

Households' Expectations and Macroeconomic Outcomes – Evidence from the Euro Survey

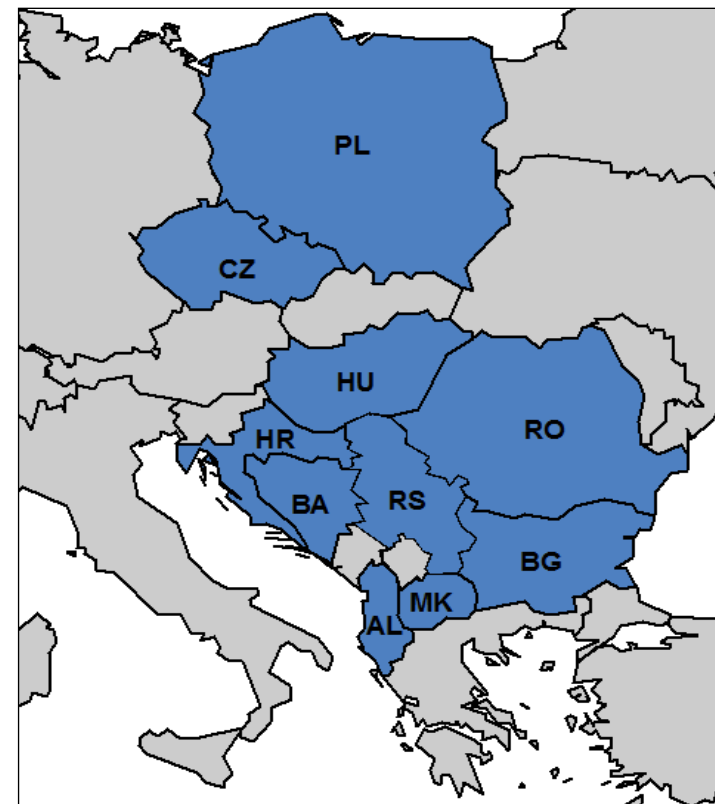
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3rd Research Conference of the NBRM
Skopje, April 29, 2014

This presentation is based on joint work with Elisabeth Beckmann (OeNB). The views expressed in this presentation are exclusively those of the authors and do not necessarily reflect those of the OeNB or the Eurosystem.

OeNB Euro Survey – Gathering Data on the Use of the Euro

- **Geographical scope of the OeNB Euro Survey**
 - **Six EU Member States:**
Bulgaria, Croatia, Czech Republic, Hungary, Poland and Romania
 - **Four (potential) EU candidate countries:**
Albania, Bosnia and Herzegovina, Macedonia and Serbia
- **Conducted twice a year since fall 2007;**
latest survey wave: fall 2013
- **Representative country samples**
- **Face-to-face interviews**
- **At the level of individuals**



The Questionnaire – Main Contents

- **Foreign currency cash holdings**
 Dissemination, currency composition, amounts, motives
- **Foreign currency deposits**
 Dissemination, currency composition, amounts, motives
- **Foreign currency loans**
 Dissemination, currency composition, motives
- **Payment behavior**
 Personal vs. observed payment behavior
- **Economic sentiments**
 Assessment of general economic situation, perceived and expected inflation, exchange rate expectations, trust in currencies and banking sector, trust in institutions
- **Special topics**

Questions Used Regarding Expectations

- "Over the next five years, the economic situation of [my country] will improve."
- "Over the next 12 months, I expect the financial situation of my household to get better."
- Possible answers: Strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree
- Balance statistics

$$\text{Balance} = (\text{strongly agree} + 0.7 * \text{agree} + 0.3 * \text{somewhat agree}) - (0.3 * \text{somewhat disagree} + 0.7 * \text{disagree} + \text{strongly disagree})$$

