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RIKSBANKENS
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THE SWEDISH FOUNDATION FOR
HUMANITIES AND SOCIAL SCIENCES



COMMENTS: MODERN DSGE MODELS

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Much Progress over 40 Years

- Ad-hoc IS-LM models
 - Replaced by DSGEs with
 - Optimizing households and firms
 - Forward-looking agents
 - Market-clearing prices
- ⇒ Designed to analyze policy



Two Progress Reports

- Eichenbaum:
 - DSGEs are used by *and* useful for central bankers
- Uhlig:
 - DSGEs are not yet useful for central bankers



DSGE: Achievement

- DSGEs are now empirically plausible



DSGE: Achievement

- DSGEs are now empirically plausible
 - Early RBC models
 - No money
 - Frictionless markets
 - Missed key properties of data
 - Early NK models
 - More qualitative than quantitative



DSGE: Challenge

- DSGEs are now empirically plausible



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- DSGEs are now empirically plausible, but
 - Empirical fit due to
 - Non-micro-founded frictions
 - Non-structural shocks
- ⇒ Effectively have *wedges* in focs



DSGE: Challenge

- DSGEs are now empirically plausible, but
 - Empirical fit due to
 - Non-micro-founded frictions
 - Non-structural shocks
 - ⇒ Effectively have *wedges* in focs
 - Are these models useful for policy analysis?



Quantitatively Important Shocks

- Exogenous shocks to
 - Wage markups
 - Risk premia
- Account for most variation in real activity



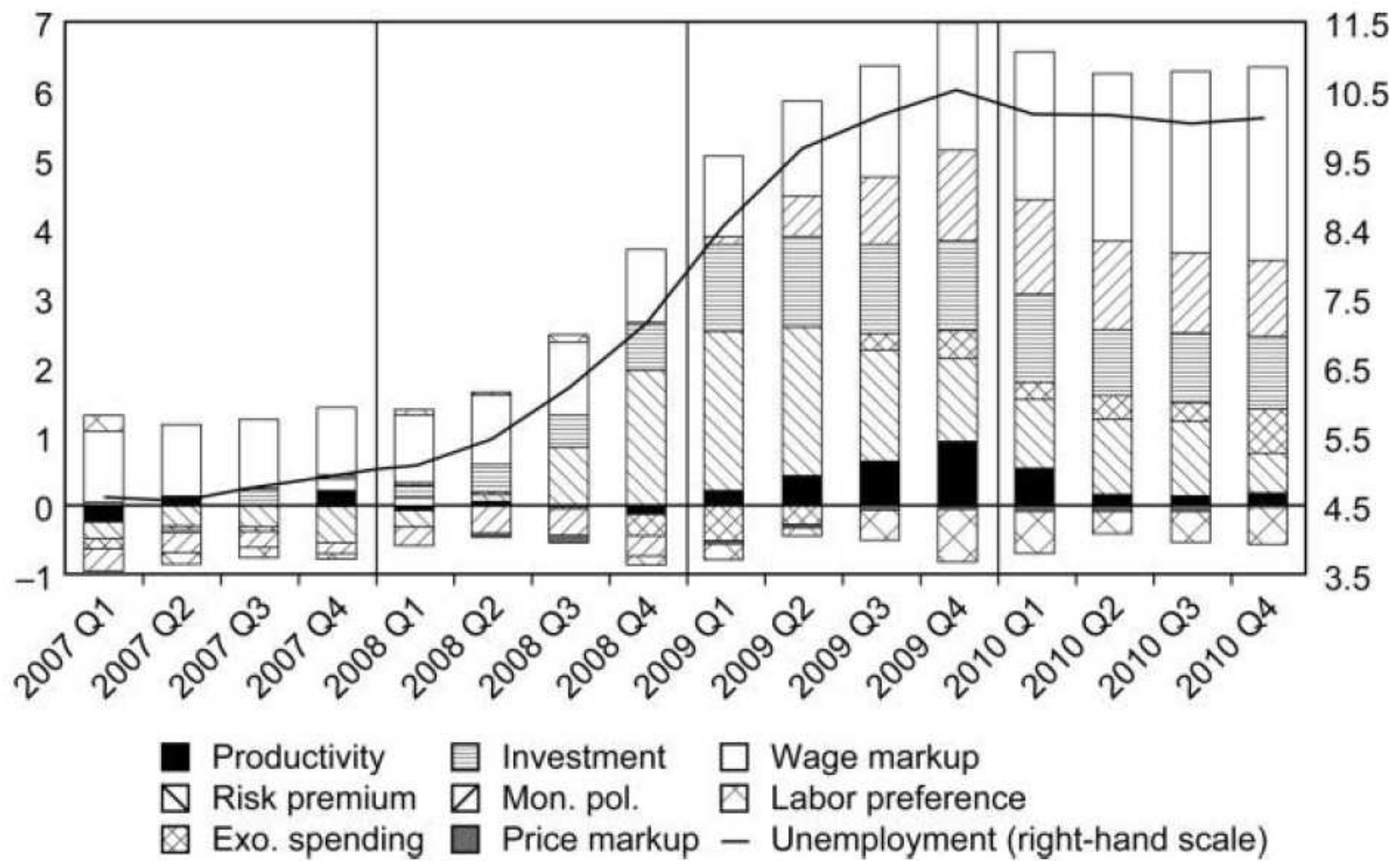
Quantitatively Important Shocks

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... Next, consider evidence for key labor market variables

