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# Systemic risk monitoring tools – the Austrian experience

**Sinaia, 20 October 2016**

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Department for Financial Stability and the Supervision  
of Less Significant Institutions

[www.oenb.at](http://www.oenb.at)



# Agenda

1. The Vienna Initiative and **NPL resolution** efforts
2. The Austrian Sustainability Package and the CESEE **subsidiaries' funding model**
3. The sustainability of **mortgage lending** in the domestic market
4. The **Austrian Financial Stress Index (AFSI)**

# The Vienna Initiative: a framework for safeguarding financial stability of emerging Europe

## Forum for decision making and coordination to prevent a systemic banking crisis

- ensure that credit keeps flowing to the real economies
- limit negative fallout from nation-based uncoordinated policy responses to the global crisis
- avoid a massive and sudden deleveraging by cross-border bank groups
- NPL work stream aims at three overlapping objectives:
  - Enhancing the transparency of restructuring frameworks
  - Capacity building through technical assistance
  - Knowledge sharing

## Transparency is a bedrock for NPL resolution

### **Semi-annual NPL Monitor to track progress of all activities**

- Review the latest data on NPLs
- Report on recent progress
  - Progress with resolving impediments
  - Progress with NPL transactions

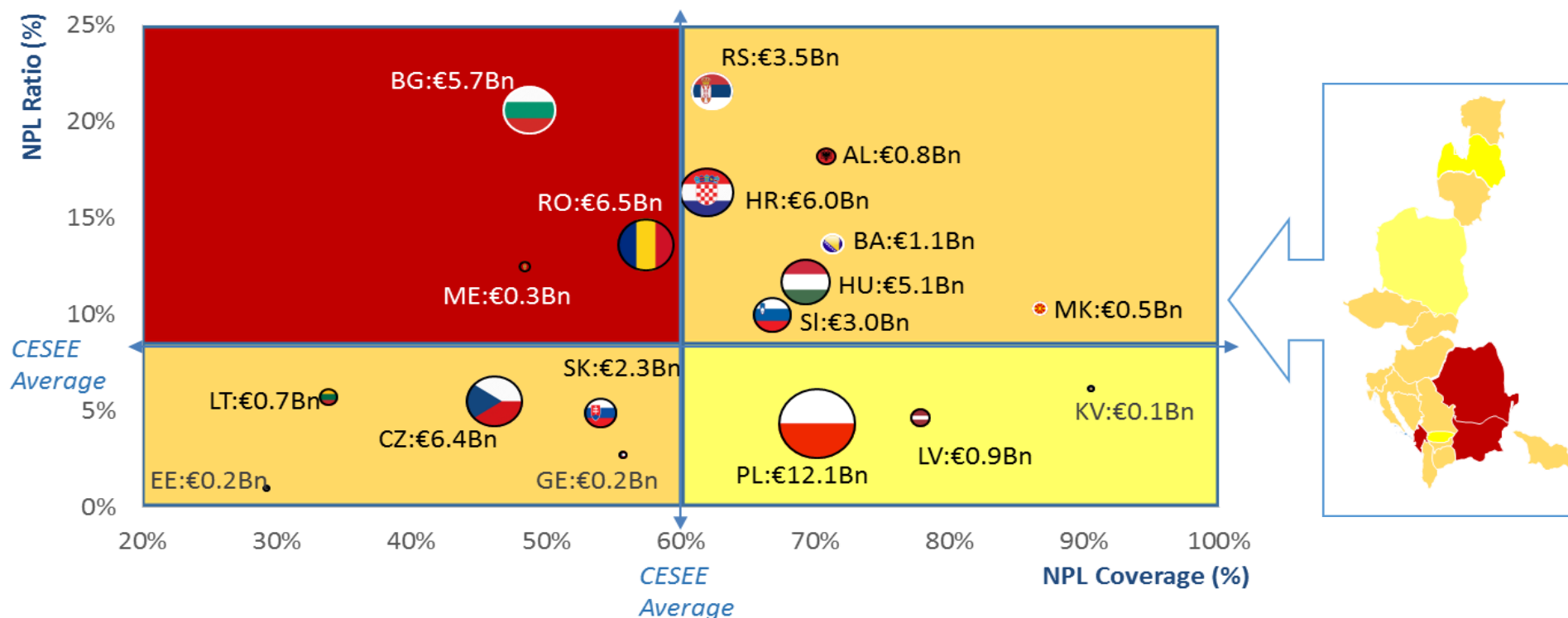
### **New website dedicated to NPLs as an information sharing hub for the industry**

- Country information
- Best practices
- Research
- Training resources

# NPL ratio and NPL coverage ratio

as at 31 December 2015

- In 2015, the CESEE has recorded a significant reduction in NPL volume by €3.9 Billion to €55.5 Billion (-6.6%). This is mostly explained by the realised sales of NPLs.
- The region's average for NPL ratio stands at 7.7% and coverage ratio at 60.9%.



Source: Data taken from IMF meta table

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# The supervisory guidance to strengthen the sustainability of the business models of large internationally active Austrian banks (2012)

## Maintaining financial stability in Austria and CESEE

*Increasing risk bearing capacity*

*Avoiding excessive credit growth (boom-bust-cycles)*

*Preparing for potential crisis situations*

### Higher capitalisation

- As of 2013: Implementation of Basel III common equity tier 1 ratio (CET1) of 7%
- Without any related transitional provisions\*
- Update: New capital buffer regime (O-SII and SRB)

\* Participation capital issued in the course of Austria's banks support package is eligible.

### Local stable funding base of banking subsidiaries

- Strengthening local deposits, local issuances as well as funding from supranational institutions
- **Monitoring the „Loan-to-Local Stable Funding Ratio“ (LLSFR) as an early warning indicator**
- Discussion and decision making in the framework of supervisory cooperation

### Group recovery and resolution plans (RRPs)

- Recovery plans: Enable firms to plan how they would recover from severely adverse conditions
- Resolution plans: Providing a roadmap to resolve a failed firm, while minimising the impact on financial stability
- Update: Changes in the legal (BRRD/BaSAG) and institutional framework (SRB/NRA)

**Consultations took place with the European Commission and the package is in line with the spirit of the Vienna Initiative**

