



The German current account surplus and labour market: New challenges?

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Paris

July 7, 2016

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AGENDA

- **Post Hartz labor market dynamics**
- **Labor market reforms and international linkages**

Agenda 2010

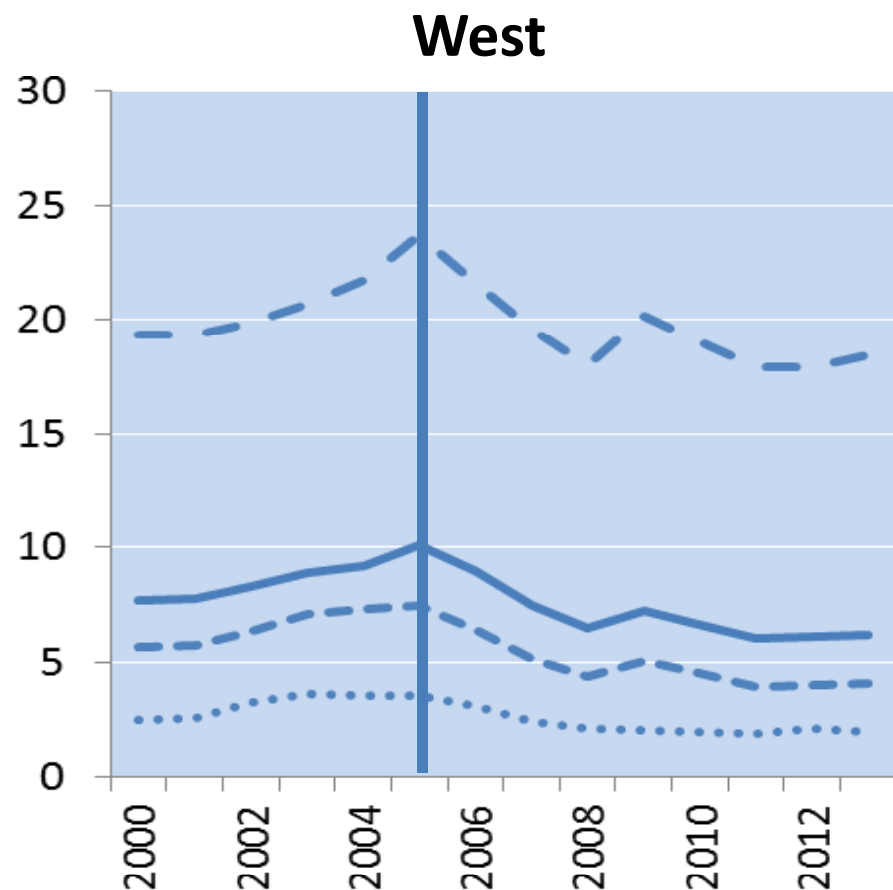
Hartz reforms:

- ¶ **Hartz I and II (2003):** personnel service agencies, temporary staffing agreements, mini and midi jobs, Ich-Ags
- ¶ *Hartz III (2004):* Labour office is transformed into a federal agency and professionalized, job centers
- ¶ **Hartz IV (2005):** two-tier unemployment benefit system (ALG I, ALG II = „Hartz IV“), one-Euro-jobs

