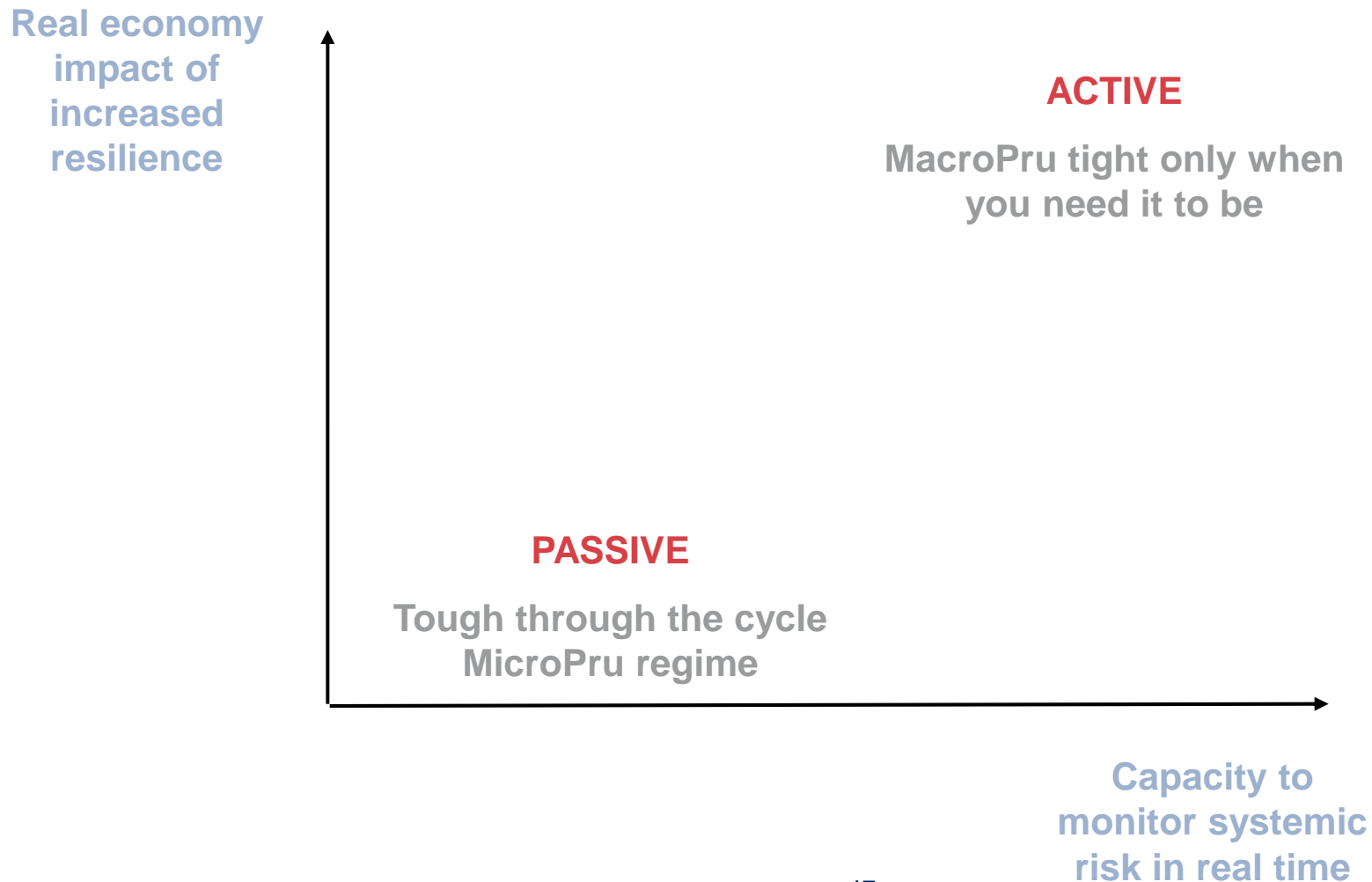
#### 2.) Is tighter regulation costly? Is there a long run trade-off?

- ❑ Efficiency: Credit is more costly
- ❑ Equity: increased credit constraints



# Calibrating the regime

## Active vs. passive



# Instruments

# The instrument set

## Larger than you think

### The piggy back

- ❑ aggregate versus specific
- ❑ capital based or liquidity based
- ❑ **Note that a lot of the discussion assumes that the micro regulator is asleep at the wheel and not using time varying tools (e.g. Pillar 2).**
- ❑ **Roland showed us that assumption was wrong even in the bad world....**

# The instrument set

**Larger than you think**

**The piggy back**

**Prohibition and direction**

- ❑ LTV / DTI caps
- ❑ Limits on holdings of domestic sovereign bonds

# The instrument set

**Larger than you think**

The piggy back

Prohibition and direction

Real taxes / subsidies rather than quasi taxes

□ M-M and the behavioural impact of capital surcharges

# The instrument set

**Larger than you think**

**The piggy back**

**Prohibition and direction**

**Real taxes / subsidies rather than quasi taxes**

**Central bank balance sheet**

- ❑ LOLR: market failure in funding markets + systemically important institutions
- ❑ MMLR: capital markets analogue
- ❑ FLS / TLTRO: term funding + incentives to lend

# The instrument set

**Larger than you think**

The piggy back

Prohibition and direction

Real taxes / subsidies rather than quasi taxes

Central bank balance sheet

Instrument set above is too bank focused....