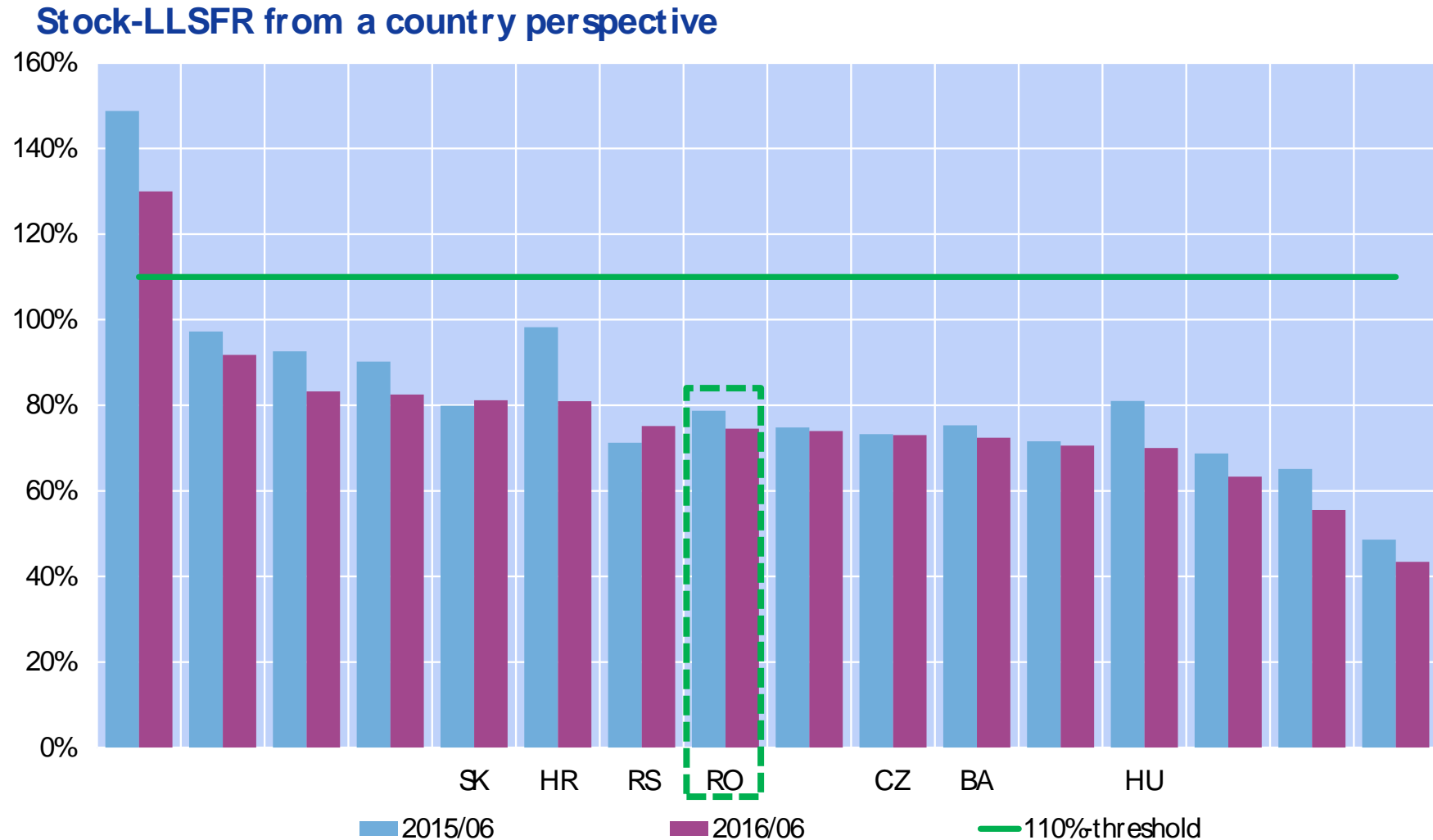
# How is adherence to the LLSFR-guidance being monitored?

1. A **standardised data template** with exact definitions has been created by the OeNB to monitor all information that is not already in the supervisory reporting database (e.g. supranational funding, internal fund transfer pricing, forecasts).
2. The template is **sent to the parent banks on a quarterly basis** and information is collected on a single subsidiary, Euro and end of quarter basis.
3. The gathered data is entered into the **OeNB's LLSFR-database** and a **quarterly analytical report** is sent to the OeNB's and FMA's senior management (incl. on- and off-site supervisors, financial stability experts).
4. On an **end-of-year basis**, an **all-encompassing report** is prepared and serves as a basis for further discussion with host authorities and the ECB.

All data is **shared with the concerned host supervisory authorities.**



# Austrian subsidiaries' business model is now strongly reliant on local stable funding sources (esp. non-bank deposits) €NB



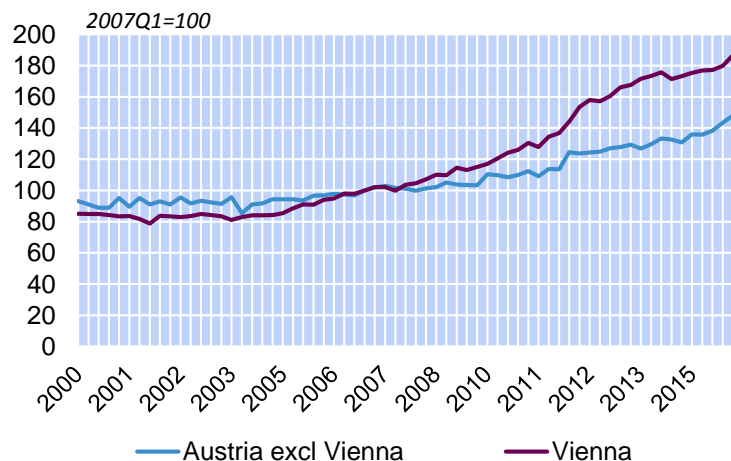
Source: OeNB. Due to data confidentiality reasons, some countries' data cannot be shown. Unicredit BA's subsidiaries are no longer monitored.

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# Real estate prices and loan growth on the rise; structural factors mitigate systemic risks

Residential Real Estate Prices in Austria

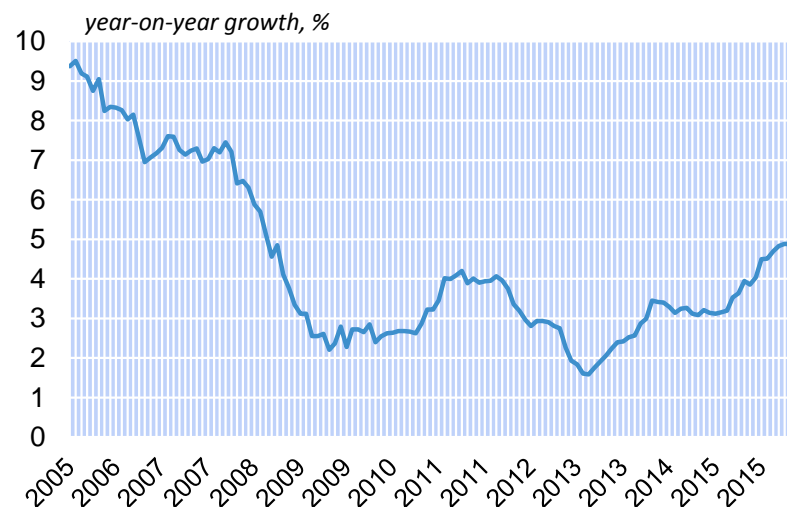


- Strong increase in residential real estate prices in Vienna as well as the rest of the country
  - +9.5% in Q2 2016
- Robust growth of residential real estate loans:
  - +4,8% in July 2016
  - Pre-crisis real, adjusted growth rates approx. at current level

## Mitigating factors

- Low share of owner-occupied housing
  - Vienna: 17% of households owner-occupiers, 6% of households have mortgage
- Lower-income households benefit from non-profit and public housing
- Aggregate household debt among lowest in mature EU
  - Household-debt-to-GDP ratio: 50.8% in Q1 2016, down from 54% five years ago
- Mortgage loans in % of GDP and of banks CET 1 low in EU comparison

Housing loans of Austrian households



## Austrian authorities have taken precautionary steps

### Advice of FMSB to the Ministry of Finance to create a legal basis for LTV-/DTI-/DSTI-limits

- Unanimous decision by the Austrian Financial Market Stability Board (FMSB) on June 1<sup>st</sup>, 2016
- Proposal initiated by OeNB including a motivation and detailed requirements (see [www.fmsg.at](http://www.fmsg.at))

### FMA shall receive competence to impose the following upon FMSB-proposal

- LTV-/DTI-/DSTI-limits on new mortgage loans for the purchase/construction/renovation of real estate loans collateralized with immovable property located in Austria
- Auxiliary conditions:
  - a. Amortization requirements: maturity limits, minimum redemption requirements
  - b. Allotments: exemption of parts of the mortgage portfolios
  - c. Restrictions: geographical , types of property (private or commercial use of residential property (buy-to-let) and commercial property)
- Ex-ante and ex-post impact assessment required
- Possibility of sanctions in case of non-compliance

### → Next step: Legislative proposal

### → LTV, DTI, DSTI should be implemented at the EU level

- The harmonization of definitions of LTV-, DTI- and DSTI-ratios would enhance the consistency, comparability, robustness and the analytical quality of the work of the ESRB, ECB SSM and of national authorities.
- Coordination at the European level would be eased.

