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Macroeconomic Evaluation of Labor Market Reform in Germany

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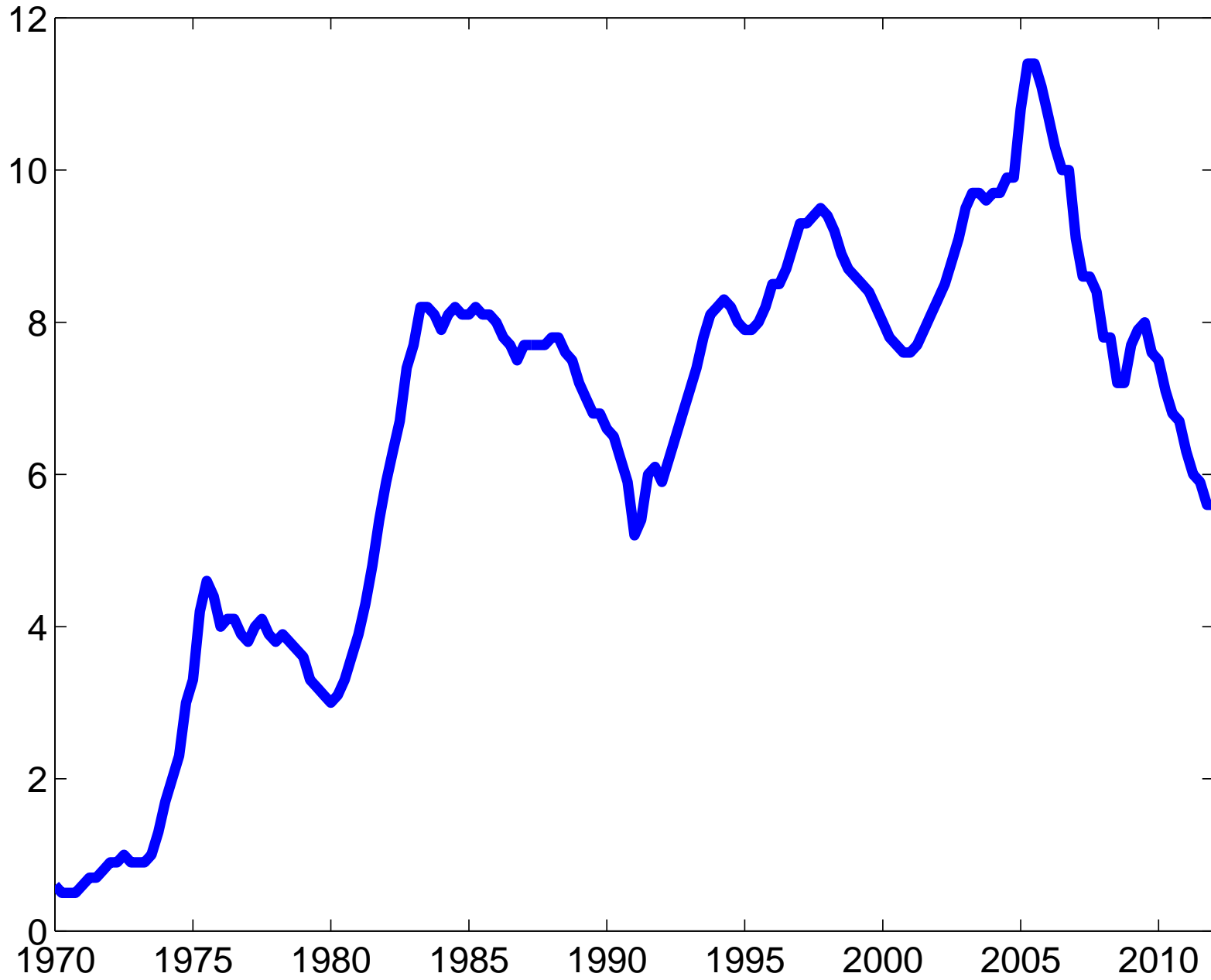