- Instruments to influence activity of non-bank financial system?
- Instruments to influence demand for core financial services?

**An example of uncertainty about  
the instrument set**



# Capital surcharges

## Counter cyclical surcharge

### Is capital costly?

- ❑ Theory: banks become more like utilities, cost of funding unchanged
- ❑ Conventional explanations for failure of M-M (asymmetric information, tax treatment)
- ❑ Macroprudential concerns
  - ❑ can investors price risk? do investors price bank liabilities more like utilities
  - ❑ risk homeostasis? banks become more like hedge funds

# Capital surcharges

## Counter cyclical surcharge

Is capital costly?

Does policy bite?

- ❑ Likely to be costs involved in being at or below the floor
  - ❑ Regulatory constraints on behaviour (dividends)
  - ❑ Costs of adjusting balance sheet and business model
    - ❑ .... So banks might want to operate above the floor In most states of the world

# Capital surcharges

## Counter cyclical surcharge

Is capital costly?

Does policy bite?

- ❑ Likely to be costs involved in being at or below the floor
  - ❑ Regulatory constraints on behaviour (dividends)
  - ❑ Costs of adjusting balance sheet and business model
    - ❑ .... So banks might want to operate above the floor In most states of the world
  
- ❑ Could be additional costs from operating close to the floor or below your peers imposed by the market ...
  - ❑ Balance sheet weakness punished in a downturn (too risky)
  - ❑ Balance sheet strength punished in a boom (not risky enough)
    - ❑ .... Banks will respond to these market requirements too

# Capital surcharges

## Counter cyclical surcharge

Is capital costly?

Does policy bite?

Numerous ways in which banks can respond

- ❑ Rights issue
- ❑ Sale of business units
- ❑ Sell trading assets
- ❑ Shift portfolio towards less risky assets (lower RWA for given A)
- ❑ Lend less
- ❑ Cut dividends
- ❑ Charge higher spreads
- ❑ Cut costs

# Capital surcharges

## Counter cyclical surcharge

Is capital costly?

Does policy bite?

### Numerous ways in which banks can respond

- ❑ These strategies rebuild capital over different time horizons and on different scales
- ❑ Policymaker unlikely to be indifferent, but not clear she can control
  - ❑ Deleverage at home or abroad?
  - ❑ Sell trading assets and cut bonuses vs. cut lending to SMEs
- ❑ Banks decision influenced in part by expectations of how stance is likely to evolve in the future

**Does the practice ahead of  
theory approach matter?**

# Current approach

## A stylised account

### Policy by precedent

- ❑ Macroprudential policy is what we do, for the reasons we do it
  - ❑ and by extensions not what we haven't done, for the reasons we didn't do it

### The law of the instrument

- ❑ When you have a hammer it is tempting to treat every problem like a nail
  - ❑ ... path dependence given premature decisions on instruments

### The law of the institution

- ❑ Institutions will focus on their areas of expertise and questions of interest
  - ❑ ... path dependence given premature decisions on institutions

# Practical issues:

## 1.) Expectations

- ❑ Expectations of future decisions central to our narrative on impact of policy
- ❑ Expectations matter here too ... for a diverse group
  - ❑ Sophisticated financial market participants
  - ❑ Inattentive households
- ❑ Hard to know what those expectations will be based on
  - ❑ Hard to know how people will behave...

## 2.) Accountability

- ❑ Macroprudential policy could have a material impact on welfare
- ❑ Policymakers need to be held to account
  - ❑ Hard to do that if you don't know what macroprudential policy is *for*
- ❑ Problematic if there is a disagreement over what policy is for
- ❑ Problematic when the next crisis occurs
  - ❑ ..... consequences of reputation of central bank



# Current approach

## How will policymakers take decisions

**Without well specified preferences its hard to know what to do even with a reliable model of the system**

**Without a reliable model of the system its hard to know what to do even with well specified preferences**

**Without well specified preferences or a reliable model of the system there is no real anchor on the policy debate**

**Policymakers cannot be confident that they will satisfy the Hippocratic Oath (make things better)**