# Austrian authorities have issued opinion on sustainable lending standards

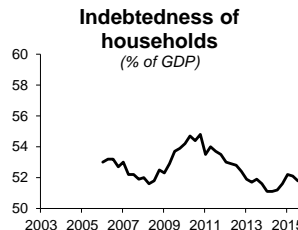
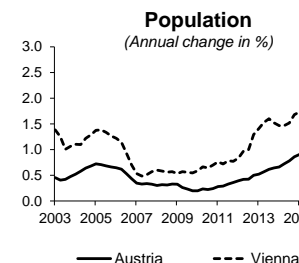
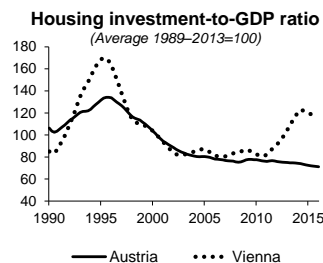
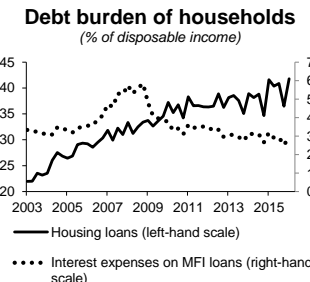
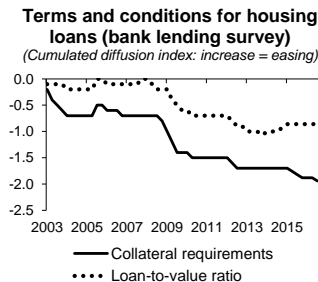
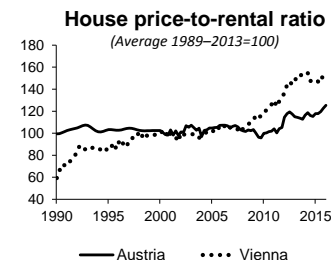
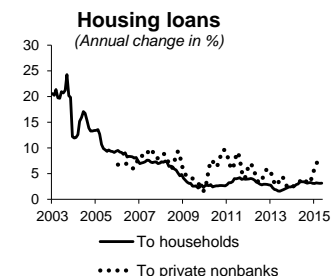
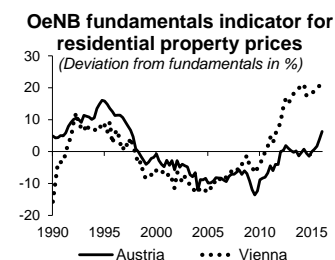
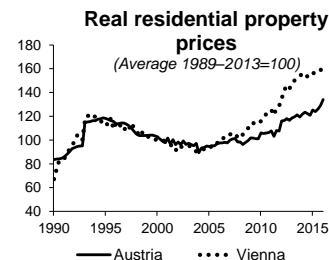
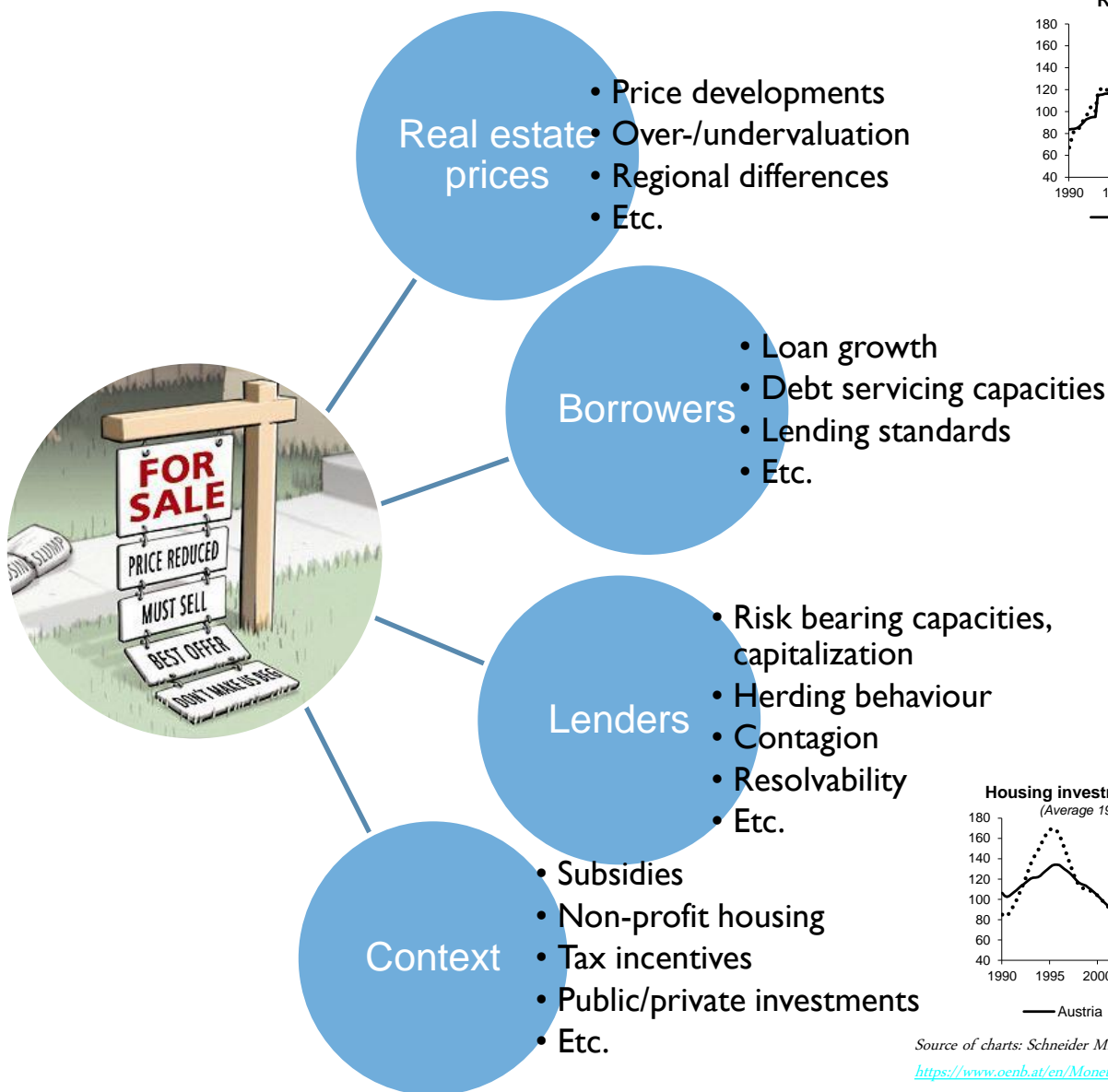
## FMSB announced its stance on criteria for sustainability

- Press release by the Austrian Financial Market Stability Board (FMSB) on September 23<sup>rd</sup>, 2016 (see [www.fmsg.at](http://www.fmsg.at))

## Criteria encompass sustainability requirements on LTV, DTI, DSTI

- Conservative LTV ratios
  - Sufficient buffer to avoid a collateral stretch in the face of falling real estate prices.
- Banks are required to consider DSTI and DTI ratios in their risk management
  - Households must be able to service debt even under stress scenarios (e.g. reductions of household income and unexpected payment obligations).
  - Debt service capacity of households must also be resilient to plausible interest rate shocks.
- Mortgage pricing must be risk adequate and reflect credit risk as well as the costs of liquidity and capital.
- Close monitoring of the sustainability of lending standards in real estate lending by the FMSB.
  - Reporting needs to be improved.
  - Specification of the criteria and recommendations may follow.

