



13TH JACQUES POLAK ANNUAL RESEARCH CONFERENCE
NOVEMBER 8–9, 2012

Macroeconomic evaluation of labor market reform in Germany

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Paper presented at the 13th Jacques Polak Annual Research Conference
Hosted by the International Monetary Fund
Washington, DC—November 8–9, 2012

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SOME COMMENTS ON

**“MACROECONOMIC EVALUATION OF LABOR
MARKET REFORM IN GERMANY”**

BY T. KREBS AND M. SCHEFFEL



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13th Jacques Polak Annual Research Conference, November 2012

OBJECTIVES AND APPROACH

○ 2 Objectives:

- Assessing unemployment impact of decline in unemployment benefits (for long-term unemployed) induced by 2005 Hartz IV reform
- Assessing welfare effects of the reform, for different groups and overall (income versus income *insurance* effects)

○ Approach:

- General equilibrium macro model with job-search-driven unemployment
- 3 groups: employed E; short- and long-term unemployed ST U and LT U
- Idiosyncratic shock in each t with 3 components: labor market status (E or U), unemployed status (ST U or LT U), human capital (iid shocks)
- Idiosyncratic shock cannot be fully insured → market incompleteness
- Unemployment benefits (UBs) affect U through impact on job search
- Risk-averse households maximise lifetime utility = $U(\log C, \text{search effort})$
- No nominal rigidities (“real” model), no real rigidities

4 KEY RESULTS

- LT impact: reform lowered *equilibrium* U (U^*) by 1.2 percentage point, reflecting increased job-search intensity.