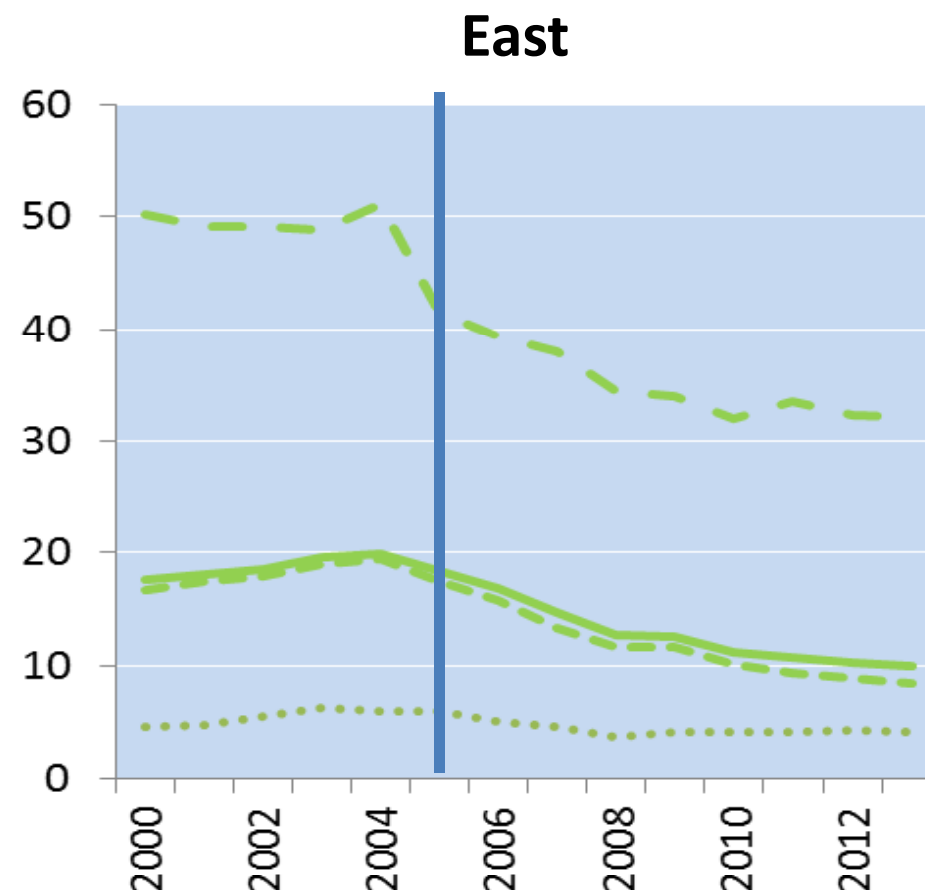
Literature on effectiveness (quantitative literature)

- ¶ Launov and Wälde (2013, IER)
- ¶ Krebs and Schäffel (2013, IMF-ER, 2016)
- ¶ Felbermayr, Prat, Impullitti (2016)

Unemployment rates (%)