# Systemic risk assessment requires a comprehensive approach



Source of charts: Schneider M., K. Wagner, W. Waschiczek; OeNB property market monitor of October 2016.

<https://www.oenb.at/en/Monetary-Policy/real-estate-market-analysis/data-and-analyses.html>

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# Development of the Austrian Financial Stress Index (AFSI)

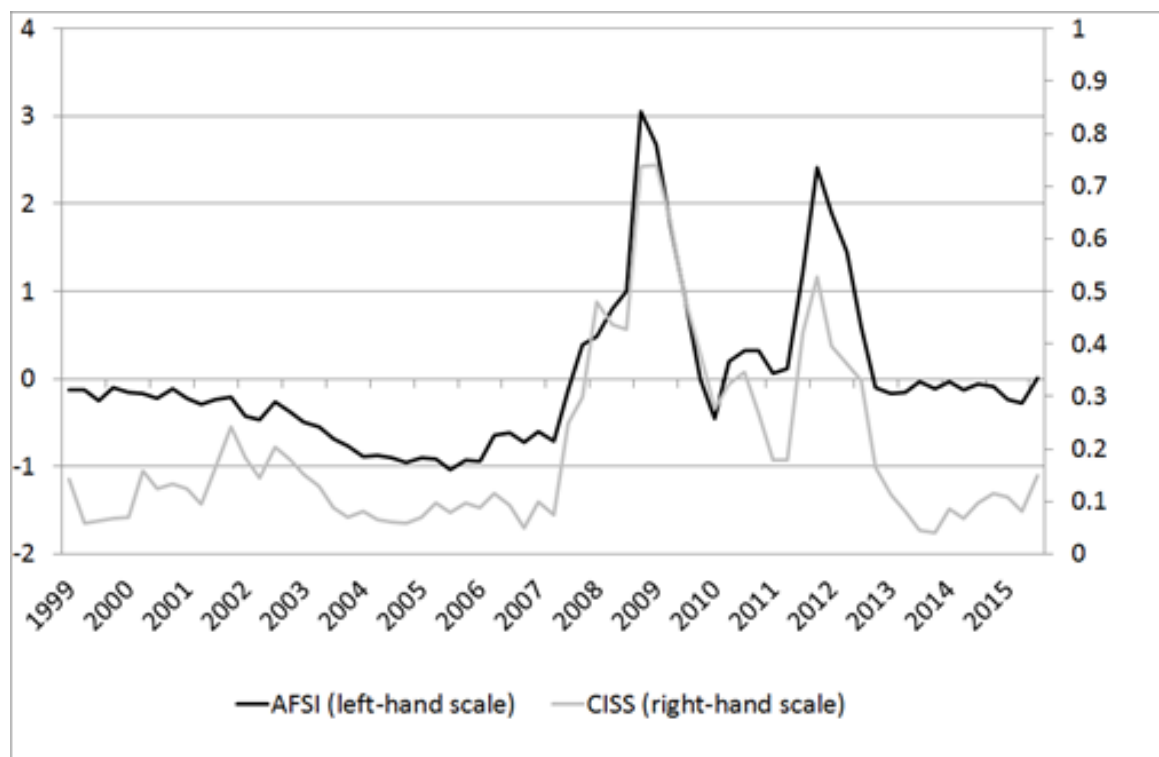
- The OeNB examined various variables in the development process of an Austrian financial stress index.
- Our major selection criterion was *to best reflect (past) periods of financial stress*.
- In particular, our approach was motivated by Hollo, Kremer and Lo Duca (2012) who constructed the CISS – a composite *indicator of systemic stress in the financial system*.

The higher the AFSI (CISS), the higher the financial stress.

Both indices reflect two major periods of financial distress in Austria and Europe (the collapse of Lehman Brothers and the sovereign debt crisis.).

Financial market stress is usually a leading indicator for an economic downturn and increases the probability of a banking crisis.

AFSI and CISS are measured on a different scale.





## Components of the AFSI

Equity market is the first component of the AFSI. It has three subcomponents. A high ATX and Austrian Financials return reduces financial stress (hence the minus sign). A high volatility increases stress.

The 3-month EURIBOR-OIS spread is an important measure of risk and liquidity in the money market.

The Sovereign Bond Market spread between Austria and Germany is a standard measure of sovereign risk.

Segment	Components	Relation	Weight
(1) Equity Market	ATX yoy return	-	1/3
	Datastream Austrian Financials yoy return	-	
	Realized ATX volatility	+	
(2) Money Market	3-month EURIBOR-OIS spread	+	1/3
(3) Sovereign Bond Market	Spread of Austrian 10-year government bond yields over German 10-year government bond yields	+	1/3



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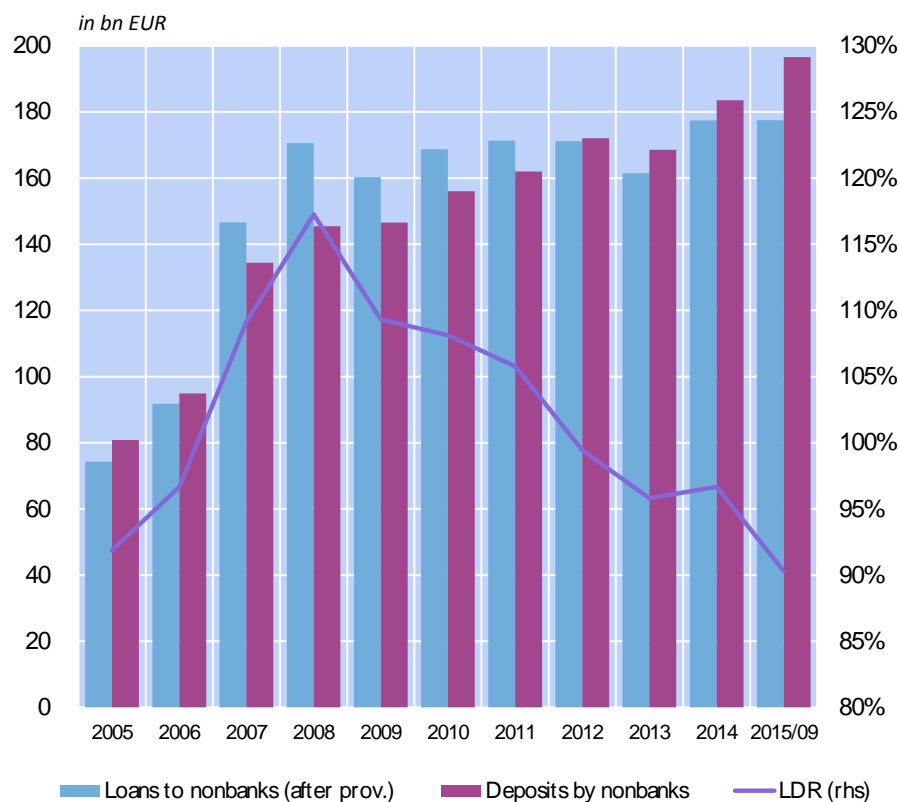
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**Thank you for your attention**