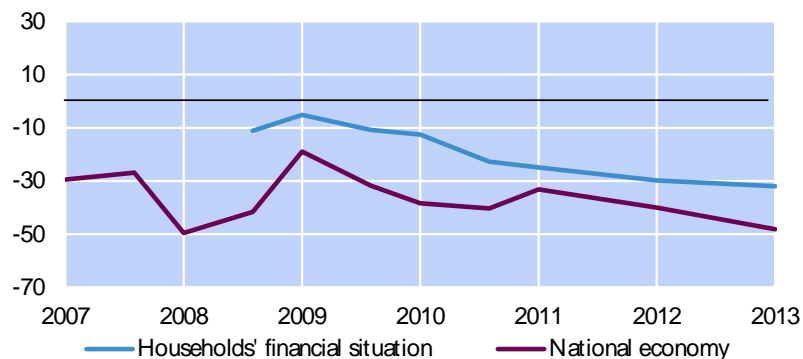
→ Balance statistics can range from 100 (all strongly agree) to -100 (all strongly disagree)

Some Stylized Facts – “Household” Bias

Development of expectations regarding households' financial situation and national economy

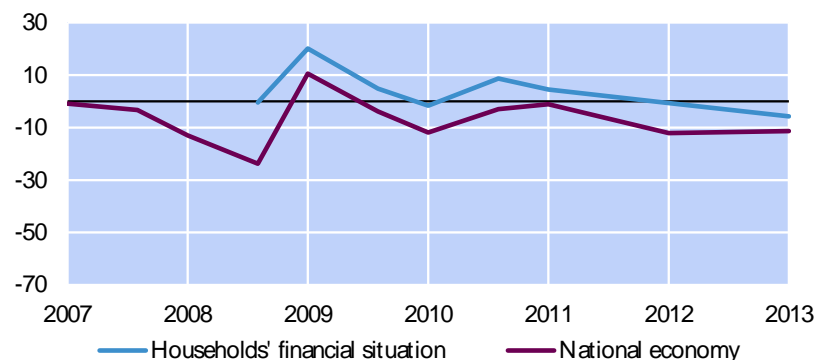
Bulgaria

Balance statistics



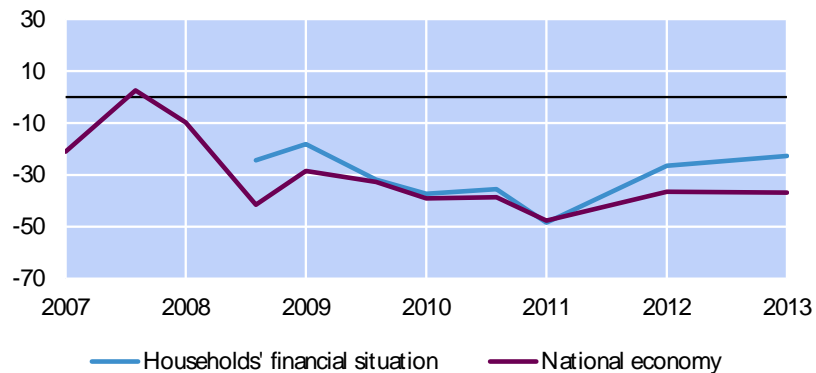
Macedonia

Balance statistics