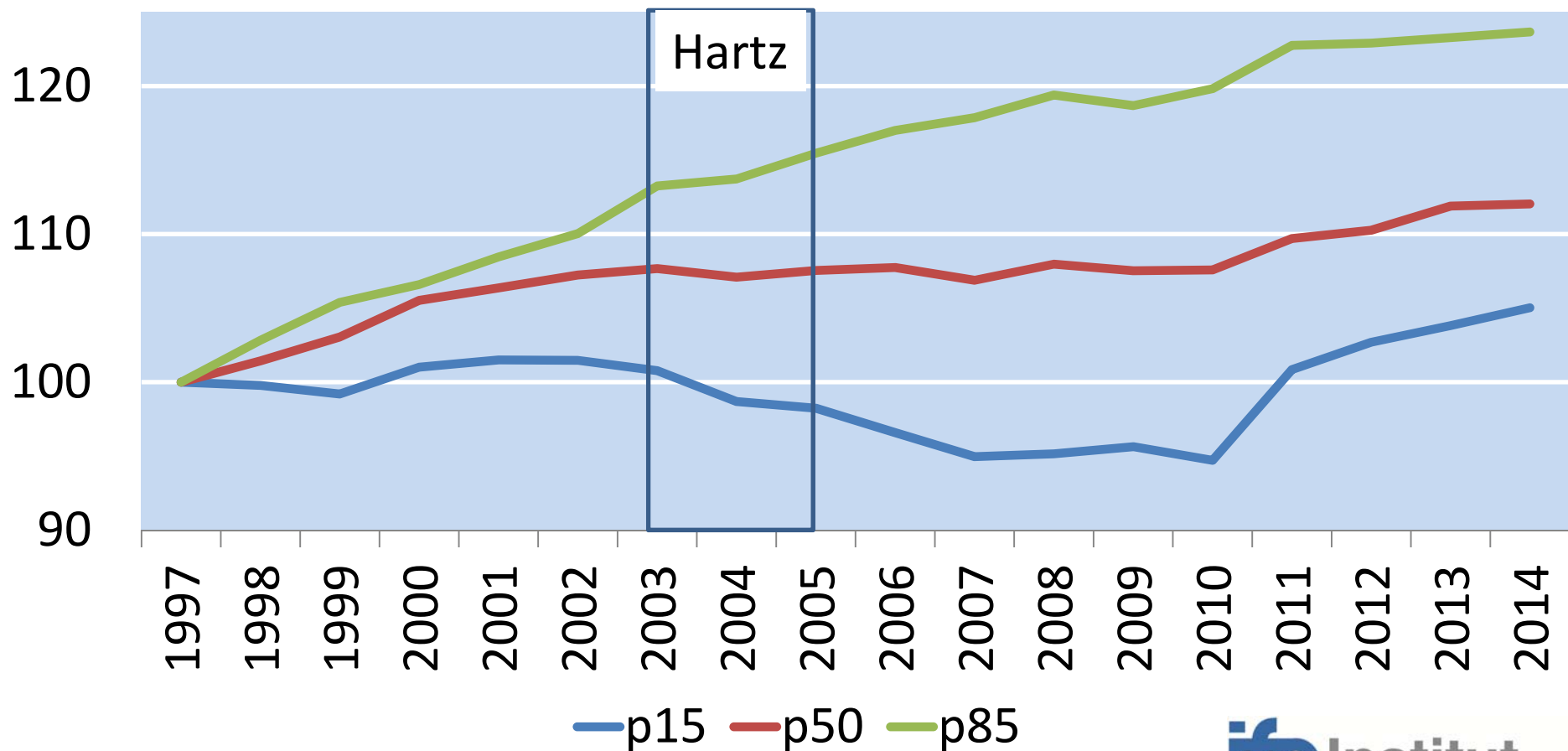
— Total
 University degree



--- Vocational training
 - - - No formal qualification

Dynamics of gross monthly real wages at different percentiles

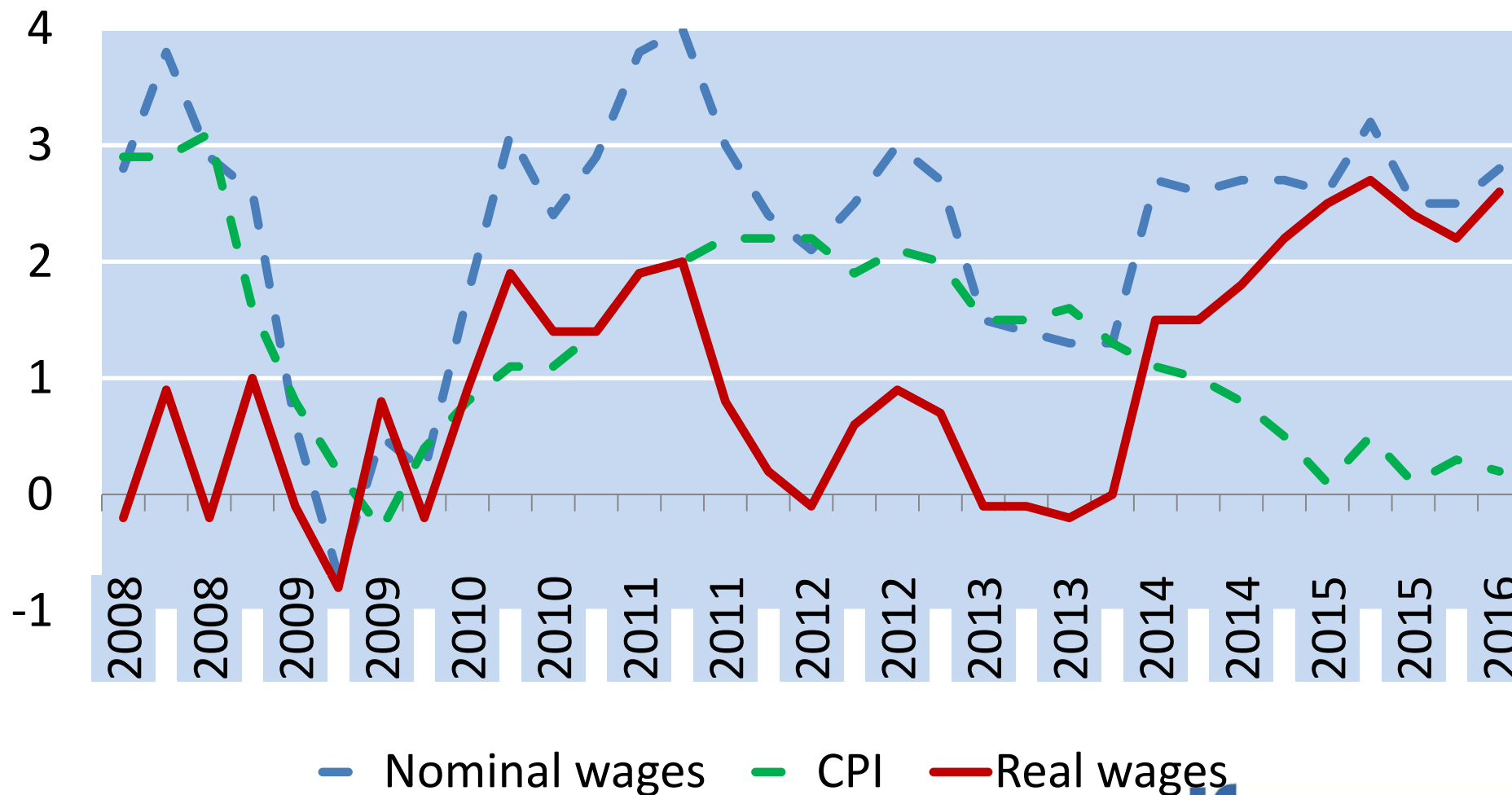
SIAB 2% (fully employed workers aged 16-64 under social security)



