

Preparing Draft for Susanto of Sept 15
w/ estimation results

11 Sept 2020

Bob King meeting

Paper & show: will range & topics & tools

↳ challenging to outsiders

1. too many things going on → what are cool features?

↳ big challenge for JM → at getgo, ID key things & results

2. graphs at beginning

SPF

behavior of relevant price indices

→ to make us believe that simple KF rules
can't capture any richness → worrin!

! See recording in presentations > dissertation-workshops >
feedback-sept 2020 > Bob King discussion

↳ Actually now it's just no BC-Research
to/c GitHub had committing issues.

19 Sept 2020

- ① The key difference to Bordalo et al's diagnostic E is that θ is static here
 - in other words, the extent to which expectations exaggerate the representative feature is a constant and is policy-invariant
 - vs. the key feature of the anchoring expectation is that the distortion in E away from RE is dynamic & depends on policy
 - an exeq gain scheme would be a closer analogue to Bordalo et al b/c policy invariant
- ② What we need to show in data is that the responsiveness to fe itself is time-varying.

Ryan meeting

16 Sept 2020

- 1) Should I submit all materials and Casey submits references?
Yes.
- 2) Should I always send you reminders of deadlines?
No.
- 3) Should I always send you all the tailored materials?
No.
- 4) Micro, mechanics, finance, business plans → no macro?
- 5) Hollowing out of the middle: nothing between Harrowd and Chengdu 4U
- 6) Go this year? Comparison of # to last year

- 1) Slippage: Casey is a designee → she submits the letters you do everything else

Some schools won't let you designate a designee → put down advisors' info

- They get the email, fwd to Casey
- Casey uploads letter.

Not confirmed that that's the approach this year.

- 2) Historically Ryan's letter is done Nov, first week.

Earlier deadlines need communication

- 3) Cover letter — only pro forma! No need to send CV can send. Research statement / Teaching statement
→ send!

Numbers: not empty markets: not a little # of open posis.

Apply anywhere you would go. (in some state of the world)

Hertie - don't know → look at faculty: how big?

↳ quite large, few macro

• areas of expertise

↳ business schools: fewer macro

• std. (whether
got edn?)

more teaching

pay more

Mannheim - doesn't know but pretty good

U B Paris - -11-

4) Baseline: heterogeneity tends to be the same as on my list.

5) Hollow out: seems right

6) About now is when you start paying a cost for pulling out
of the market.

Real cost: when you get interviews from senior places
and decline.

Carlos III Madrid good place

Dallas Fed good

Banks of Mex has hired interesting ppl

SF normally don't hire rookies (i.e. new Phds)

FNCB WIB

Check Carbondale (more than 6 contracts?) maybe not worth it.

CB Chile interesting

Alan Finkelman Shapiro is now at Tufts.
ah yes, he is Ryan's mentor and
has worked

U Surrey Postdoc → Alan Finkelman Shapiro w/
several
↳ Ryan knows so if you Blgpl
could imagine it

Samford - serious place?

SSE postdoc interesting

Oxford-Nuffield interesting

He doesn't know the rest

Postdocs will help clear the market this year
↳ pay attention to those!

Sanjay Chugh
Fabio D'Amico
Federico
Mondolman

Green Law - Miao Discussion

18 Sept 2020

- Tomasz: why not \hat{A}_t, \hat{B}_t ? \rightarrow b/c You update based on f_t which is realized conditional on \hat{E}_{t+1}^2
- Distortion?
they coincide
- Would be good to state ass. on \hat{E}^1 e.g. does it fulfill LIE etc?
- Claim: "Endogenous" — it's not , microfoundation??
 \hookrightarrow it allows the public to adapt its E -formation to environment
- "Anchored" def not clear in paper
- fc bad notation b/c one variable
- "Expected mean inflation" is "long-run E " \rightarrow confusing terminology

Main complaint: exposition
notation
structure \rightarrow

Ryan: def = might be helpful to think of metric of anchoring (continuous quantity of anchoring)

Bob:

Fed policy need to be endogenous

Susanto:

Bob's question: π^* is fixed

Suppose Fed wants to change the target

Pablo:

PC flat

Fabian Windler GLMM feedback

22 Sept 2020

lot of work to do:

- endogenous gain: what is it exactly
 - Marat & Nicolini has done that

- 1)
- shouldn't be a detection story
 - too much intro (7 min is too much)
 - . what the paper does
 - . why it's interesting
 - . main results

↳ spp graph wasn't helping b/c E are above 2.5%

Maybe allude to volatile E being a bad thing in general

"Apparently the Fed cares about the stability of LR-E
Here is a model that explains why."

Under RE it's fine

But here no.

↳ For an interview, way too long intro.

↳ 2 min: stability of LR-E.

2) Calibration

Need to spend time on it

especially if you wanna talk about welfare.

↳ ^{show} volatility of α & x in model
just a reality check.

- Degree of anchoring better than binary
- Clarity of concepts
 - forecast error

↳ Send him draft.

BOS FED press

22 Sept 2020

- What
- Vaidhali : Cyclic planning vs anchoring
↳ volatility due to non-RE
- → back out response in 10-year expectation from LR-E.
- Philippe : ↓ in LR-E not engineered by CB
↳ consensus : β (LR-E to fe)
met doesn't say that it was a policy mistake
PCE is 2% then CPI is 2.5%
GSOE tend to anchor in CPI

Ryan meeting after

- 1) 2 versions of talk
 - SLAE
 - Boston Fed
- 2) focus on making contribution clear early \Rightarrow comes too late

- 3) 3 candidate intros 2 pages
- Powell
 - anchored
 - Graph SPF & nothing reg
- \Rightarrow can't do all

Need to do one to not take 75 min

SPF: if just new 2% frag,
then E shouldn't respond to
 f_C

Rolling reg: do overlapping windows
and then plot it as a pic.