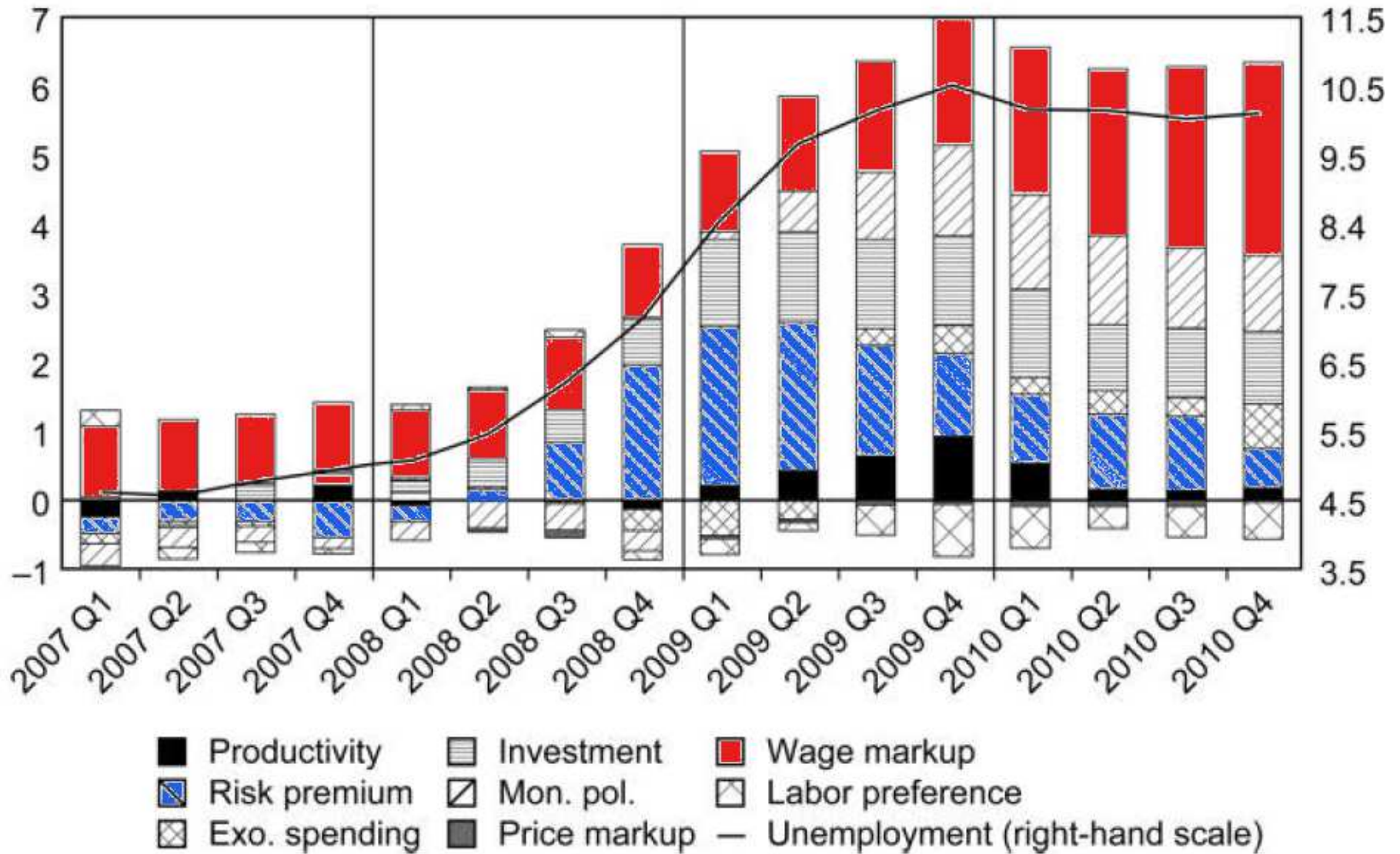


Unemployment (Gali, Smets, Wouters)