Source: Felbermayr et al., 2016. Data include bonus payments.

Wage dynamics: recent behavior

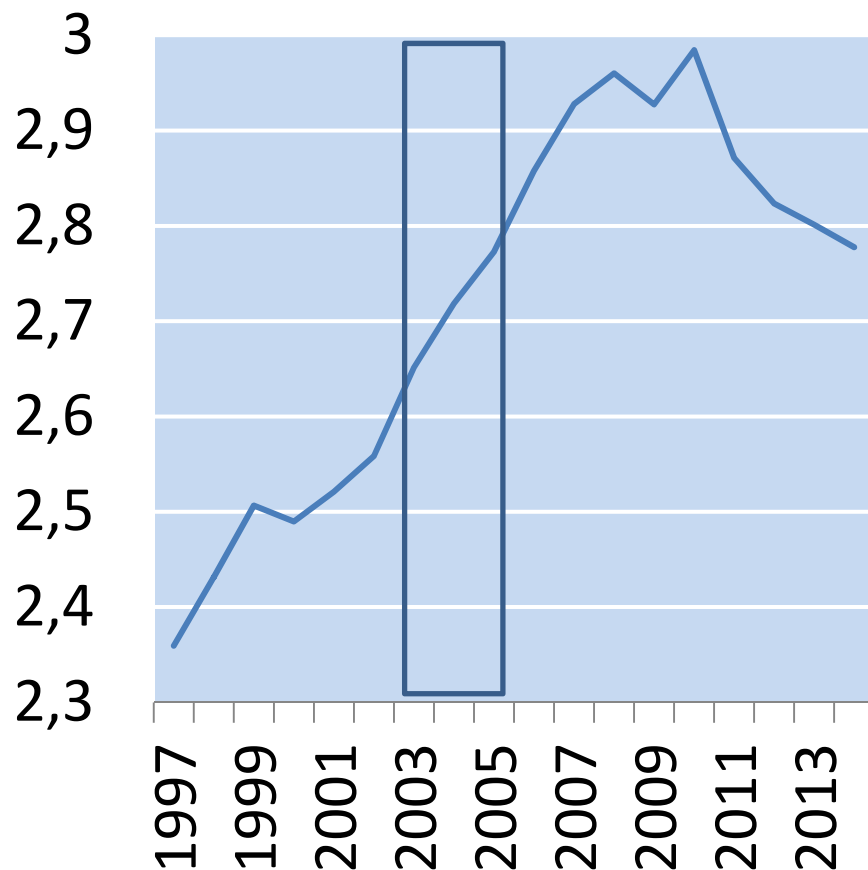
Q-to-Q growth rates of wage indices and CPI