\curvearrowleft If that works out, that's the best intro

Get to "this project is under 9 minutes"

Slide 6. Interpretation of ($\hat{\beta}$)

If I put in \bar{W} on RHS?

What does the reg mean/say?

$\hat{\beta}_1$ isn't a structural coeff! It's a stylized fact.
 \hookrightarrow I'd put diff RHS vars depending on model
of E -formation. In RE $\hat{\beta}_1 = 0$.

60% - 40% that the rolling thing belongs in the paper

- Philippe's question on unanch:
- π^* has a shock on it
- w/incomplete info, since π^* moved, ppl look for interest rate etc to find out π^*
 - ↳ look at Philippe's work
- ⇒ what they can't capture is the time-varying recognizability of beliefs to outcomes which those models can't answer
 - "and I know you've done some great work in that"
- Lit slide
 - point to headings
 - point to 2-3 papers
 - 45 sec
 - allow ppl to ask questions but get out fast
- "My model of expectations formation"
 - ↳ acknowledges that there are alternatives

- \hat{E} instead of E
 s_t are exog. states \rightarrow that's why h is known
 Could be that (g) is on a separate slide
- RE $a=0$ didn't get too much out of it
 \hookrightarrow don't post it : be ready to answer why
 agents est. an intercept
- slide 18 - Getting to it is important, fast! (15 min)
 $k_t = g(\cdot)$ is your paper.

Endog. gain models aren't all over the place

- my contrib is to think more generally
 about g and analyze opt policy
 in this context.

Slide 17: "Alternatives for the gain"

- my stuff is the third bullet point-
 - ppl have thought about MP for exog & endog gain
 - ppl have thoughts of endog / general gain
 but not policy
- \hookrightarrow maybe list them

- Calibration

no need to mention p_j at that point

0.98 "you're right it's on the high end. I can change that".

- Results presented nicely.

- Marketing:

"that's a good question" \rightarrow don't say it all the time

- Welfare effects

distance not units

\rightarrow consumption equivalent

that's the one that's interpretable as a number

\rightarrow it will be pretty small, connected

w) the magnitudes in the lit on

bns. cycle costs (Lucas)

- Last & most important:

unclear: 3 distinct policy disruptions

- 1) P. 31 "kill, kill, kill!"
- 2) lower Taylor rule
- 3) "Giving markets what they expect" idea
 - ↳ they aren't contradictions but they don't overlap either.

Could use the same g in the TR-version
 ↳ or: act as if ppl expect the TR & implement optimal policy.

- Miao: \hat{E} -heat → need to state that LIE holds
 ↳ state in paper, not in prez
 "This [it] is a little thin on the properties of \hat{E} , but I need LIE so I assume it"

Endog gain

"g isn't microfounded, but it's very generic
 i.e. very flexible → says that people can
 depend on environment → but g is endog.

Average inflation targeting

↳ not quite clear what model supports
of 1% or more than RE.

Ryan comment on LATs:

29 Sept 2020

Hamilton College is the best liberal arts college in Con.

Consumption equivalents (CE) of welfare 29 Sept 2020

$\xi := CE$ = the amount of cons that would make an agent indiff between being in model a vs ap:

$$\xi := \underbrace{E[W_t^P(\xi)]}_{=} = E[W_t^{AP}]$$

$$E\left[W_t^P + \frac{1}{1-\beta} \ln(1+\xi)\right] \stackrel{!}{=} E[W_t^{AP}]$$

I guess this is the
PV of ξ w/ log u

$$\Rightarrow \frac{1}{1-\beta} \ln(1+\xi) = E[W_t^{AP}] - E[W_t^P]$$

Dynar
formm

$$\ln(1+\xi) = (1-\beta) E[W_t^{AP} - W_t^P]$$

$$\xi = \exp\{(1-\beta) E[W_t^{AP} - W_t^P]\} - 1$$

the interpretation seems to be "100.5 % of lifetime consumption"

Andrea Vedolin meeting

28 Sept 2020

↳ finance fit miss mit was breakoren - Ti
oder NK model isch

→ unklar xi was teil isch
wieso , wichtig

↳ Shleifer wichtig bi infl expectations

behavioral NK model von A.

↳ over & underreaction bei mitffragt.

Framework CB's use to set i ass RE. By which
(mean ...). But survey data shows this isn't
true. In particular.

↳ lit on anchoring E via communication.

Reach out to her when you want to try the 5 min
Spiel for finance people.

Vaishali Garga meeting

29 Sept 2020

Mengdi at TBB - fiscal exp.

Control for things in reg

even tho not causal

- inflation uncertainty

- high/low levels of π

- break the sample or add dummies post-

2012

→ try this w/ buttons in the slides

or title of slide: "time-varying" since that's
the focus

emphasize correlation not causation

other comment:

IRF: decompose into constant gain learning
vs. anchoring

alt: RE model v/ anchoring as an alternative

→ take an avg of $\sin(k)$ as gain, constant gain
IRF

1) diff b/wn AP & PCE

↳ check blog Banque de France

composition of underlying basket \rightarrow housing
scores

\rightarrow not definite evidence

Simple way to handle: "fine-structure in the set of π
and sometimes this is corr w/ π or ρ "

\rightarrow motivates the use of my model

be cautious not to say the fed has to be
symmetric

2) RE vs non-RE.

2 things

A) Emphasize: fine-varying Kullback gain for ppl who
get the fit \rightarrow & why is this an important
feature for monetarist: gain vs. varying gain

B) if DGP has fine-variance: e.g. r^* and π^*
changes

3) Compose results to "Units" in presentation

Intro: debate on consequences for model of
these trends in L-E

Some people say you have to
be more aggressive
Opportunities

Others say it looks wrong
→ "Units"
→ my contnb.