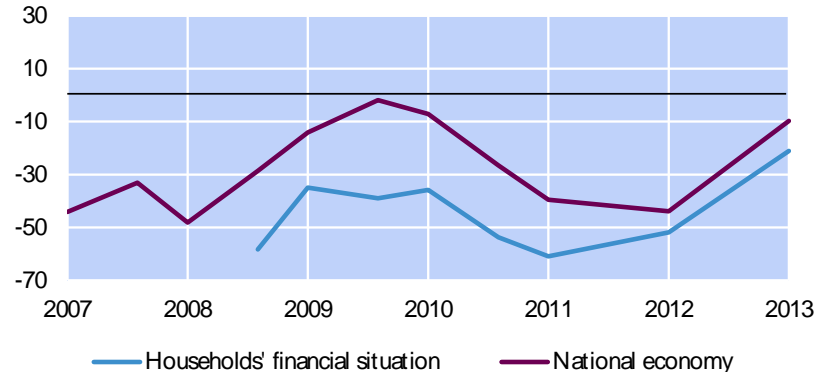
Serbia

Balance statistics



Hungary

Balance statistics



Source: OeNB

Summary Statistics on Expectations Regarding the National Economy

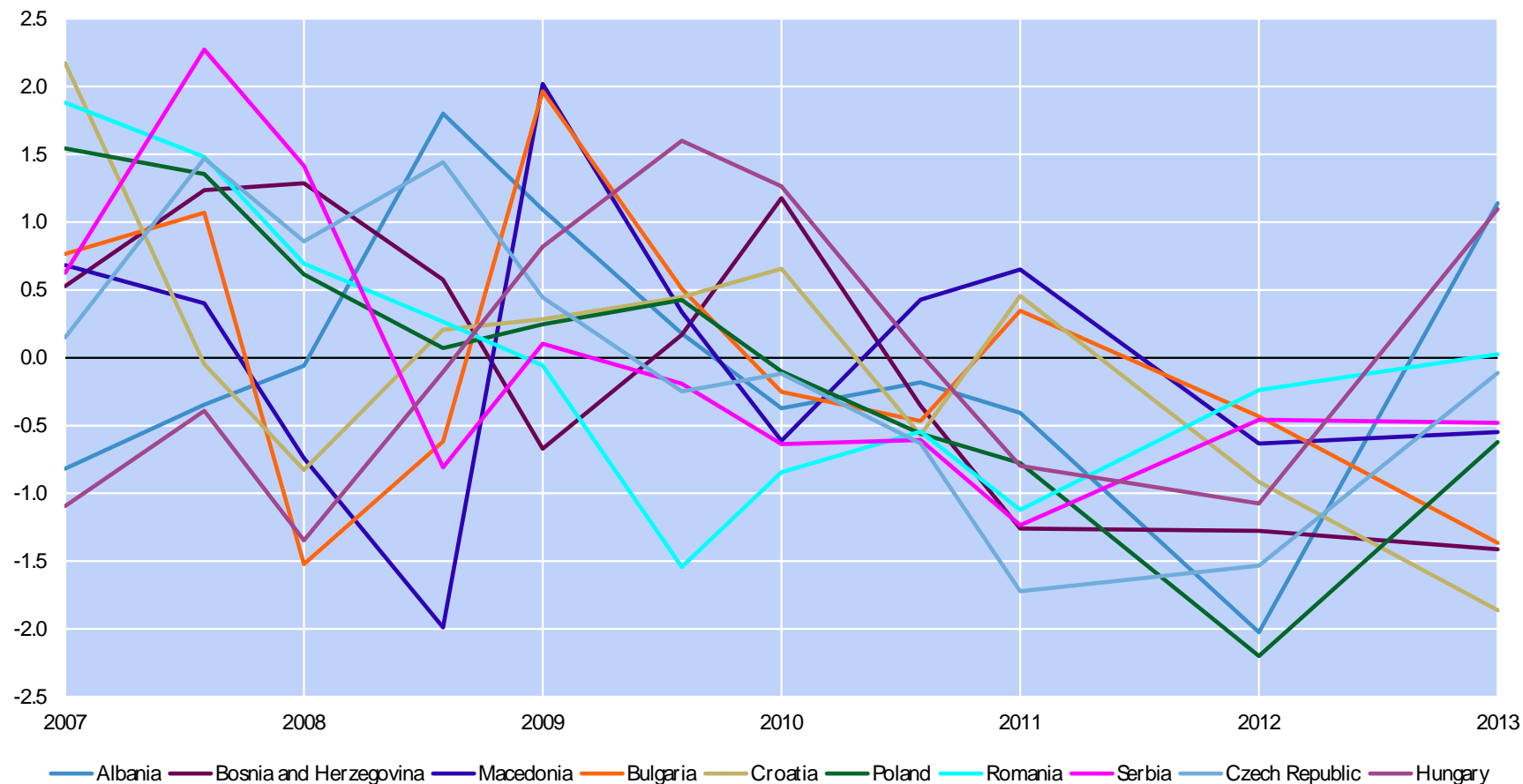
	Mean	Standard deviation
Albania	-9.7	9.9
Bosnia and Herzegovina	-32.1	9.8
Bulgaria	-36.2	8.8
Croatia	-31.0	10.1
Czech Republic	-14.0	9.8
Hungary	-27.0	15.7
Macedonia	-6.7	8.6
Poland	-6.1	12.5
Romania	-27.7	18.0
Serbia	-30.0	14.3