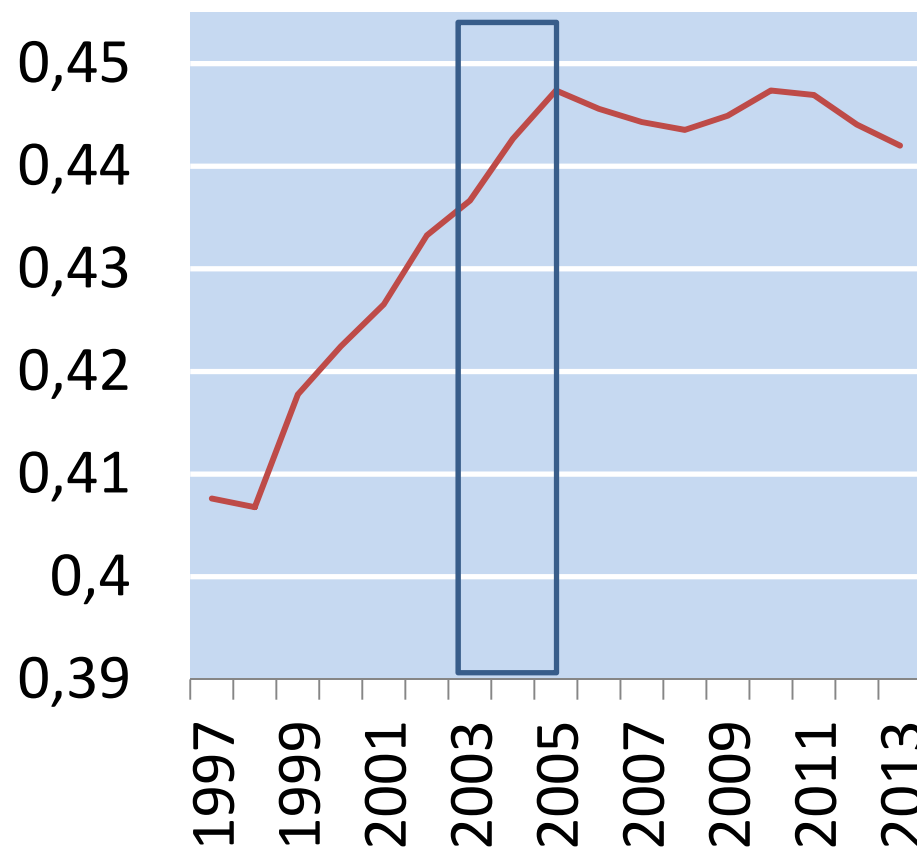
Source: Destatis, own representation.

Inequality of gross wages

**Workers under social security
(SIAB Data, p85/p15 ratio,
1997-2014)**



**All workers
(SOEP Data, Gini coefficient,
1997-2013)**



Source: Felbermayr et al., 2016. Data include bonus payments.

Peter Hartz versus Arthur Okun

Okun's (1970) **tradeoff** between efficiency (lower unemployment) and equity (higher inequality)

- ¶ Gross wages of employed: some evidence in early post Hartz period, driven by wage and composition effects
- ¶ At least after 2010 wage dispersion starts to fall
- ¶ Gross labor income in labor force: inequality moves with unemployment

Explanations?

Structural quantitative model by Felbermayr et al. (2016, FPS)

- ¶ Firm heterogeneity, labor market frictions, imperfect comp.
- ¶ Trade opening, labor market reform, product market reform

FPS I: Trade liberalization

Counterfactual analysis based on calibration for year 1996

Moments	Data		Model	
	1996	2009	$\tau = 1.53(1996)$	$\tau = 1.298(2009)$
Median markup, %	30	25	30	30
Exports share among exporters	20	29	20	29
Share of exporting firms, %	18.2	30	18.6	35
Average firm size	27.5	35.1	25.5	27.4
Average size exporters	96.6	89.6	102.6	67.7
Exporter wage premium, %	10	10.7	10	9.6
Total wage variance (residual), %	2.9	5.3	1.25	1.26
Within-firm wage variance, % total	50	43	51.5	53
Unemployment rate	9.9	7.8	9.9	8.86

Source: Felbermayr, Prat, Impullitti (2016).

FPS II: Labor market reforms

Counterfactual analysis based on calibration for year 1996

Moments	Data			Model	
	1996	2009	bench(1996)	$b = 0.23$	$A = 3.7$
Median markup, %	30	25	30	30	30
Exports share among exporters	20	29	20	20	20
Share of exporting firms, %	18.2	30	18.6	18.9	19.2
Average firm size	27.5	35.1	25.5	24.7	25.6
Average size exporters	96.6	89.6	102.6	100.1	100.5
Exporter wage premium, %	10	10.7	10	10	9
Total wage variance (residual), %	2.9	5.3	1.25	1.35	1.19
Within-firm wage variance, % total	50	43	51.5	54	56
Unemployment rate	9.9	7.8	9.9	9.13	9.1

Source: Felbermayr, Prat, Impullitti (2016).