Other notes:

- Forming leads to $\pi^* > 0 \rightarrow$ question: which NK model?
Is st. st. iff $= 0 \rightarrow$ deviations from what st. st.?
→ Maybe just mention quickly a baseline b/c
a 0 st. st. in NK vs. > 0 at reality.
- CEMP:
- EE:
Imperfect info \swarrow can be used to mitigate expectations channel
vs here: excess volatility in E.
↳ looking at imperfect info from another window

→ debate is empirical lit on under-correlation
vs news

Opposite story to lit!

Maybe a downside: forward guidance in my model

↳ interesting

Send updated slides in Oct (2nd half and
we can talk again in late Oct)

Vaishali barga meeting

30 Sept 2010

- Bridge TFP in RE NK
Demand for R&D
Demand shock → growth

↳ fully optimal policy under RE would be a good
benchmark

- Two-axes for RE vs. TR.

- RE, γ^A = e.g. as a fourth column.
↳ put numbers on graph as lines
↳ easier to visualize

- Same for slide 37 : one graph w/ several values
also use $\frac{V}{\pi} = 2.2$ and $\frac{V}{\pi} = 1.1$ as values.
- Slide 34: put in a button to clarify RE IS-
leaving LH-E & why more volatile.

Button on loss to IS & PC curve why so volatile.

Our Barbican meeting

1 Oct 2020

presentation:

→ JMC curse: answer every question too long
 → need to be sharper, quicker
 so ppl don't drag you out of flow
 especially in beginning.

- graphs / fig. in beginning → if they ask questions
 that brings you out then move on & go straight
 to point

Sometimes you need to let them go → first 3 slides.

Content-wise: good.

2 things: 1. Why should I use your system?
 ↳ Not easy model / paper → is this

a way to convince me why I should use it?

2. Result counterintuitiveness \rightarrow like more discussion on it!

(B) so volatile \rightarrow would that be desirable b/c it's so volatile & time-varying

\hookrightarrow prof will ask you this: do you really believe one should do it?

ppl don't care about the answer they wanna hear that you've thought about it.

Cardin Pfleider meeting

1 Oct 2020

RW in π (\rightarrow and in i)

\hookrightarrow breakeven π moves a lot around
marginal announcements

Stock, Swanson et al $E(\pi)$ corr w/ i

$\rightarrow \text{corr}(i, E(\pi)^{\text{LR}}) < 0$ what they
predict

Eric Pust et al

Croen, Charles \rightarrow document distrib of skills
vs - professions

Peter meeting

1 Oct 2020

↳ likely not likely to change

• Lucas (1987) models of B.C.

↳ welfare comparison diff b/c both policy & E
are changing at the same time

→ change one thing at a time!

Even A & Even B

w/ one rule replaced by another

Carolin Pflueger talk

1 Oct 2020

Romer & Romer (2000) "Fed info effect"
10Y Breakeven π \rightarrow S&P 500 \uparrow

$$i_t = \text{smoothed TR} + v_t^* + v_{ST,+}$$

$$v_t^* = v_{t-1}^* + v_{LT,+} \quad \leftarrow \text{Long-term } \pi \text{ shock}$$

\uparrow news about LR π

\hookrightarrow permanently higher π is good news \Rightarrow expansionary

\rightarrow "Fed info effect" \rightarrow Ryan: Schmidt-Grohé & Manku called this the "Neo-Fisherian effect"

Maria Luengo meeting

2 Oct 2020

- PhD in Applied Econ
ID & labor only

5-6 years : 90% research Fed
↳ Minneapolis Fed → no policy work
Philly Fed → more research
Chicago Fed →

Dallas & St Louis are ok
The others are more policy-intensive

The Board is insane → hierarchical

Interview: ask them what their job involves
% policy & research & over time
how it's concentrated in the year

E.g. Philly Fed: assigned to particular
FOMC rounds → 100% policy
otherwise 100% research
→ Boston Fed doesn't work like that

Uni or regional Fed: you can ask about who interviews
Board or large institutions: don't worry.

UK system: Research Evaluation Framework (REF)

every 5 years they do an eval of insti based on research of faculty → then they kindle the funding based on that

↳ junior market is 50-80 in those years

↳ hcl friend

Wiki: the next iteration of REF was to be in 2021, but it's been delayed b/c COVID-19.

Carlos III

one of newest unis (& Pompeu Fabra)

→ created to end an insidious hiring

Not general: Carlos III specializes in
Engineering, business (con
& law)

↳
Econ Dept. → Need top 5 for full prof
Business Dept. not for Ass. Prof.

CEMPI → best place in Spain to get a job

↳ comes from Bank of Spain → money

Master & PhD program

Lots of research

#2 Barcelona: consortium of unis
(Pompeu Fabra, Autonoma ...)

"Good School of Economics"

#3 Carlos III

#4 Alicante Dept of Econ very good dept!
all → teaching in English
→ ask her about Spanish openings!

Talk:

Time use → need to get more fast
& have time to repeat the message!

Answer questions quicker & better if necessary!

Substandard methods should come across
that it was hard!

↳ Send a new draft later or a newer version
of my slides.

↪ Nov!

Chris Cotton meeting

2 Oct 2020

- Core inflation → recession w/ time to clean out oil shocks
- faster at the start
- 1.5 years ago he was on the market

Advisor vs. "Senior Advisor"

Anything below "Chair" / "Chair" isn't overwhelming w/ policy work.

Jenny Tang meeting

2 Oct 2020

GD min job talks? On Zoom they might be shorter.
→ have a shorter version!

Procs outside your dept are slower.

clickable buttons!