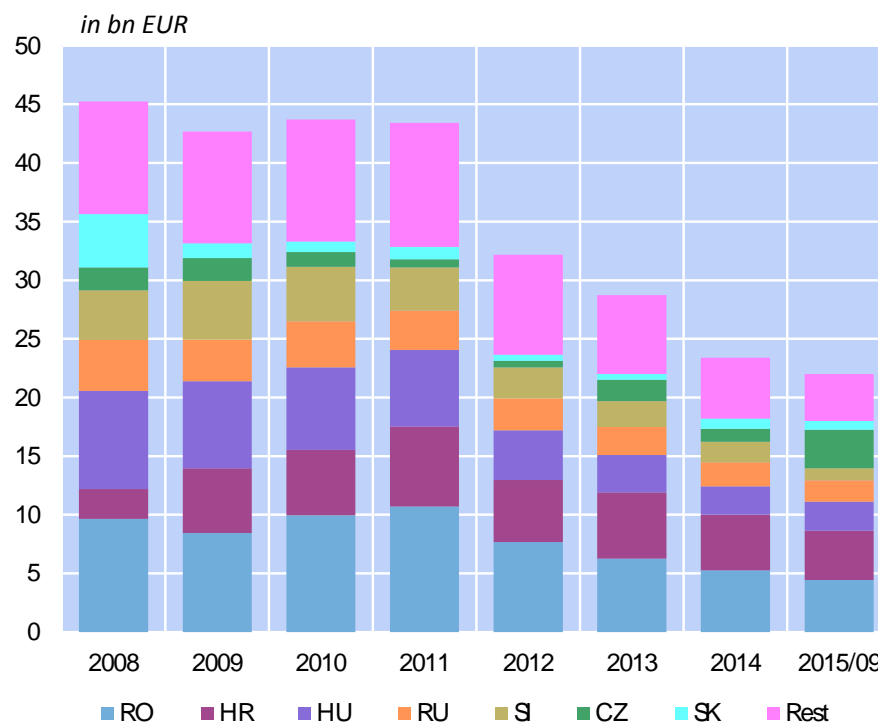
# Sustainability package: local funding situation of Austrian subsidiaries in CESEE improved significantly

Local funding situation of Austrian subsidiaries in CESEE



Source: OeNB, variable bank sample.

Intra-group liquidity transfers to CESEE subsidiaries



Source: OeNB. Liquidity transfers to credit institutions only.

# Austrian Financial Stability Factsheet (1/4)



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## Financial Stability Factsheet

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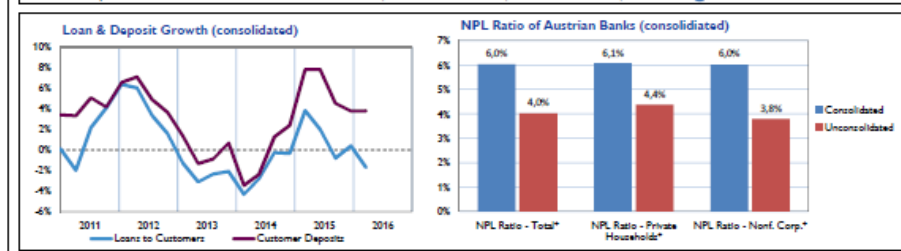
### Austrian Banking Sector

September 2016

currency unit EUR

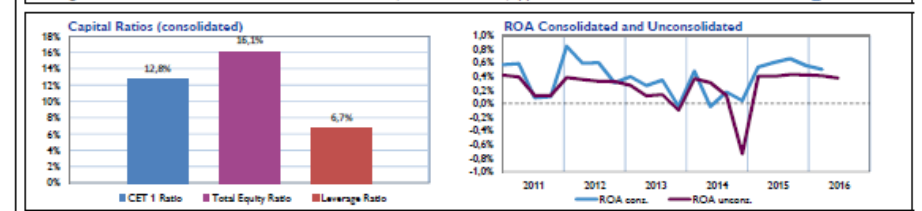
#### 1 Assets and Capital - Consolidated

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Total Assets	1.067,5 bn	-3,4%	-5,4%		16Q1
Loans to Non-MFIs	621,8 bn	-1,7%	2,6%		16Q1
Consolidated data for private households and nonfinancial corporates currently not available / useable					
Investments in Affiliated Companies	19,9 bn	3,6%	0,2%		16Q1
Trading Assets	172,1 bn	-5,3%	-18,4%		16Q1
Customer Deposits	584,6 bn	3,8%	16,7%		16Q1
Risk Provision	25,4 bn	-12,8%	-6,4%		16Q1
Debt Liabilities	157,2 bn	-12,4%	-32,3%		16Q1
CET 1	68,9 bn	3,5%	n.a.		16Q1
Tier 1	69,2 bn	3,4%	0,7%		16Q1
Total Equity	86,8 bn	-2,0%	-1,2%		16Q1
Total Risk Exposure	539,3 bn	-6,5%	-16,2%		16Q1



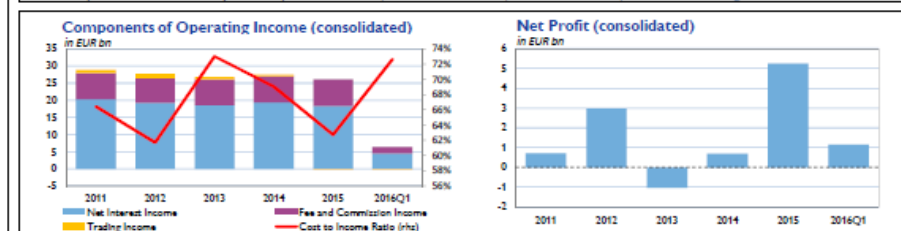
#### 3 Key Ratios - Consolidated

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Loan to Deposit Ratio	106,4%	-5,9pp	-14,6pp		16Q1
NPL Ratio - Total*	6,0%	-0,9pp	n.a.		16Q2
NPL Ratio - Private Households*	6,1%	-0,1pp	n.a.		16Q2
NPL Ratio - Nonf. Corp.*	6,0%	-1,2pp	n.a.		16Q2
Coverage Ratio I	62,0%	-4,3pp	+10,3pp		16Q1
LCR	n.a.	n.a.	n.a.		
NSFR	n.a.	n.a.	n.a.		
Cost to Income Ratio	72,6%	+10,5pp	+14,6pp		16Q1
ROA	0,5%	-0,0pp	-0,1pp		16Q1
ROE	8,5%	-2,2pp	-1,0pp		16Q1
Net Interest Margin	1,7%	-0,0pp	-0,1pp		16Q1
Total Equity Ratio	16,1%	+0,7pp	+2,4pp		16Q1
CET 1 Ratio	12,8%	+1,2pp	n.a.		16Q1
Leverage Ratio	6,7%	+0,4pp	n.a.		16Q2