FPS III: PMR and joint effects

Counterfactual analysis based on calibration for year 1996

Moments	Data		Model		
	1996	2009	bench(1996)	$\sigma = 5$	Joint
Median markup, %	30	25	30	25	25
Exports share among exporters	20	29	20	20	29
Share of exporting firms, %	18.2	30	18.6	10	45
Average firm size	27.5	35.1	25.5	38	42.8
Average size exporters	96.6	89.6	102.6	310	87.7
Exporter wage premium, %	10	10.7	10	14	14.6
Total wage variance (residual), %	2.9	5.3	1.25	2.28	1.94
Within-firm wage variance, % total	50	43	51.5	44	45
Unemployment rate	9.9	7.8	9.9	14.5	11.8

Source: Felbermayr, Prat, Impullitti (2016).

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Have the Hartz reforms hurt France?

Core of reforms:

- ¶ Starting point: mass unemployment
- ¶ Wage restraint to incentivize job creation and cuts to benefit to incentivize work
- ¶ Implicit assumption: wages in early 2000s were „inefficiently“ high

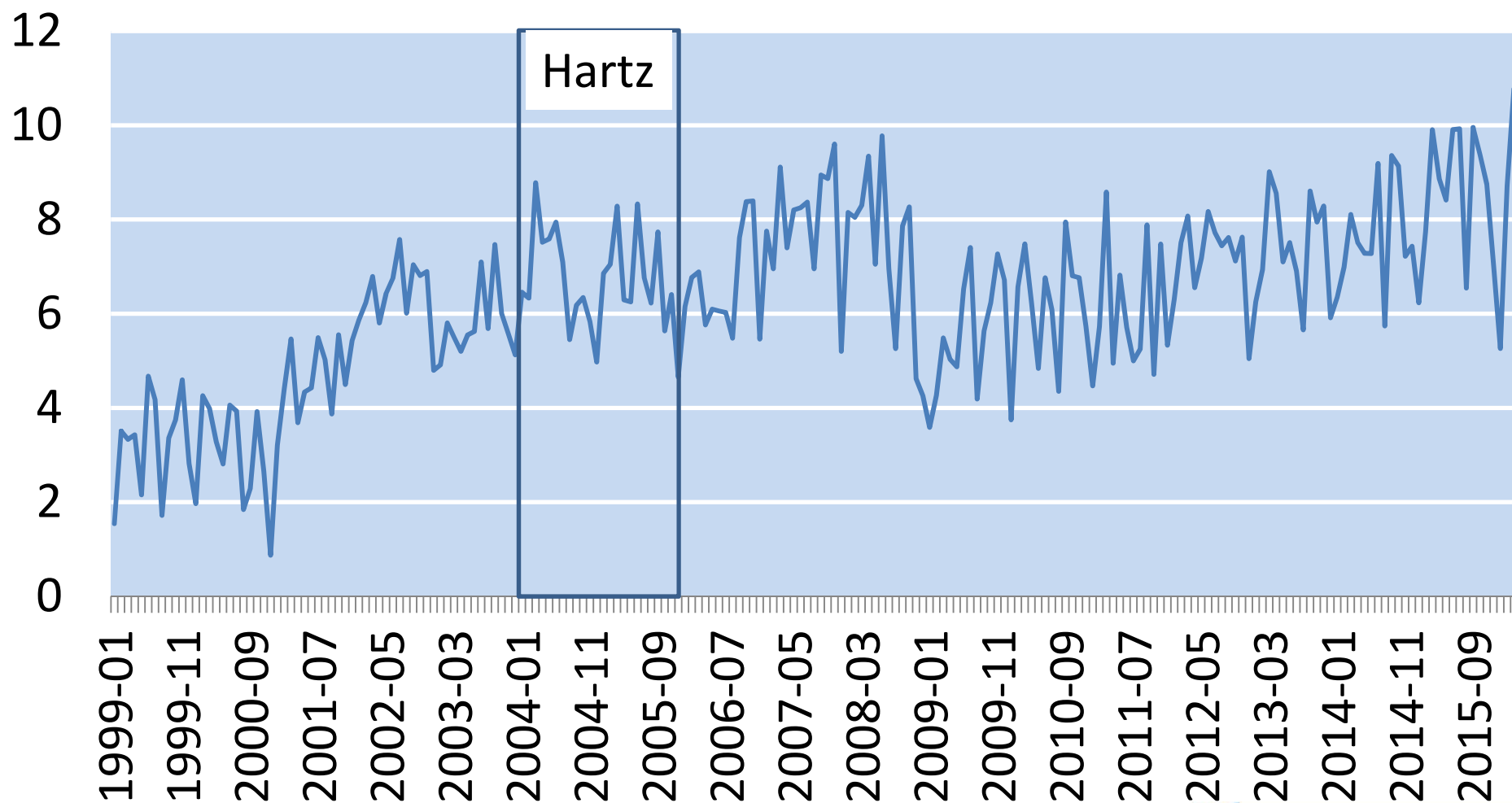
What is the efficient level of unemployment?