, analytical results for simple version

↳ quantitative results for full version: learn $\binom{\pi}{x}$

- if E look like a TR, then opt. policy will look like TR
- the pic of reg :
 - if we were in FIRE, the line should be zero
 - if we were in a gain world, it should be flat at k.
- important point: the other point you're not making forcefully is that they're not about long-run expectations.

"Knowing the model but not seeing the SR shades vs. seeing the SR shades but not knowing the model (me)"

→ my way is more powerful b/c in noisy info their beliefs are only as persistent as the shock.

Noisy info: responses to shocks muted

(but they do generate more persistence
but the overall effect on unconditional
variance is unclear)

↳ here instead ppl learn about permanent objects
which is why the policy responses are large
→ makes it more palatable to ppl b/c
they know that in NK, policy responds more
to persistent shocks.

Either: Jimmy can attend Macro lunch → don't meet
on Oct 16 but meet after talk

Or if she can't attend, can meet on Oct 16 to
go thru slides.

Slavik Sheremiror meeting

6 Oct 2020

(See his comments from his email saved in the BosFed prez folder.)

- Balance item theory & empirics really depends
 - ↳ JMP is nice if you compare policy inst's proper data work
- Reward for this kind of work
- size of effect \Rightarrow very hard to convince don't break, but present w/ explanation
don't say "take it or leave it"

Similar to first guidance puzzle:

small anchoring will persist for ∞ time

↳ discounted EE fit \Rightarrow downplays future fluctuations
Nakamura, Steinsson & McKay "Discounted EE"
& whom they cite
↳ kills off the first guidance puzzle

↳ If there's a way to make anchoring matter only in the immediate future

- Rigoristic

normally a good motivation

but my test is a little counterproductive

It's one way to test for anchoring
but it is the only one?

↳ + discussion on: is it D-cl?
→ misleading!

Maybe say that it will come out of the model
provide intuition

Show knowledge of problem → say that
it needs a model

Show the PCE Inflation vs. 2% target

→ "Why would anyone believe that the
target will be reached?" → or look to evidence
in other papers

Could show CEMF result too to protect yourself.

Or say: I'll have a model & I'll come back to that.

Don't feel you have to answer the question exactly.

- \hat{E}^m vs E_{firms} \rightarrow b/c firms have small costs to learn and high benefits especially large firms!

\hookrightarrow PC would incorporate \hat{E}^m

Gibson & bord: firms act ^{as} ~~instead of~~ as consumers in NZ.

Set up stuff w/ the other fellows!

Reach out to him & other BasEd ppl later!

Shaowen Liu meeting (Virginia Tech isn't 6 Oct 2020 hiring)

Singapore & HK best

1. NUS best
2. Nanyang Tech U
3. NUS - fall LAC

4. Int'l business school

1. HK U

2. Chinese U of HK

3. HK U of Science & Tech

4. City U of HK

5.

Mianyang China

1. PKU Peking

2. Tsinghua

3. Fudan Shanghai

Peking

-1-

tough to get in

4. Tsinghua Transportation U Shanghai

Beijing:

Finance & Econ Schools :

- University of Int'l Business & Econ
- Central U of Finance & Econ

Shanghai:

- Shanghai U of Finance & Econ

Also good:

Xiamen U

Jinan U (Guangdong)

Wuhan U

Ryan meeting : Comments on Sept 21/25 draft 7 Oct 2020

- Content:

disconnected from TR & other results in periods

1. Agents expect st. st. after a certain horizon in the future. If st. st. is like TR, then you can benefit by picking an n .

↳ Intro: careful to cite a magnitude that might change.

2. Cons. equivalent:

Welfare from 2 stochastic worlds

→ get st. st. cons for those & compare
for those → 2nd paper

. Schmidt-Grohé & Uribe: comparing non-lin
it doesn't make sense when model is a
linear approx.

Woodford tends to rescale the welfare term as he likes.

Valid: use utility function & the properly scaled loss function

1. take st. st welfare

2. take loss function to find dev from st. st. loss.

↳ Then it's a 2nd order approx from the st. st.

$$\underbrace{\sum \beta^t u(c_t) - \sum \beta^t u(c_t)}_{\text{dev. from some nonstochastic st. st.}} \approx -\Psi L^W \left(\left\{ \hat{y}_t, \hat{\pi}_t \right\} \right)$$

Woodford tells you how to get 2nd order approx of this

but he doesn't tell you the scales of (figure out!)

You can compute L^W vs L_2^W ↗ alternative policy

Steady-state consumption equivalents:

$$\sum \beta^t u(c_1) = \left(\sum \beta^t u(c_t) - \Psi L^W \right)$$

$$\sum \beta^t u(c_2) = \left(\sum \beta^t u(c_t) - \Psi L_2^W \right)$$

→ compare c_1 & c_2

2nd order approx for welfare under policy 1

Steady-state consumption: c needs to come from the nonlinear model

Maybe $\frac{u'}{u''}$ w/o look c^*

May require additional commitments

thinking aloud

14 Oct 2020

2 points content:

- large interest rate response
- consumption equivalents

3 points presentation

- ✓ draft: conclusion
- ✓ make it snappy
- ✓ emphasize what you will do

• presentation = update from

• what to do w/ opt i? draft

• impulse? ✓ compile a FAQ

• %? ✓ f^* -plot: put % on x-axis label!

No need! ~~X upload draft again to EIM~~

Peter meeting

15 October 2020

Goodfriend's paper has examples where the Fed raised the int rate more than it wanted to in response to an π -scare!

→ could cite that paper! 50-75 or 100 bp vs. Fed's "de facto policy" to move: 25 bp at a time

Also in developing countries 100s of bp moves have been seen.