- ST impact: gains materialize quickly, with quasi full impact in 3 years and full impact in 5 years
- Reform raised welfare of E but reduced welfare of ST U and LT U:
 - Reduction in conso tax rate required to finance UBs benefits all groups
 - Loss of income insurance harms all groups... but larger loss for LT U since immediate income loss and finding job still takes time
- Reform increased *social* welfare (based on population-weighted average of utility of 3 groups)

1. MODEL AND ASSESSMENT OF THE LT IMPACT ON U*

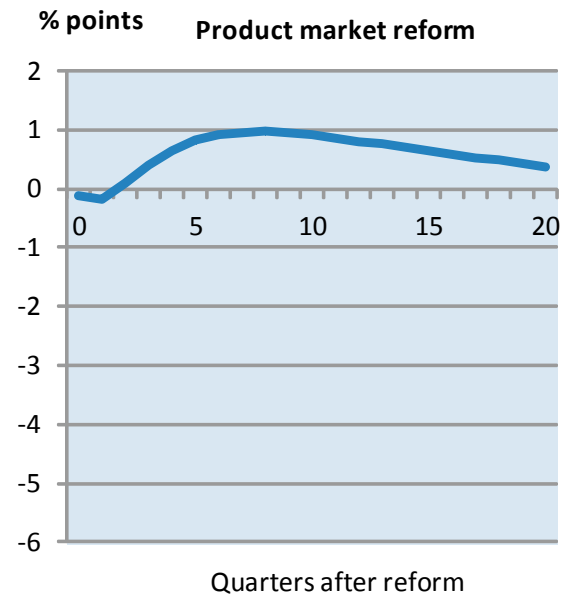
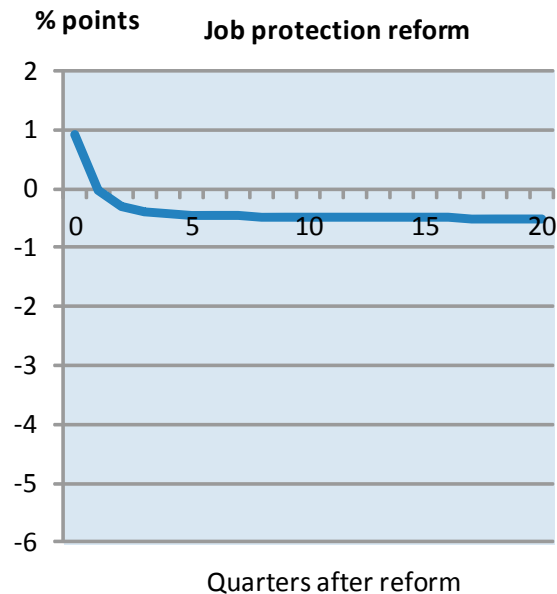
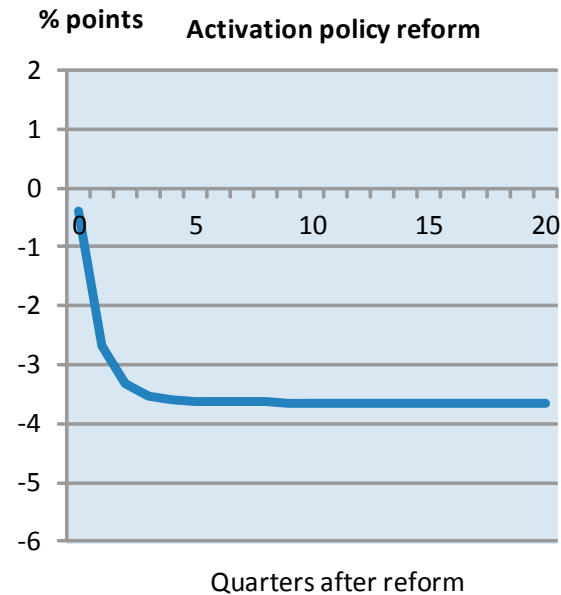
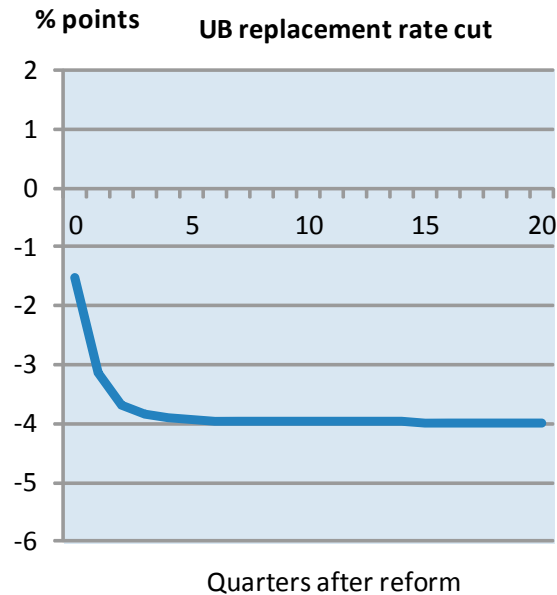
- Macro model approach welcome (micro econometric estimates do not capture well GE and dynamic effects; macro estimates subject to robustness/endogeneity)
- Could also in principle be used to assess activation policy reform, a core element of the Hartz reforms (also affects effectiveness and intensity of job search)
- Price to be paid for rich analysis of welfare effects is fairly poor representation of labor market (competitive labor market for Germany)
- Even so, assessment of impact of Hartz IV is in line with empirical elasticities (e.g., -1.2 versus roughly -1 based on Bassanini and Duval, OxRep 2009) and consistent with shift in Beveridge curve...
- ...possibly because model adequately captures the key channel (job search intensity)...
- ...although estimate is sensitive to calibration of key parameters, primarily responsiveness of job finding rate to benefit payments