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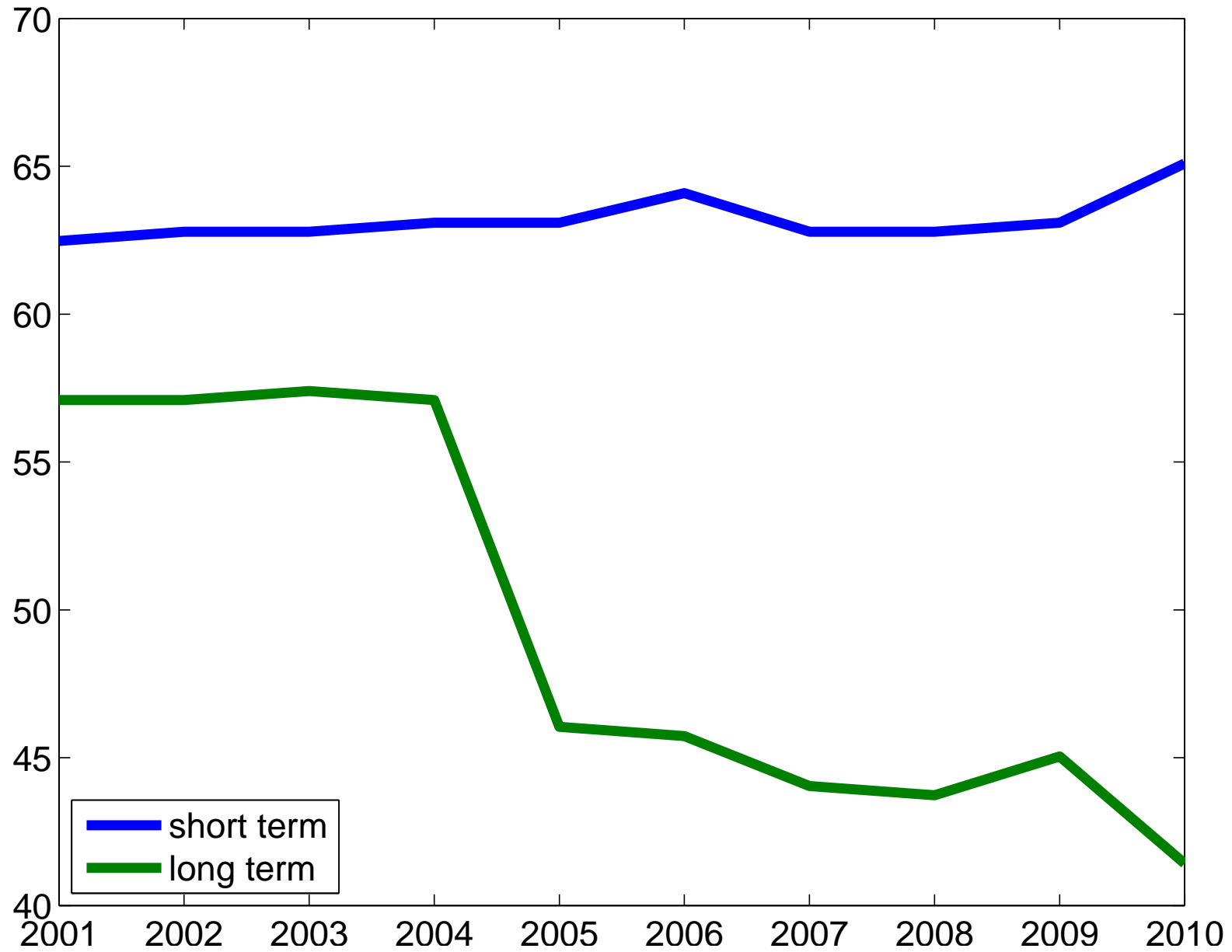
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Unemployment Rate, Germany 1970 – 2012