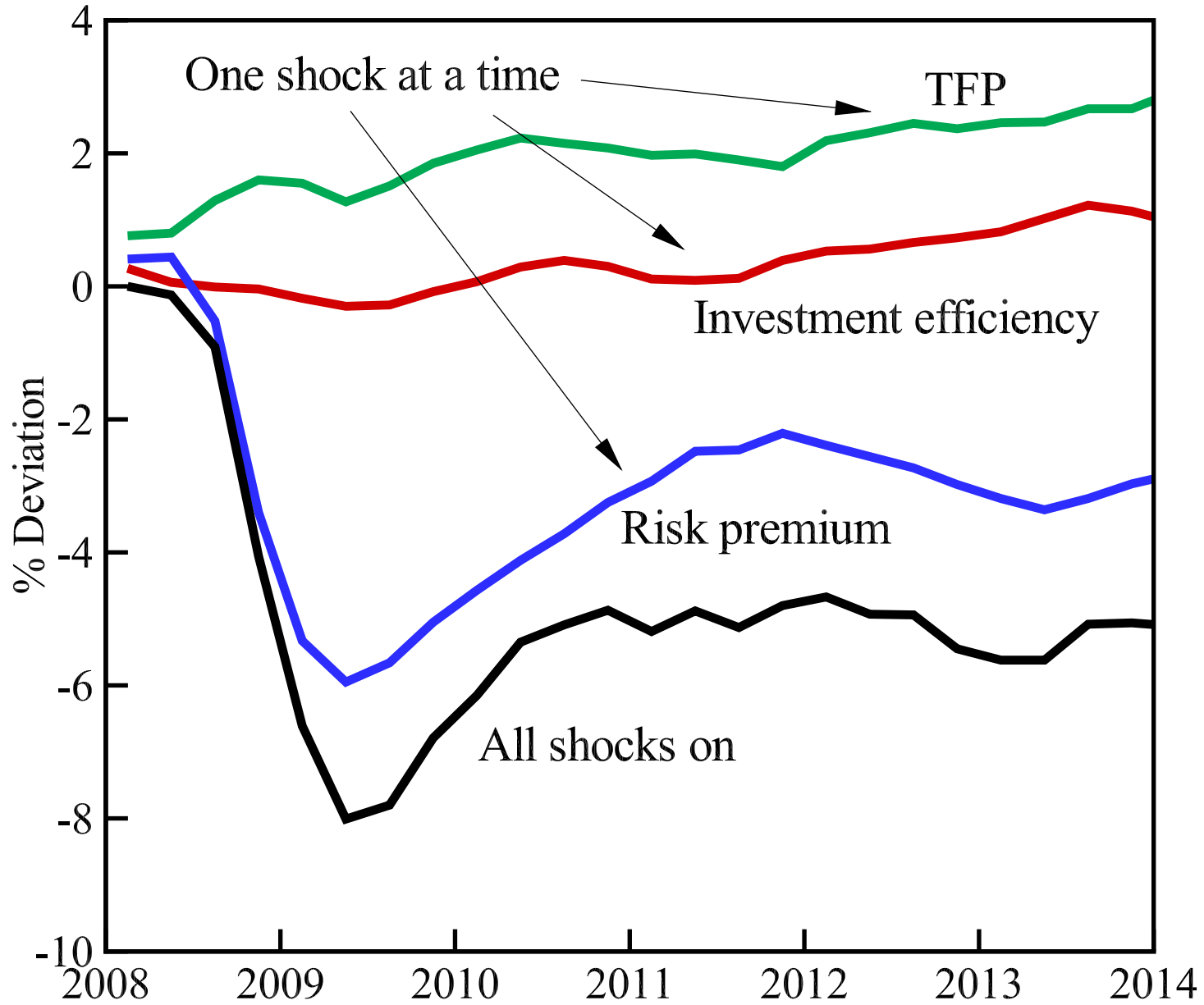


Unemployment (Gali, Smets, Wouters)





Hours (Gust, Herbst, Lopez-Salido, Smith)





Shocks or Wedges?

- Invariant to monetary policy?
 - Wage markups:
 - Preference shocks?
 - Monopoly power shocks?
 - Risk premia:
 - Flight-to-quality shocks?
 - External financing cost shocks?
 - Capital quality shocks?
- Without structure, summarizes extent of our ignorance



A Way Forward

- To do policy analysis, need to:
 - Identify which wedges most important
 - Use findings to identify promising DSGE models with
 - Micro-founded frictions
 - Primitive, interpretable shocks
 - Discipline analyses with micro evidence
- So far, have only done step 1



A Better Way Forward

- More emphasis on designing rules and institutions
- Lots of examples from the Minneapolis Fed, eg,
 - Wallace, “A Modigliani-Miller Theorem for O-M Ops”
⇒ Relevant for Quantitative Easing
 - Sargent-Wallace, “Unpleasant Monetartist Arithmetic”
⇒ Relevant for current Euro crisis
 - Kareken-Wallace, “Deposit Insurance and Bank Reg”
⇒ Relevant for Too Big to Fail
- Which were seeds of later quantitative DSGE analyses