#### 2 Profitability - Consolidated

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Net Interest Income	4,5 bn	-4,0%	-10,7%		16Q1
Fee and Commission Income	1,9 bn	-4,6%	-2,7%		16Q1
Trading Income	-0,05 bn	-115,9%	-109,3%		16Q1
Other Income	0,22 bn	28%	-88,0%		16Q1
Operating Income	6,5 bn	-8,1%	-29,7%		16Q1
Operating Costs	4,7 bn	7,4%	-21,4%		16Q1
Operating Profit before Risk	1,8 bn	-33,5%	-45,1%		16Q1
Risk Provisioning	0,3 bn	-63,5%	-78,1%		16Q1
Net Profit (after Tax and Minority Interest)	1,1 bn	-7,2%	-15,9%		16Q1



#### 4 Unconsolidated Figures

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Total Assets	850,6 bn	-4,6%	-14,3%		16Q2
Loans to Private Households	148,0 bn	2,2%	7,7%		16Q2
thereof FX-Loans to HH	22,8 bn	-14,8%	-43,4%		16Q2
Loans to Nonf. Corp.	137,2 bn	0,5%	0,4%		16Q2
thereof FX-Loans to NFC	4,7 bn	-25,8%	-62,6%		16Q2
Customer Deposits	389,6 bn	3,2%	14,3%		16Q2
Net Interest Income	4,3 bn	-6,3%	-7,3%		16Q2
Operating Income	9,9 bn	-7,2%	-0,1%		16Q2
Operating Costs	7,0 bn	12,6%	23,9%		16Q2
Operating Profit	2,8 bn	-35,5%	-32,7%		16Q2
Risk Provisioning	1,3 bn	-21,1%	-45,4%		16Q2
Net Profit (after Tax and Minority Interest)	3,2 bn	-10,0%	-17,0%		16Q2
Loan to Deposit Ratio	111,1%	-2,7pp	-17,2pp		16Q2
NPL Ratio - Total*	4,0%	-0,5pp	n.a.		16Q2
NPL Ratio - Private Households*	4,4%	-0,4pp	n.a.		16Q2
NPL Ratio - Nonf. Corp.*	3,8%	-0,6pp	n.a.		16Q2
Cost to Income Ratio	71,4%	+12,6pp	+13,8pp		16Q2
Net Interest Margin	1,0%	-0,0pp	+0,1pp		16Q2
ROA	0,4%	-0,0pp	-0,0pp		16Q2
ROE	5,5%	-0,5pp	-0,1pp		16Q1
Coverage Ratio I	66,2%	-5,9pp	-4,2pp		16Q2

\*Data only dates back to 2014Q1 (new COREP methodology). Although other data sources would allow for longer time series, this source is the only one that allows for separate NPL ratios for households and non-financial corporations.



# Austrian Financial Stability Factsheet (2/4)



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## Financial Stability Factsheet

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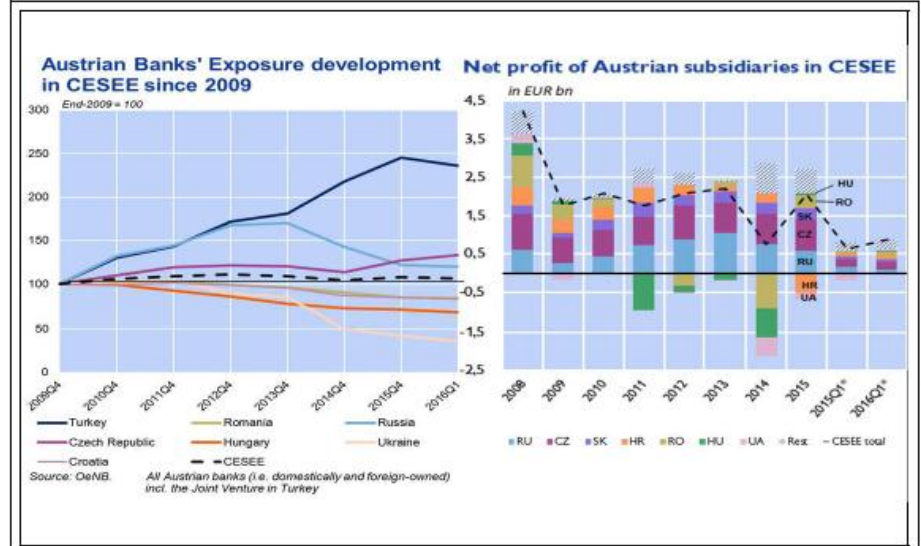
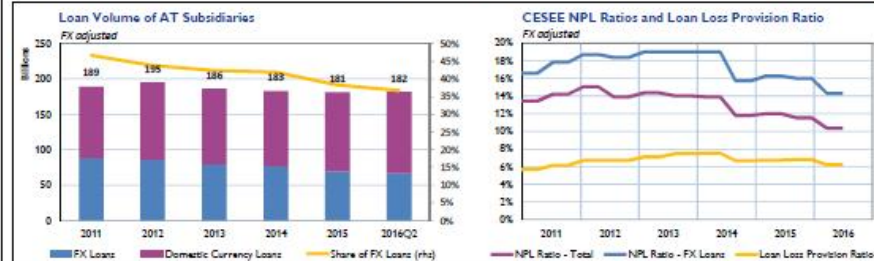
### B Austrian CESEE Exposure

September 2016

currency unit EUR

#### 1 Credit and Liquidity Risk

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As of
Total CESEE Credit Exposure - Ultimate Risk	323,1 bn	-1,3%	-0,9%		16Q1
Number of Subsidiaries	60	-1	-9		16Q1
Number of Countries with Subsidiaries	17	0	n.a.		16Q1
Total Assets of Subsidiaries	298,6 bn	0,7%	n.a.		16Q1
Total Loans of Subsidiaries	181,7 bn	-2,8%	-2,8%		16Q2
FX-Loans	66,7 bn	-8,4%	-20,7%		16Q2
Loan Loss Provision Ratio	6,2%	-0,5pp	+0,5pp		16Q2
Running Risk Costs	0,3 bn	-39,55%	n.a.		16Q1
NPL Ratio - Total	10,4%	-1,6pp	-3,1pp		16Q2
NPL Ratio - FX Loans	14,3%	-2,0pp	-2,3pp		16Q2
Liquidity Transfer	19,1 bn	-13,7%	-57,9%		16Q1
AT Share of BIS Exposure	15,5%	-0,3pp	n.a.		16Q1