Average Net Replacement Rates, Germany 2000 – 2010



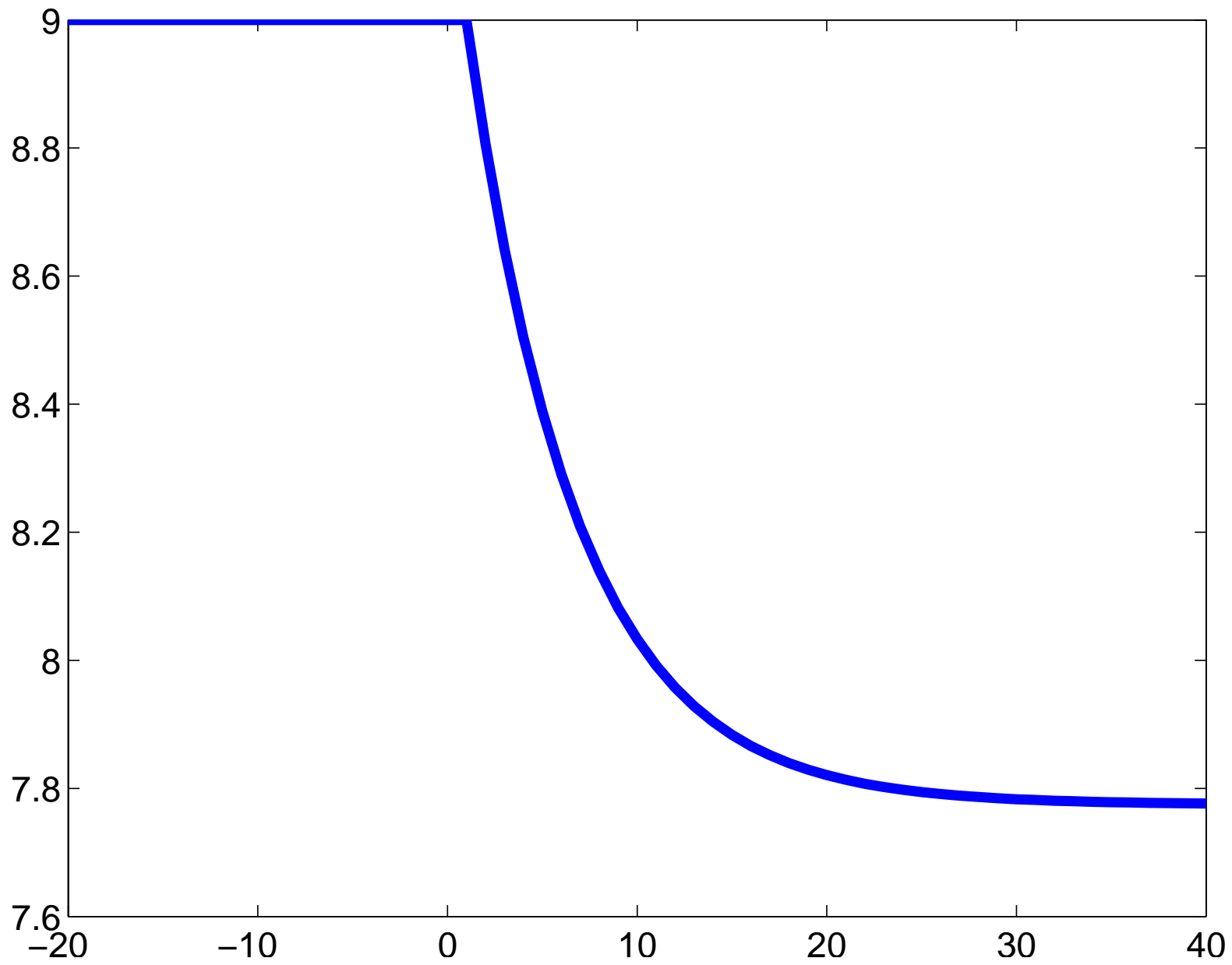
The German Labor Market 2000-2010

- 2000-2004: persistently high unemployment (Eurosclerosis)
- Labor market reforms (Hartz I-IV reforms) 2003-2005/6
- Hartz IV in Jan 2005: significant reduction in unemployment benefits for the long-term unemployed
- 2005-2008: unemployment declined from 11% to 7.5%

Main Questions and Results

- Question 1: How much of the observed decline in unemployment was due to the Hartz IV reform?
- Answer: Hartz IV reduced the unemployment rate permanently by 1.2%
- Question 2: Why is there so much resistance to Hartz IV in Germany?
- Answer: Because there are winners and losers (unemployed experience a welfare loss)

Unemployment Rate, in Percent



Further Results

The reform had the following effects:

- Output expansion
- Real wage decline
- Reduction in human capital investment (on-the-job training)

Method

Structural interpretation of German experience:

- Develop a model
- Calibrate the model using pre-reform data for Germany
- Use the calibrated model to simulate the macroeconomic and welfare effects of Hartz IV reform

Model

- Incentive-insurance tradeoff
- Households are risk-averse
- Unemployed households receive unemployment benefits and choose search effort
- Distinction between short-term and long-term unemployed

Model

- Growth Model with physical and human capital
- Competitive labor and capital markets
- Missing: Matching, endogenous job separation, non-trivial firm decision

Equilibrium

- Model is tractable (aggregate state is 4-dimensional)
- We compute stationary equilibria and transitional dynamics
- No business cycle analysis in this paper (interaction between reform and macro shocks)

Calibration

- Match number of important macro facts (unemployment rate, share of long-term unemployed, transition rates)
- Match a given job finding elasticity
- Use calibrated model economy to simulate the effect of the reduction in unemployment benefits for the long-term unemployed

Table 1. Macroeconomic Effects

	Pre-Reform	Post-Reform
unemployment rate	9%	7.78%
job loss rate (short-term)	0.24	0.252
job finding rate (long-term)	0.06	0.089