Goodfriend 1993's aggressive int-rate response

- Sept 1979 - April 1980 : 6.2 pp ↑
- Sept 1979 - Oct : 2.3 pp ↑ in one month!
- March 1980 : 3 pp ↑
- July - Dec 1980 : 10 pp ↑

Jenny meeting

16 Oct 2020

- ~~✓~~: Overlay SPF-E on second axis? → No
- ✓ S.1: Anchored E : tighten! "E stay where they are regardless of how actual π moves around"
Important b/c long-run $E(\pi)$ determine how firms set prices → if LR-E stable, prices are stable.
- ✓ S. 5 "Anchoring expectation formation" → pol won't get it.
How to conduct policy when E can become madworld?
or when policy affects anchoring?
How does a potential unwind affect mon pol?

5.16.

Don't give "overest" a full bullet point.

↳ instead put b/c ppl think it matters for theory (while it doesn't)

⇒ take out this bullet

Take out 3rd bullet point b/c you're not arguing for a constant gain

⇒ don't take out but highlight that for theory you focus on #1.

✓ 5.15 Reads too much like "I'm throwing all these empirically relevant elements together"

put 1 & 2 up together & take out 3
Attude back to motivation slide: gain function is fine-varying in a non-deterministic sense
take out (1) & (2) as not true in the least → maybe patterns
the (3) is true in the least ⇒ that's why it's
sample mean b/c ppl don't need that
↳ this is what you say. ↳ Like to motivation slide [un]

Silently Carrasco et al → should give the example → do it here
say:
May the Great Inflation is still ppl remember
↳ gets the point across that indeg. gain important.

✓ Gain: noisy info looks like this
(Goro & Gordon) (Can say one sentence)

✓ S.18 calibrate variances \rightarrow don't put on slide b/c confusing

✓ S.19 - λ_x take out here
this isn't Smets & Wouters

✓ S.20 put all params in one table

-✓ S.21. Put this and procedure thing in appendix
instead: "I estimate a functional form of the
flexible form

expectations process"

✓ ↳ Repeat eq (18) instead

and plot $\underbrace{g(f) \cdot f}$

spoonfeeds audience

"ala nonlinear"

Avoids nodes discussion

✓ S.22 2015 stay might be going on w/ oil prices
 \rightarrow check! \rightarrow In line w/ other note: Goro et al
Cons. E very sensitive to oil prices b/c gasoline

S. 25 & 26 make it one slide Ramsey, $\alpha = 0.05$
make slide look usually like slide 26

1. empty slide : $\pi_t = -\frac{\alpha}{K} x_t$ Only π_t

2. add on the other pieces

And simplify $\frac{\alpha}{K} \frac{(1-\alpha)\beta}{1-\alpha\beta}$ some simple coefficient

• same for the product
w/ button for full expression

S. 26: move big RHS term to LHS.

$$\pi_t + () = -\frac{\alpha}{K} x_t$$

↳ Now this new term can move too
↳ a new term that can absorb
the cost-push shock

In RE⁺: opt. thing to do is to have π_t & x_t absorb
cost-push shock.

Here, a new thing is E_{T+1} , you can push some of
the shock to the future.

• highlighting is off. $f_{T+1} g_{\pi_t}$ should also show only
in the third

✓ 2nd bullet shows just a single constant multiplying
 $\sum x_{t+i}$

$$\begin{array}{l} \downarrow \\ O(k) \text{ or } O(n) \\ \cancel{O(kn)} \end{array}$$

✓ S.27 put as feedback slide

✓ S.30 RE version of plot?

Don't do TR-E \rightarrow you have good reason
to speculate that w/ reasonably
adjusted E you can squeeze magnitude

↳ Is $\bar{\pi}$ stable? Is 0.1 pp a large
movement in $\bar{\pi}$? \rightarrow Show variations
in $\bar{\pi}$ (or stdder)

↳ The CB can stabilize $\bar{\pi}$ w/ rns
Model spends most of its time close to $\bar{\pi}$
of 0.

✓ S.31 Emphasize: only diff b/w yellow & blue is
the gain \rightarrow so if policy lets gain be high, you
get yellow.

~~S. 34~~ for TR. Solution of γ_{gain} ?
→ maybe you can compare γ_a and $\gamma_{\pi}^{\text{gain}}$

~~S. 35 - 36~~ Is TR Confusing more than it's answering?

↳ doesn't seem to work b/c $\gamma_a^{\text{and},*} \neq \gamma_{\pi}^{\text{gain},*}$

✓ Asymmetry should be there b/c γ_{π} is diff when k is ≥ 0 .

If you plot against k it's there,

It's not there b/c you're plotting against $\bar{\alpha}$.

General notes: diff will be whether some slides are in app or not.

✓ Technical audience: maybe show present but you don't go into detail b/c you want that ppl don't think the detail matters just to show fancy things you did.
↳ App. slides!

Nor is next meeting

Email about Webinars

Work after

- ✓ Statement of RE in \hat{E} (in draft)
- ✓ Varshali comment (29 Sept 2020)
 - Control for things in reg even tho not causal \rightarrow App.
 - Inflation level, infl. uncertainty, break sample in 2072
 - The two look the same?
- ✓ Philippe (29 Sept 2020) can refer to Orphanides vs Posen in "IR less aggressive" part \Rightarrow emph "my contrib"
- Varshali (29 Sept 2020)
 - ✓ - CB loss plot: put Y_t^* on there as a line /
 - maybe I should put Mankiw/Susanto stuff in to clarify why the model is more volatile than RE (at last in app)
- ✓. Carsten Pflueger (1 Oct 2020) Gürkaynak, Sack, Swanson 2005 AER
Stock Swanson et ... (might be Sack, Swanson Gürkaynak)
 - found that $\text{corr}(i, E(\pi)^{LR}) < 0$
- ✓. Chris Colton (2 Oct 2020)
 - do reg w/ PCE core to clean out oil shocks
- Jerry (2 Oct 2020)
 - X - hideable buttons
- ✓ - add to opt policy specification: if they could learn $\binom{\pi}{x}$
- ✓ - She also made some really nice interpretation points (should write up \Rightarrow write a "neat interpretations" collection!)