Here: What were the effects on trade partners?

Felbermayr, Larch and Lechthaler (AER, 2013; CJE, 2016): real, long-term models of trade and structural unemployment

Side comment: A glance at the data

Current account, goods trade, Annualized monthly data, % of GDP



Source: Bundesbank, own calculations.

Arguments

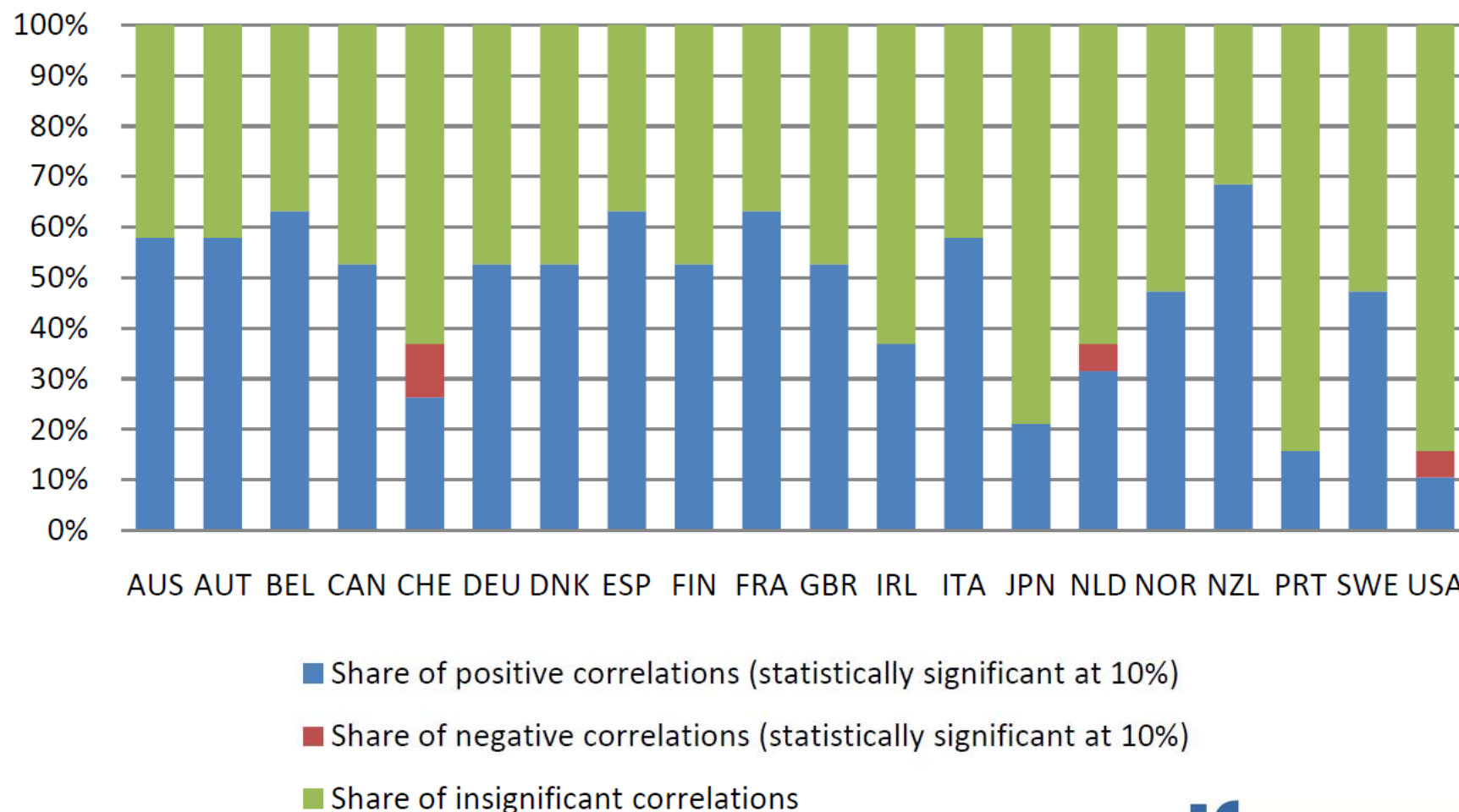
Heckscher-Ohlin (Davidson et al., 1999 ...)