#### 2 Country Indicators

	Country	Total Credit Exposure	Lending Subsidiaries	Loans to Private HH	FX Loans to Private HH	Loans to Nonf. Corp.	FX Loans to Nonf. Corp.	Share of FX Loans	Loan to Deposit Ratio	NPL Ratio - Total	NPL Ratio - FX Loans	Coverage I	Cost - Income Ratio	Net Profit	ROA	CET 1 Ratio	LLSFR
	As of	2016Q1	2016Q2	2016Q2	2016Q2	2016Q2	2016Q2	2016Q2	2016Q1	2016Q2	2016Q2	2016Q2	2016Q1	2016Q1	2016Q1	2015Q4	2016Q1
Systemic Priority	CESEE Total	323,1 bn	181,7 bn	77,4 bn	18,1 bn	104,3 bn	48,6 bn	36,7%	88,0%	10,4%	14,3%	60,0%	53,2%	874,0 mn	1,2%	15,1%	81,3%
	HR	32,8 bn	19,5 bn	8,7 bn	5,4 bn	10,7 bn	7,6 bn	66,6%	95,6%	17,0%	17,6%	59,7%	55,1%	93,8 mn	1,1%	19,5%	91,3%
	HU	22,5 bn	10,4 bn	4,0 bn	0,0 bn	6,4 bn	3,7 bn	35,8%	78,1%	14,7%	12,7%	59,0%	81,4%	36,9 mn	0,6%	13,8%	73,1%
	RO	30,6 bn	15,5 bn	8,2 bn	3,8 bn	7,3 bn	4,2 bn	51,8%	82,7%	13,2%	18,6%	59,3%	60,5%	110,4 mn	1,6%	14,3%	78,6%
	RU	27,4 bn	18,4 bn	4,2 bn	0,3 bn	14,2 bn	8,8 bn	49,3%	81,0%	7,8%	6,0%	61,3%	34,9%	103,9 mn	1,4%	7,1%	78,9%
	TR	40,1 bn	21,7 bn	5,8 bn	0,0 bn	16,0 bn	8,1 bn	37,4%	123,7%	5,0%	0,0%	61,7%	45,3%	71,8 mn	1,0%	15,1%	103,5%
	UA	4,2 bn	4,0 bn	1,6 bn	1,2 bn	2,4 bn	1,2 bn	62,4%	66,6%	70,1%	91,9%	59,8%	41,9%	27,8 mn	2,9%	11,7%	56,6%
	CZ	68,4 bn	37,7 bn	18,1 bn	0,0 bn	19,6 bn	6,1 bn	16,3%	82,3%	4,0%	3,9%	60,8%	54,4%	187,2 mn	1,0%	16,7%	75,7%
	SK	36,5 bn	21,5 bn	12,5 bn	0,0 bn	9,0 bn	0,3 bn	1,2%	87,9%	4,9%	0,8%	52,7%	57,2%	63,2 mn	0,9%	16,2%	80,0%
	PL	19,8 bn	8,2 bn	4,6 bn	3,5 bn	3,6 bn	1,3 bn	59,0%	94,3%	8,0%	3,5%	61,5%	54,7%	34,7 mn	1,1%	14,5%	92,4%
	SI	9,2 bn	5,1 bn	2,1 bn	0,4 bn	3,0 bn	0,0 bn	8,3%	111,3%	13,8%	10,7%	53,9%	65,6%	13,5 mn	0,7%	14,3%	103,6%
	BG	12,4 bn	7,3 bn	2,3 bn	0,6 bn	5,0 bn	2,7 bn	45,3%	66,9%	13,1%	20,1%	60,5%	45,3%	60,2 mn	2,0%	20,8%	64,3%
	RS	7,1 bn	4,8 bn	1,8 bn	1,0 bn	3,0 bn	2,5 bn	74,6%	100,1%	16,4%	19,4%	62,9%	54,0%	43,2 mn	2,4%	15,2%	83,9%
	BA	6,6 bn	4,9 bn	2,7 bn	1,6 bn	2,2 bn	1,0 bn	53,7%	88,9%	12,5%	16,6%	72,2%	61,4%	20,1 mn	1,6%	10,9%	77,5%
	AL	1,5 bn	0,8 bn	0,2 bn	0,1 bn	0,6 bn	0,4 bn	59,9%	40,5%	20,2%	28,9%	65,7%	44,6%	-16,8 mn	-3,2%	8,8%	40,5%
	BY	1,4 bn	0,8 bn	0,1 bn	0,0 bn	0,7 bn	0,5 bn	65,0%	99,2%	9,0%	9,9%	58,7%	34,3%	20,3 mn	6,4%	8,2%	95,6%
	ME	0,4 bn	0,4 bn	0,3 bn	0,0 bn	0,1 bn	0,0 bn	2,7%	102,9%	11,3%	59,1%	58,0%	107,4%	0,2 mn	0,3%	19,5%	n.a.
	MK	0,3 bn	0,2 bn	0,1 bn	0,0 bn	0,1 bn	0,1 bn	62,8%	81,7%	9,9%	11,5%	81,1%	67,7%	0,4 mn	0,6%	19,8%	62,0%
	XK	0,5 bn	0,5 bn	0,2 bn	0,0 bn	0,3 bn	0,0 bn	69,3%	7,0%	0,0%	44,3%	61,0%	3,0 mn	1,4%	11,6%	69,3%	

# Austrian Financial Stability Factsheet (3/4)



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## Financial Stability Factsheet

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EUROSYSTEM

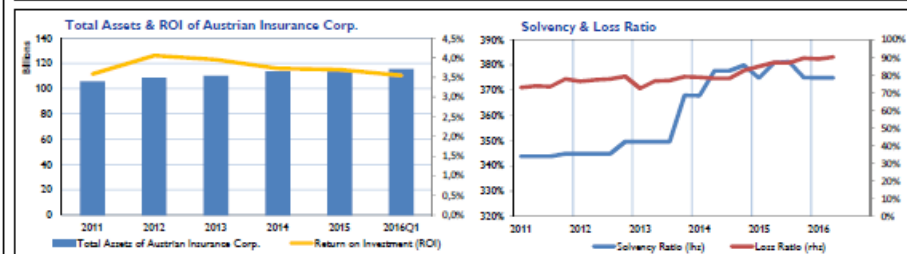
### C Others Sectors and Indicators

September 2016

currency unit EUR

#### 1 Insurance Sector

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Total Assets of Austrian Insurance Corp.	115,5 bn	-0,4%	8,0%		16Q1
Return on Investment (ROI)	3,9%	-0,0pp	-0,8pp		16Q2
Loss Ratio	90,3%	+3,1pp	+16,5pp		16Q2
Expense Ratio	21,0%	-0,0pp	+0,7pp		16Q2
Solvency Ratio	374,9%	-6,0pp	+31,1pp		16Q2
Asset Allocation - Debt Securities	28,6 bn	-4,8%	-12,1%		16Q1

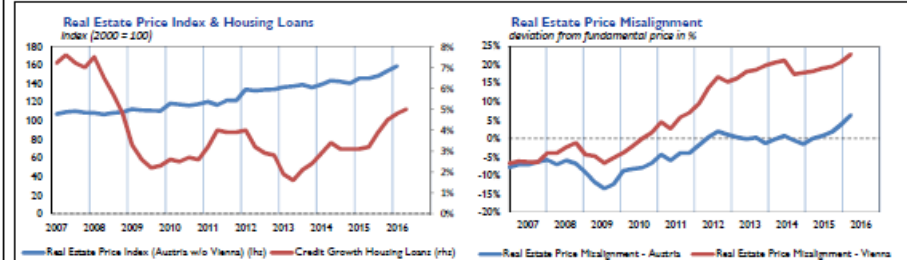


#### 2 Mutual Funds, Pension Funds and Other Financial Intermediaries

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Total Assets Under Management	168,4 bn	-1,2%	16,1%		16Q2
Performance - Mutual Funds	1,8%	-4,9pp	-4,6pp		15Q4
Performance - Pension Funds	7,3%	-1,8pp	+1,9pp		15Q3

#### 3 Real Estate Sector

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Real Estate Price Index (Austria w/o Vienna)	158,9	8,9%	31,7%		16Q1
Real Estate Price Misalignment - Austria	6,3%	+6,3pp	+10,7pp		16Q1
Real Estate Price Misalignment - Vienna	22,8%	+4,6pp	+18,4pp		16Q1
Credit Growth Housing Loans	5,0%	+1,8pp	+1,0pp		16Q2