• Slavik (6 Oct 2020)

- Nakamura, Steinsson & Mckay "Discounted EE"

✓ App: PCE Inflation against 2% → why would anyone believe target will be reached?

✓ Jenny's comments today (first priority)

Note: Core PCE = excl. food & energy

- Change core banknotes
- Change portfolio h-rng.

- Plot in robustness checks in paper
- Rewrite intro/abstract analysis of opt pol

✓ S.3 SOF write out.
Δπ def

✓ S.4. $\hat{\beta}$

✓ S.12 $g_t = (\tau_t, x_t, i_t)'$
Et S_{t+1}

✓ S.18 (Lit prob here) or sources.

✓ S.21 Motivation plot? → argue that it fits the general features (simple model)

✓ S.24 b_1 was defined before. Endogenous gain!

$$\frac{K}{P}, \gamma_x$$

- ✓ S. 27 % of $\Delta \hat{x}$ that results in < 75 bps : movements
 ✓ Add good/bad to inhibitions $\hookrightarrow \approx 60\%$ of time
 ✓ S. 28 oscillatory button
 ✓ S. 31 pause (maybe highlight \bar{r}_{t+1}) in < 100 bps movements
 ✓ add this in LaTeX in:

✓ S. 32 put Preston (Chm73)

$$\hat{\mathbb{E}}_t \hat{X}_x$$

✓ S. 33. anch anch determines extent of $\hat{\mathbb{E}} X_{t+1}$

$E_t^i x_{t+k}$ in IS-curve

20 Oct 2020

Preston (2005) p. 16 (Mac) IS-curve

$$x_t = \hat{\mathbb{E}}_t \sum_{T=t}^{\infty} \beta^{T-t} \left[(1-\beta)x_{T+1} - \gamma(i_T - \pi_{T+1}) + r_T^n \right] \quad (6)$$

Lead one period:

$$(1) \hat{\mathbb{E}}_t x_{t+1} = \hat{\mathbb{E}}_{t+1} \sum_{T=t+1}^{\infty} \beta^{T-t-1} \left[(1-\beta)x_{T+1} - \gamma(i_T - \pi_{T+1}) + r_T^n \right]$$

(2) Take RE at + on both sides (apply LIE)

$$E_t x_{t+1} = E_t \sum_{T=t+1}^{\infty} \beta^{T-t-1} \left[(1-\beta)x_{T+1} - \gamma(i_T - \pi_{T+1}) + r_T^n \right]$$

(3) Now take (6) and pull out the $t+1$ terms:

$$x_t = \hat{\mathbb{E}}_t \left[(1-\beta)x_{t+1} - \gamma(i_t - \pi_{t+1}) + r_t^n \right] + \beta E_t x_{t+1} \quad \text{IS (RE).}$$

→ I think it must be that \hat{E}_t doesn't satisfy L.I.E. while \hat{E}_t^i does

It must be b/c it's step (2) that is different between RE and learning. → Yes, I think it's fair to say that \hat{E}^i satisfies LIE while \hat{E} doesn't.

Anticipated utility (Kreps) → is a way of saying that LIE holds for \hat{E}^i .

Ok - but why does for RE, where recursive & non-recursive formulation coincide, simply no role for E_{t+1}^i ? ⇒ it's not that it doesn't, but it's that E_{t+k} is fully rational, while $\hat{E}_{t+k}^i =$ partly non-rational and so it moves more.

S. 21 p.m. apart

- ✓ Paper: put in robustness checks for regression
- ✓ Paper: rewrite optimal policy section (\rightarrow intro & abstract)
w/ big results & explanation
- ✓ Cover letter: change templates (concise, avoids numbers)
- ✓ Change tracking portfolio numbering.
- ✓ Website: add "on market"

Macro lunch

21 Oct 2022

- 3. Reg slide: Robert: Coibion & Goro \rightarrow f : answer not crisp
- Mario: add i index
- 5. Pablo: LR-E money isn't relevant now
- \hookrightarrow the right answer is that this is a timeless question & model: history teaches us that LR-E can move, so it can happen again
- Fabio: "Paper" not "Project"
- 5.7. Rosen: lacking motivation why admissible E ?
Robert: Show me most imperfect info can't give you this if uncertainty declines over time

Rosen: can sidestep this discussion

Fabio: you lost control

s.14 - 15 Rosen: Dn3 13-4 OLS

□ Ryan: only again learning is RLS

s.16 Jarrowir: since E behavioral, you can't do optimal policy

s.20 Ryan: Can run motivating reg in a non-parametric

□ way and obtain the same thing?

s.26. Pablo: λ_x is chosen by mon pol optimally?

s.27 Pablo: large response in policy

□ \hookrightarrow compute equivalent TR coefficient
and see how large it is

□ \hookrightarrow show histogram of $x_t \rightarrow$ polynomials
use

s.28 □ Pablo: size of stock / what's on Y-axis

- report unconditional volatilities

- or

- use RE-benchmark and show relative to that

After talk

Rosen

- intro doesn't work too well

- set the table for why not RE

- estimate g from reg directly, very straightforward

- downward trend dominates first graph \rightarrow

- State-dependent not just time
anch. dep. needed
- behavioral agents, mon. pol. exploits that
↳ ass. that CB knows a lot (model & \hat{E}^t)
is very strong

Jaronne: Lucas-critique

- Rosen:
- write down what $g(\cdot)$ looks like
 - Answer to Jaronne: "relax full info ass
in a way that's 'adjacent to optimal'
(if uncertainty about the world). So instead
of ass-ing something, I use adaptive
learning which is robust."