- ¶ Labor market reform (lower wages, lower unemployment) harms the foreign country if its capital/labor endowment is lower but benefits it otherwise
- ¶ Size of spatial correlation of unemployment rates depends on comparison of K/L ratios
- ¶ Not supported in data (20 OECD countries)

Intra-industry trade (Krugman, Melitz, ...)

- ¶ Labor market reform leads to entry, lowers terms-of-trade, and benefits trade partners if they use some foreign varieties as inputs
- ¶ Positive spatial correlation of unemployment rates
- ¶ Supported in data

Bilateral correlations of structural unemployment rates



Source: <http://voxeu.org/article/spillovers-labour-market-reforms>

The role of labor market institutions (b , b^*)

$$u_{it} = \lambda \cdot \text{LMR}_{it} + \lambda^* \cdot \text{LMR}_{i,t}^* + \pi \cdot \text{PMR}_{it} + \delta \cdot \text{OPEN}_{it} \\ + \gamma_1 \cdot \text{GAP}_{it} + \gamma_2 \cdot \text{GAP}_{it}^* + F_i + T_t + S_{it} + \varepsilon_{it},$$

Dep. var.: Level of unemployment rate	OLS (1)	OLS (2)	IV (3)	OLS (4)	IV (5)	IV (6)	IV (7)	IV (8)
b	0.093*** (0.019)	0.075*** (0.017)	0.071*** (0.017)	0.081*** (0.017)	0.059*** (0.014)	0.053*** (0.017)	0.063*** (0.016)	0.050*** (0.016)
b^*				0.009*** (0.003)	0.016*** (0.003)	0.006 (0.040)	0.015*** (0.003)	0.021*** (0.004)
$b^* \times k^*/k$								0.009*** (0.003)
k^*/k								-1.062*** (0.224)
....								

Source: Felbermayr et al., 2013, Table 2.

The spatial lag of unemployment (u, u^*)

$$u_{it} = \rho u_{it}^* + \lambda \cdot \mathbf{LMR}_{it} + \pi \cdot \mathbf{PMR}_{it} + \delta \cdot \mathbf{OPEN}_{it} + \gamma_1 \cdot \mathbf{GAP}_{it} \\ + \gamma_2 \cdot \mathbf{GAP}_{it}^* + F_i + T_t + \mathbf{S}_{it} + \varepsilon_{it},$$

Dep. var.: Level of unemployment rate z defined as					$\frac{POP}{POP^*}$	$OPEN$	$FLEX$	$\frac{k^*}{k}$
	OLS (1)	IV (2)	IV (3)	IV (4)	IV (5)	IV (6)	IV (7)	IV (8)
u^*	0.137*** (0.030)	0.177*** (0.043)	0.148*** (0.035)	0.073** (0.029)	0.081** (0.035)	-0.018 (0.067)	0.168*** (0.051)	0.227*** (0.041)
$u^* \times z$					-0.022** (0.011)	0.110*** (0.037)	-0.144** (0.066)	0.050 (0.084)
z					0.0001 (0.0201)	-0.616*** (0.212)	-5.000*** (1.740)	-0.982** (0.438)
....								

Source: Felbermayr et al., 2013, Table 5.

Conclusions

Hartz reforms have not led to a difficult efficiency-equity trade-off in Germany

They explain about 40% of unemployment reduction between 1996 and 2009, ambiguous effects on wage dispersion

Trade liberalization and product market reforms have more bite on both unemployment and inequality

No theoretical and empirical support for negative beggar-thy-neighbour labor market reforms in OECD countries