2. ASSESSMENT OF ST/DYNAMIC IMPACT ON U

- *Short-term* impact of supply-side reforms = much more contentious issue, especially in current macro-policy situation
 - e.g. “paradox of toil” vs. “wealth effect” arguments (# for # reforms?)
- *A priori* the model is NOT suitable for this purpose:
 - Absence of real rigidities (other than job search frictions) may overestimate speed at which short-term U effect of reform materializes
 - e.g. real wage rigidity in presence of wage-reducing reform
 - Absence of nominal rigidities → rules out demand effects from reform, which can matter under zero lower bound...or monetary union
 - e.g. consumption decline by credit-constrained U households could more than offset increase (if any) by other households
- But in practice simulated dynamics comes close to that under DSGE model with explicit firm entry and hiring/firing dynamics (frictions)...
- ...because UB reform affects hiring but NOT firing (# product or job protection reforms) and may not be as deflationary as often assumed

SIMULATED UNEMPLOYMENT RATE IMPACT OF VARIOUS REFORMS

(CALIBRATED DSGE MODEL WITH DYNAMIC FIRM ENTRY AND JOB DESTRUCTION/CREATION)

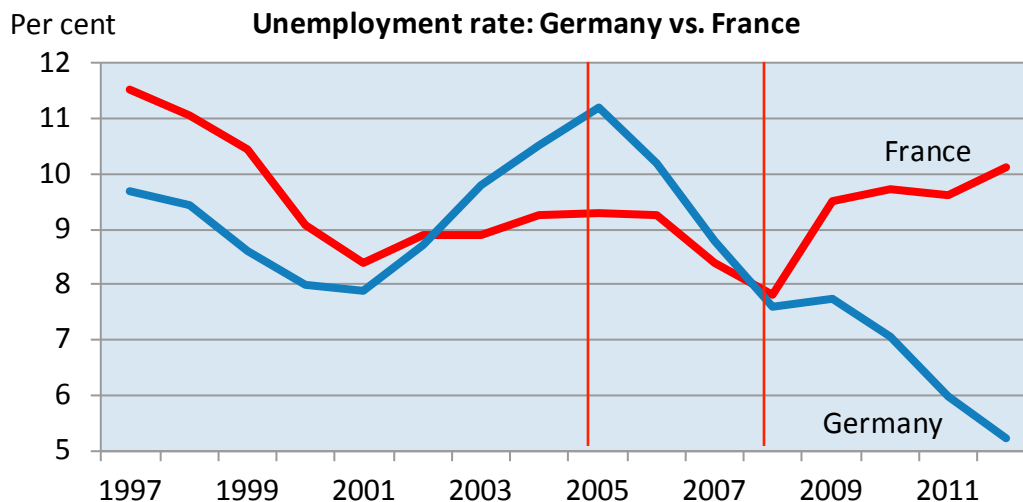


3 AND 4. WELFARE EFFECTS OF REFORM

- Welfare of individual groups:
 - It is a *difference* between a gain and a loss
 - Sensitive to parameter calibration → need for more sensitivity analysis regarding e.g. specification of disutility of job search, elasticity of job finding rate to UBs + assumed risk aversion is rather low
 - Welfare gains could be smaller in the real world:
 - Slower materialization of net job gains, adverse impact on risk taking and productivity (Acemoglu-Shimer EER 2000), higher risk aversion?
 - But they could also be larger:
 - Depreciation of human capital of LT U + over-statement of decline in income of LT U due to assumption that capital income = $f(\text{UB RR})$?
- Social welfare calculation problematic: E and LT U do differ in their characteristics (e.g. education) in real world, so social welfare function problem applies

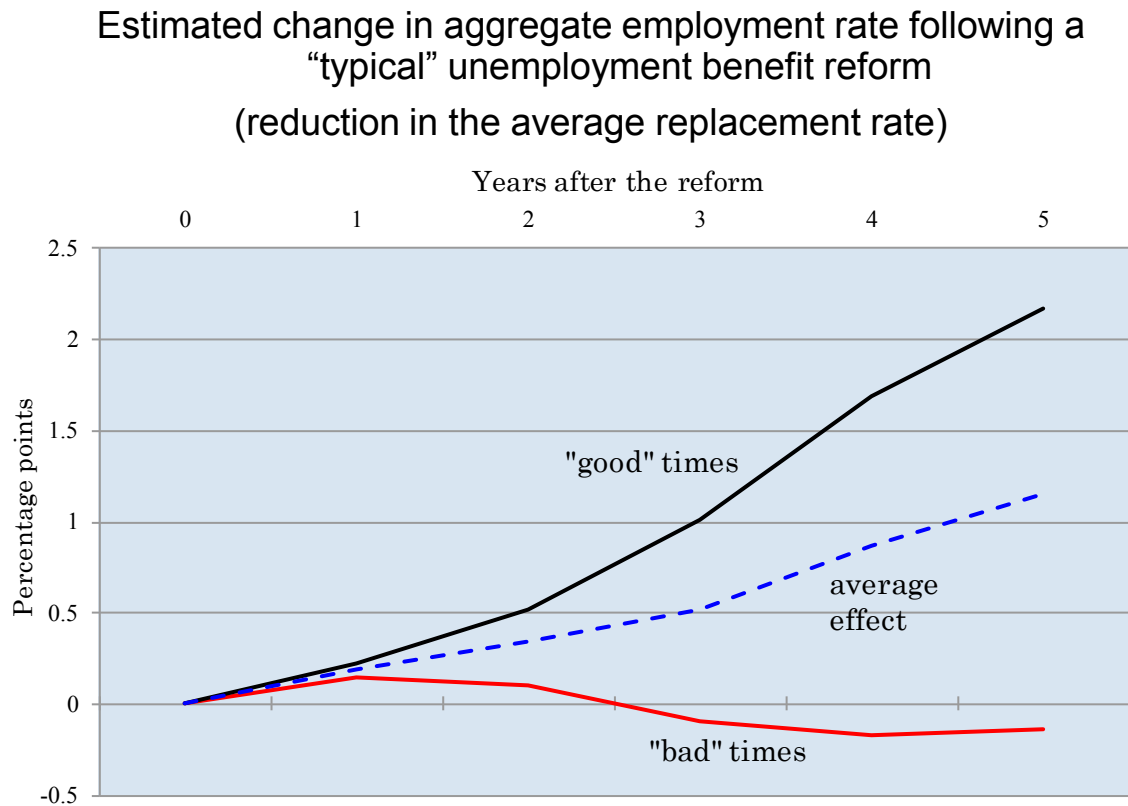
CONCLUDING REMARKS

- Finding that Hartz IV lowered unemployment significantly and fairly quickly is plausible
- Welfare effects of reform are harder to assess
- Hartz IV benefited from favorable circumstances: right before growth boom, major activation reforms as part of earlier Hartz reforms
- Most striking is response of German labor market to 2008 GFC: role of Hartz IV or working-time flexibility (short-time work scheme, collective agreements, individual time accounts) and earlier activation reforms?



CONCLUDING REMARKS

- Labor market benefits from reforms in southern European countries may take more time to materialize in current context...



Source: Bouis, Causa, Demmou, Duval and Zdzienicka (2012), OECD Economics Department Working Paper, No. 949.

THANK YOU!