Luca:

- \square if π^L is nonstationary in the data
then $\text{Corr}(\pi^L, \bar{a}_t) > 0$ and therefore under
RE $\bar{\pi}$ should be corr w/ π_t

- Mario:
- a reg. is dangerous b/c ppl ask too many questions
 - maybe cite 2-3 papers as an intro
 - Stop fighting: just say "you're right" & move on
 - Lucas critique: lots of papers don't worry about
it like Sims & Zha (2006).

Ryan meeting

- went off in ways that plausibly can go wrong in a summary
- send Ryan the list of FAQ and send Ryan
 - Introduction doesn't work
Supp. we just kept the quote slide
maybe not read the whole quote
"CB-ers have been talking about E-moder.
for a very long time & now
Problem: we don't have a good concept
of what anch is. So my goal is
to show you a model ~~that~~ based on
a realistic description of E-information
that provides that notion and helps
analyze how policymakers should respond
to it."
→ Don't worry too much that ppl. say
COMP already had a model.
→ If ppl say "why don't we see the data?"
→ "Other authors have shown that this works well,
let me defer to my estimation & you'll see

it captures the data well.

↳ Early January we can do a test w/
both Intro's

Pablo: LRE isn't moving why worry?

1. Fact that policymakers are talking about it shows it's a concern
2. The model can talk about both anchored & when unanchored
→ all the more reason to consider this model.

Preview of results:

- ☒ • Nonlinear effects of f_L
(Even constant coefficients matter more when f_L is large)

s. 15 good at making connection to Lit.

If who stretches too long: "Lots of good lit talks about it, I'll describe the connections in detail (→ s. 15) " to postpone

↳ Then you can "skip" the lit review w/o saying that you'll skip it.

Jaronir: Lucas critique

Goal: take critique seriously

Acknowledge there's no perfect sol
but you see value in the exercise

"The Lucas-c. is important whenever we
do econ.

But my view is we need a structural
model of E-formation. Domestically is
RE. Argyle (it says that it's not a great
model. I'm offering an alternative model.
While it offers a behavioral rule,
there's evidence (in fact & in data)
it also incorporates a channel that
captures what I'm interested in
(unanch) so that's why it's a valuable
exercise.

Maybe one can argue that the model
captures well $E \Delta$ across pre- &
post-Volcker.

\tilde{R}
consistent
w/

↳ There was a structural change
in policy (and RE doesn't fit how E changed).

→ f: What's optimal about it?

"I agree. My model is a good struct. model of how behavior works. It's not derived as an outcome of optimization. It would be interesting to see whether it can be derived from an opti problem."

s. 20 absolute value \rightarrow take it out.

- functional form - say it for g but don't put in slide
- intro shades in calibration

s. 21. Good pic:

- fe & gain on one plot
 - ↳ plot separately the implied \bar{v} against the SIF but that won't do what you want
 - but it's a trap
 - take it out
 - ↳ polish like Ryan: can you estimate the reg. directly (do it in DCC.)

Find the form $q(\cdot)$

Isognomism \rightarrow make $Cg.(\theta) = 0$

choosing 5 params w/ 600 moments
Use avg SIF and idiv SIF to see if it makes sense.

Fabio: λ_x optimally

Ryan: Is RE necessary for λ_x to be what it is (i.e. is the di-quadr. objective dependent on E-formation?)

↳ check the adaptive optim. pr.

We don't know, so I'm using the one from RE.

S. 28 · magnifico good question.

• "strongly anchored"

"weakly anchored" (instead of again)

"unanchored"

"if I had plotted again it would look just like this".

"RE" last

Draft: 2nd reading 2 options:

hand in by next week to get ready for Nov 15

hand in before job talks

↳ likely this option generates more helpful feedback.
→ let him know on Friday!

22 Oct 2020

- ✓
- Saturday: read thru current draft & do corrections, then save a version for submissions.
 - Turn to cons. equivalents.
 - ✓ • size of IRFs (Figs 5 & 7) \rightarrow switch to cost-push shock, then is larger.
 - direct estimation of $g(\cdot)$

Brian Dombeck meeting

26 Oct 2020

- RLS: It is a Kalman Filter
 - \hookrightarrow in eq. (21) for paper, invert 2nd moment matrix to weight less volatile data more
 - \hookrightarrow how does that relate to endog. gain?
 - But 2nd moments should move around as well \rightarrow so how should you weight stuff (R^{-1})

Quinn: Intro & conclusion \rightarrow perhaps you wanna put in future research: est. b is a generalization

\hookrightarrow PEV decomposition \rightarrow how some shocks adjust the gain vs. the mechanical adjustment

- ECB → be ready to answer what happens at ECB.
 ↳ could answer using learning as a selection criterion?
 b/c again is worked which is E-stable
 we do know
- NK model: 2 equil. →
 long. trap unstable under learning

Adaptive learning & currency crisis

Kang In-Koo Cho : Learning Dynamics & Currency Crisis
 2008, Macroecon dynamics
 Escape dynamics (like sunspots & herding)

Maybe move reg to after the Intro
 to a section called Motivation.

Stream of consciousness thoughts on Cho & Kang
 ↳ send by email.

Ryan meeting

11 Nov 2020

Make list of 10 possible places for signal & we can talk about it.

Start working on interview script → practice w/ other students!

Stefano Ensepi meeting

12 Nov 2020

Aggressive if you don't have AD

but when you do have AD, as monopol, you become very not aggressive!