- High cross-country heterogeneity in levels, some cross-country heterogeneity in variance
- No great variation across regions within countries
- No correlation with income per capita but, at the individual level, high-income households are more optimistic

Movements Increasingly Homogeneous since the Onset of the Crisis

Standardized balance statistics on expectations regarding the national economy

Standardized balance statistics



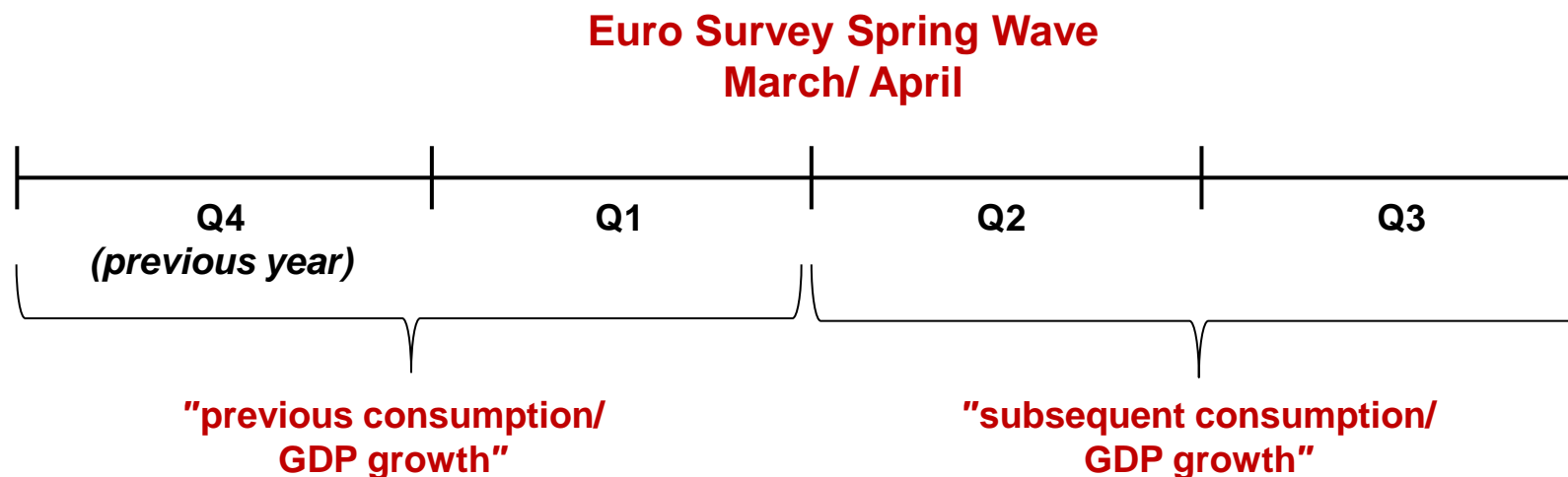
Source: OeNB (authors' calculations).

Expectations and Macroeconomic Outcomes – Literature Overview

- Relationship between expectations and macroeconomic variables
 - Precautionary savings motive (-) vs. permanent income hypothesis (+)
 - Ludvigson (2004): Little support for precautionary savings motive
 - Souleles (2004): High- and low-income households are affected differently by shocks
 - Akerlof and Shiller (2010): Change in confidence may trigger change in economic expectations → should be taken into account for explaining boom-bust cycles

- Using expectations for forecasting
 - Studies mainly focused on the U.S.A.
 - Kuzmanović and Sanfey (2012): Consumer expectations help to explain retail turnover and imports (and thus consumption/GDP) in Croatia

Expectations and Macroeconomic Outcomes – Method



- Compute Spearman correlation coefficients between...
 - expectations and previous consumption/GDP growth
 - expectations and subsequent consumption/GDP growth
- Answer indicates whether...
 - expectations correlate with macroeconomic outcomes
 - expectations are useful for forecasting

Expectations and Macroeconomic Outcomes – Results I

Spearman correlation coefficients					
Expectations regarding the national economy		Subsequent consumption growth	Subsequent GDP growth	Previous consumption growth	Previous GDP growth
	Czech Republic	0.357	0.042	0.515	0.176
	Hungary	-0.321	0.515	-0.612	-0.164
	Poland	0.679	0.503	0.661	0.539
	Bulgaria	0.107	0.176	-0.055	-0.067
	Romania	-0.536	0.321	0.491	0.576
	Croatia	0.571	0.43	0.03	-0.006
	Bosnia and Herzegovina	..	0.667	..	0.697
	Macedonia	0.5	0.317	-0.03	-0.006
	Serbia	0.357	0.358	0.442	0.394

Source: OeNB Euro Survey (authors' calculations). No data available for Albania.