Results II

Table 2. Welfare Effects in Percent of Lifetime Consumption

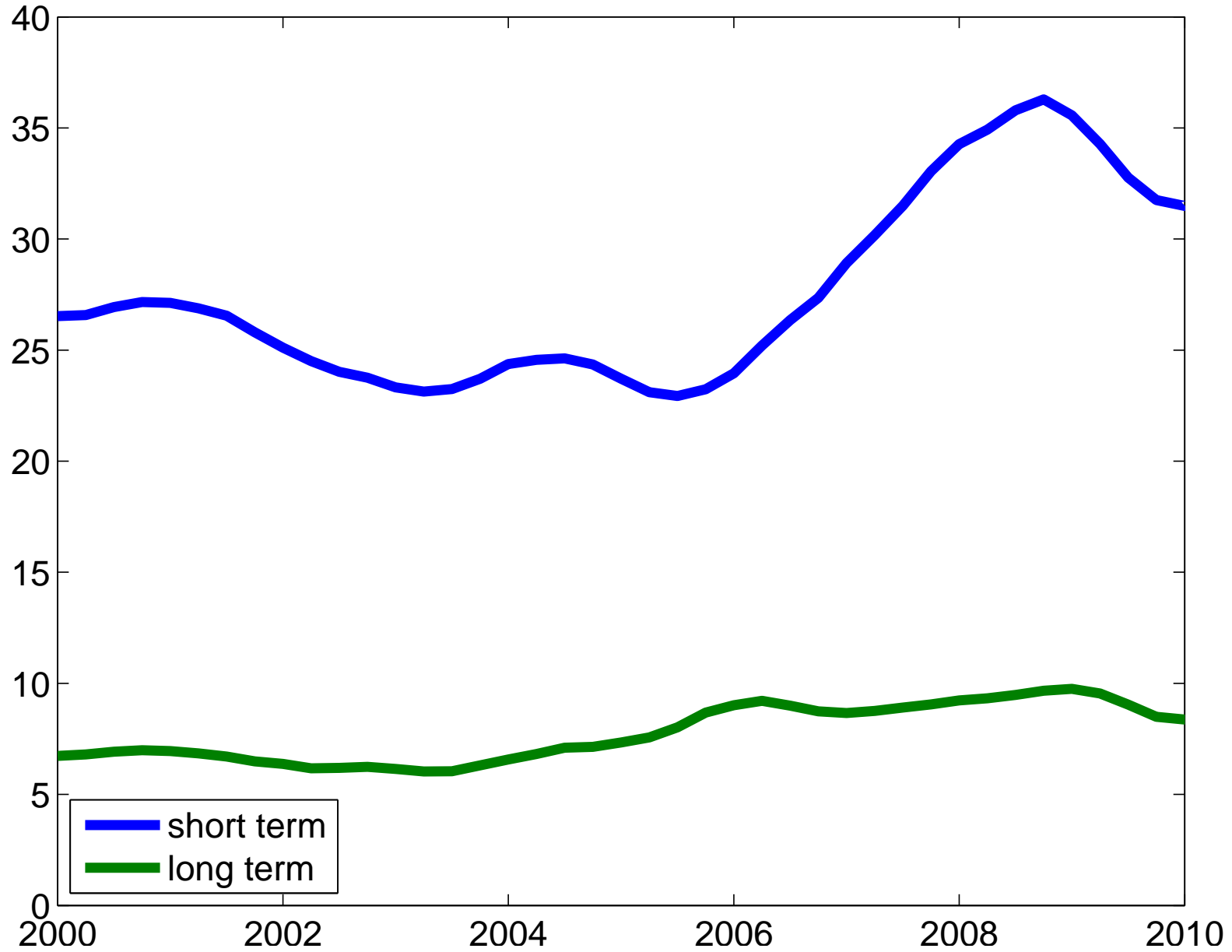
	Net Effect
Employed	+0.328%
Short-term Unemployed	-0.304%
Long-term Unemployed	-1.012%
Social Welfare	+0.239%

Evidence

Do we have independent evidence for the basic mechanism?

- OECD data on incidence of long-term unemployment
- Problem: variable has strong cyclical component and is affected by other factors
- Better: Data on job finding rates from German employment agency (Bundesagentur fuer Arbeit)

Quarterly Unemployment Exit Rates, Germany 2000 – 2010



Future Work

- Interaction between labor market policy (reform) and macro shocks
- Optimal Unemployment Insurance
- Introduce matching function