Check with option fit in Anchored. → continuous (and Cho & Kao)

! 1. Learning not optimal → "but how can you have an optimal filter when you don't know the DGP?"

2. EE is LH-learning for general interest audience:

"EE assumes that monopol can control output directly, so the whole AD-side is out. Here instead we include AD."

→ Reach out to Stefano, interested in working together?

Stefano prezi \rightarrow write him email!

~~Email~~ Could one say that L(E) holds for \hat{E}^i but not for \hat{E}^j ?
(for IS & PC curves non-recursive)

Ryan: agents don't know the Fisher rule in the LR?

S: yes that's right.

Jaromir: asking the famous question:

S: "w will always depend on policy \rightarrow expectations
 \uparrow_{LR-E} are dependent on policy"

"g is policy-invariant there" (b/c again learning)

\hookrightarrow "but policy still influences expectations, even here"

J: worried about Lucas critique.

S: "I'll give you cheap answer: in est, we allow for diff gains and compute policy for that."

The last B question is how do you shift the gain.

($\rightarrow L_j$) The gain parameterizes E , but it doesn't mean E don't adjust to policy. There is

some Lucas critique, but E-formation being policy invariant doesn't mean expectations are - they're not."

David:

Lucas-critique: Have you thought about how to introduce optimality to beliefs?

- "Boero et al. → they have a wrong RG (too high) first like we do"
- Susanto: "Why don't you test a term structure eq. + equation-formation?"

S: "Let me show you what I have, just give me a sec."

Email

• Maybe ask him for the slides.

Email

• Oscillating RFS?

- Rosen: Forward guidance?

S: "Philosophy: if you can control E directly, you'd done! But then we'd have to control for whether ppl believe you rk. Our intention here is to start w/ a primitive."

Angelidis et al. Over extrapolation-evidence is mounting.
This is how far from E, the question:
What limits does it impose on mon poly?"

Susanto: - like of lit Ken French (?)

Survey E in term structure est fits better
than RE.

- why don't you show that your E-struct
fits the term structure better?

S: "Model has term structure of E"

Sus: - But same question

S: "w/ Grump we have that, but you don't
fit the term structure well b/c you don't
have a big/risk premium in the model.
So we capture in the best poss. way
of term struc of E, not necess. the int
rate." ^{expected short rate}

Sus: reg future^K rate on (long-short gap)

is the usual thing to do. So you could plug in
E(short rates) and see how well you do.

Jenny Tang meeting

13 Nov 2020

Interviews

Schedule people you care least about first

→ when those should be 7am or late in
eve (6-7pm)

↳ opt in slots 1-3 pm or 4pm

Best: early afternoon of first full day

↳ they begin calling after first day

BoFED starts making calls at least one week
after the AEA, and then FOMC in Jan
screens up the interview

Int'l:

↳ see intro: interesting, & what you do

Then: 3 bullet point thing

After 5 min, you will be stopped

↳ so be ready to go down different branches

So you wanna get punchline in there
before you're set off on a tangent.

10-20 min. Good sign if ppl ask a lot of questions →

→ interested & engaged.

But it can happen that they're broad and ask
"do you have anything else (more interesting) to
tell us about?"

→ be prepared to talk about other work
& especially research agenda

↳ show that you're broad

e.g. BosFed is a small Fed, so we need
ppl who're good at multiple things

↳ so hint at your other projects during your speech
(Don't push it too hard tho.)

BosFed 45 min

20-25 min on JMP

5-15 min on other work

5-15 min on "questions for us"

and BosFed has their own little speech (!)

Lib Arts schools might have one too
Other schools usually don't.

ask about policy work! LAS → ask about students.

Be prepared about anything on CV.

Baseline Expectation: people have read your abstract & maybe skimmed the info
(but maybe months ago!)

Get list of interviewees!

→ More interview next time!

Opt policy generates lots of challenging questions
from micro theorists!

Ppl might be on committees who were on the market last year! And they ask challenging questions.

I'll send the AYEW slide.

Ask about tenure requirements in reports only. And frame it like this: "What does a successful assistant prof. profile look like?" (and not "What are tenure req?") You don't wanna sound like "What's the bare minimum I need to do?"

Prepare AGM presentation

16 Nov 2020

✓ s. 11 not RLS

✓ "Agents"

✓ s. 12. Same (~~x3~~)

✓ s. 13 Assumptions on g ?

✓ s. 14 Stake out "how should i?"

✓ s. 15 SPF

- s. 17 How to intro β 's?

✓ s. 24 : Neary on # (take 15 bp out)

✓ s. 30 : nonlinear

Initialise expectations process
at CEMP and manually
select β that match the
moments.

Morning rhythm

17 Nov 2020

✓ s. 29 (too many steps)

✓ s. 26 Show $E \rightarrow$ spilling back to obs?

Ernesto Pastén Meeting

17 Nov 2020

Gobbi & Gómez w/ Raphael Schoenle

Surveys on $\bar{E} - E \Rightarrow$ after Powell's announcement

↳ None! No reactions in $E \Rightarrow$ in this w/ my model

→ Most learning story get trouble when there are

big surveys (in the data of E)

dynamical rational expectation \rightarrow paper Akerlof

\hookrightarrow If you can estimate learning, you can est these too

Review prezzi

17 Nov 2020

1. Is it learning by observing? Or by communication?
2. How quickly do markets adjust? How quickly do they absorb new info?
3. Info-set?
4. SPF \rightarrow not representative of MA-E \Rightarrow FAQ!
5. How do things change if the Fed targets 2% π , and not 0%, as in the model? \Rightarrow PAR!

Note: Giovanni Caggiano (Monash) knows my supervisor (so Ryan?)

Ryan meeting

18 Mar 2020

Mannheim - good signal

Second signal: more insurance Chile CB.