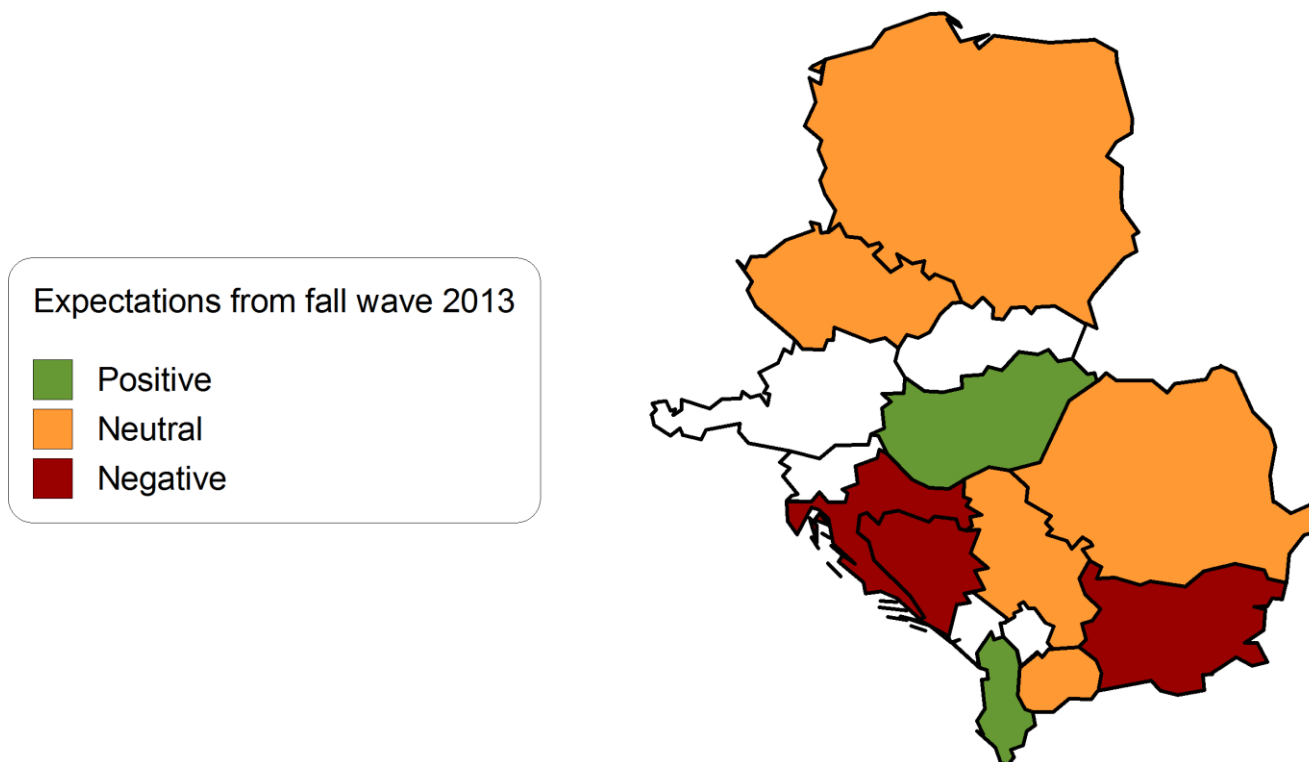
Expectations and Macroeconomic Outcomes – Results II

- Correlation between expectations and subsequent consumption growth positive for most countries
- Correlation between expectations and subsequent GDP growth positive for all countries
- Picture less clear regarding previous consumption and GDP growth
- Conclusions:
 - Correlation between expectations and macroeconomic outcomes heterogeneous at a cross-country level
 - Positive correlations point to permanent income hypothesis
 - Expectations have predictive power and can be used for forecasting

Expectations and Macroeconomic Outcomes – Open Questions

- What explains the observed country-specific differences?
- Does the relationship between expectations and macroeconomic variables change over time?
- Which direction does the causality go between expectations and macroeconomic outcomes?
- ...
- ...
- ...
- What drives expectations?

Expectations and Macroeconomic Outcomes – Outlook



Note: Values are standardized to correct for country-specific properties. “Neutral” is defined as a value within the range of zero +/- 1 standard deviation.

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Annex I: The OeNB Euro Survey – Further Information

- **OeNB publication: Focus on European Economic Integration**

Regular contribution (every 6 months) on recent results of the OeNB Euro Survey

- **ECB Report "International Role of the Euro" with OeNB contributions**

- **ceec.oenb.at**

- **Design of the survey in greater detail**
- **Main results of recent surveys**
- **Sentiment indicators**
- **References to publications**



Annex II: OeNB Euro Survey – Empirical Papers

Euroization

- Stix, H., 2011. **Euroization: What Factors Drive its Persistence?** Household Data Evidence for Croatia, Slovenia and Slovakia. *Applied Economics* 43(21), 2689–2784.
- Scheiber, T. and Stix, H. 2009. **Euroization in Central, Eastern and Southeastern Europe** – New Evidence On Its Extent and Some Evidence On Its Causes. *OeNB Working Paper* 159.
- Scheiber, T. 2013. Section 4.5: **Results from the OeNB Euro Survey of Households in Central, Eastern and Southeastern Europe.** In: European Central Bank, *The International Role of the Euro*, 29–32.

Foreign Currency Cash Holdings / Payment Behavior

- Stix, H. 2013 **Why do people save in cash?** Distrust, Memories of Banking Crises, Weak Institutions and Dollarization. *Journal of Banking and Finance*, forthcoming.
- Ritzberger-Grünwald, D., Scheiber, T., 2012. **Euro Cash in Central, Eastern and Southeastern Europe.** *Monetary Policy and the Economy*, Q1/12, 41–55.

Foreign Currency Deposits

- Prean, N. and Stix, H., 2011. **The effect of raising deposit insurance coverage in times of financial crisis** – Evidence from Croatian Microdata. *Economic Systems*, 35(4), 496–511.
- Dvorsky, S., Scheiber, T. and Stix, H. 2010. **CESEE Households and the Crisis: Lower Cash Holdings despite Deposit Withdrawals. Where Did the Money Go?** In: European Central Bank, *The International Role of the Euro*, 38–41.

Annex II: OeNB Euro Survey – Empirical Papers

Foreign Currency Loans

- Fidrmuc, J. , Hake, M., Stix, H. 2013 **Households' Foreign Currency Borrowing** in Central and Eastern Europe, *Journal of Banking and Finance*, 37(6), 1880–1897.
- Beckmann, E. , Stix, H. 2013. **Foreign Currency Borrowing and Knowledge of Exchange Rate Risk.** *OeNB Working Paper forthcoming.*
- Beckmann, E., Fidrmuc, J., Stix, H. 2012. **Foreign Currency Loans and Loan Arrears** of Households in Central and Eastern Europe, *OeNB Working Paper 181*
- Beckmann, E., Scheiber, T. and Stix, H., 2011. How the Crisis Affected Foreign Currency Borrowing in CESEE: Microeconomic Evidence and Policy Implications. *Focus in European Economic Integration*, Q1/11, 25–43.

Economic Sentiments

- Beckmann, E., Scheiber, T., 2012. **The Impact of Memories of High Inflation on Households' Trust in Currencies.** *Focus on European Economic Integration*, Q4/12, 80–93.
- Beckmann, E., Scheiber, T., 2012. **Not so Trustworthy Anymore? The Euro as a Safe Haven Asset in Central, Eastern and Southeastern Europe.** *Focus on European Economic Integration*, Q2/12, 65–71.
- Dvorsky, S., Scheiber, T. and Stix, H. 2009. **CESEE Households amid the Financial Crisis: Euro Survey Shows Darkened Economic Sentiment and Changes in Savings Behavior.** *Focus on European Economic Integration*, Q4/09, 71–83.