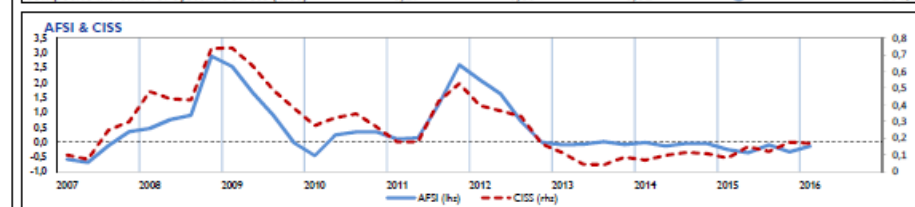


#### 4 Sectoral Indebtedness

Indicator	Figure	Δ 1 Y	Δ 5 Y	EU Average	As Of
Public debt in % of GDP	84,3%	-2,0pp	+2,1pp	92,2%	16Q2
HH debt in % of GDP	51,1%	-1,5pp	-2,8pp	67,1%	16Q1
NFC debt in % of GDP	91,8%	-2,4pp	-0,5pp	105,0%	16Q1
Credit to GDP Gap	-8,4%	-0,2pp	-8,6pp		15Q4

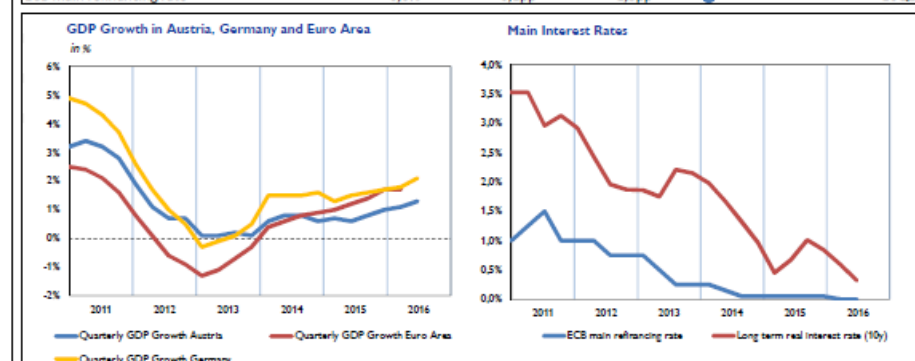
#### 5 Macroprudential Indicators (Model Output)

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Austrian Financial Stress Index (AFSI)	-0,14	0,12	-0,24		16Q1
Composite Indicator of Systemic Stress (CISS)	0,17	0,09	-0,01		16Q1



#### 6 Economic Indicators

Indicator	Figure	Δ 1 Y	Δ 5 Y	Current to Min/Max 5Y	As Of
Quarterly GDP Growth Austria	1,30%	+0,7pp	-2,1pp		16Q2
Quarterly GDP Growth Euro Area	1,70%	+0,7pp	-0,8pp		16Q1
Quarterly GDP Growth Germany	2,10%	+0,6pp	-2,6pp		16Q2
Quarterly GDP Growth CESEE-MS (non-EA)	n.a.	n.a.	n.a.		16Q1
Austrian CA-balance in % of GDP	-1,5%	-0,0pp	+1,5pp		16Q1
Inflation - Austria	0,6%	-0,4pp	-3,1pp		16Q2
Long term real interest rate (10y)	0,3%	-0,4pp	-3,2pp		16Q2
ECB main refinancing rate	0,0%	-0,1pp	-1,3pp		16Q2



# Austrian Financial Stability Factsheet (4/4)



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## Financial Stability Factsheet

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### D Definitions

September 2016

currency unit EUR

Indicator	Description	Source	Indicator	Description	Source
<b>A Austrian Banking Sector</b>			<b>C Others Sectors and Indicators</b>		
<b>1 Assets and Capital</b>			<b>1 Insurance Sector</b>		
Total Assets	Total consolidated assets of Austrian banks	OeNB	Total Assets of Austrian Insurance Corp.		OeNB
Loans to Private Households	Total loans to domestic private households	OeNB	Return on Investment (ROI)	Net investment income divided by average financial investments	FMA
Loans to Nonf. Corp.	Total loans to domestic non-financial corporations	OeNB	Loss Ratio	(Payments for claims + Changes in provision for outstanding claims)/Premiums earned	FMA
Investments in Affiliated Companies	Equity investments in affiliated companies and participations	OeNB	Expense Ratio	(Acquisition expenses + Other administrative expenses)/Premiums earned	FMA
Trading Assets	Total assets held for trading	OeNB	Solvency Ratio	Own funds divided by regulatory own funds	FMA
Customer Deposits	Liabilities against customers	OeNB	Asset Allocation - Debt Securities	Funds allocated in debt securities	FMA
Risk Provision	Current level of provisions / allowances for credit risks	OeNB	CESEE Exposure of AT Insurance Corp.		FMA
Debt Liabilities			<b>2 Mutual Funds, Pension Funds and Other Financial Intermediaries</b>		
CET 1	Common equity tier 1 according to Basel III	OeNB	Total Assets Under Management	Net asset value of institutional funds	OeNB
Tier 1	Tier 1 equity according to Basel III	OeNB	Performance - Mutual Funds	One year performance of Austrian mutual funds	OeNB
Total Equity	Total equity according to Basel III	OeNB	Performance - Pension Funds	One year performance of Austrian pension funds	OeNB
Total Risk Exposure	Total risk exposure that serves as the denominator for calculation of capital ratios	OeNB	Performance - Severance Funds	One year performance of Austrian severance funds	OeNB
<b>2 Profitability</b>			Share of Other Financial Intermediaries		OeNB
Net Interest Income	Total interest income net of interest expenses	OeNB	<b>3 Real Estate Sector</b>		
Fee and Commission Income	Total fee and commission income net of fee and commission expenses.	OeNB	Real Estate Price Index (Austria w/o Vienna)	Real estate price index for Austria (without Vienna)	OeNB
Trading Income	Total trading earnings net of trading losses	OeNB	Real Estate Price Misalignment - Austria	Deviation from fundamental real estate price in percent - Austria	OeNB
Other Income	Includes dividend income, gains and losses on financial assets, gains and losses on derecognition of non-financial assets and other operating income	OeNB	Real Estate Price Misalignment - Vienna	Deviation from fundamental real estate price in percent - only Vienna	OeNB
Operating Income	Total operating income, net	OeNB	Credit Growth Housing Loans	Q-o-Q change of real estate loans to households	OeNB
Operating Costs	Total operating costs	OeNB	<b>4 Sectoral Indebtedness</b>		
Operating Profit before Risk	Profit or loss before risk, taxes and minority interests from continuing operations.	OeNB	Public debt in % of GDP	Austrian public debt in percent of Austrian GDP	OeNB
Risk Provisioning	Impairment on financial assets not measured at fair value through profit or loss	OeNB	HH debt in % of GDP	Austrian household debt in percent of Austrian GDP	OeNB
Net Profit (after Tax and Minority Interest)	Profit or loss after tax and minority interest	OeNB	NFC debt in % of GDP	Austrian non-financial corporate debt in percent of Austrian GDP	OeNB
<b>3 Key Ratios</b>			Credit to GDP Gap	Difference between the credit-to-GDP ratio and its long-term trend	OeNB
Loan to Deposit Ratio	Non-financial customer loans divided by non-financial customer deposits.	OeNB	<b>5 Macroprudential Indicators (Model Output)</b>		
NPL Ratio - Total	Customer loans (HH & NFC) classified as non-performing divided by total customer loans	OeNB	Austrian Financial Stress Index (AFSI)	contemporaneous financial soundness index quantifies the level of stress in the Austrian financial market. A high positive value of this unit-free index signals stress	OeNB
NPL Ratio - Private Households	Loans to priv. HH classified as non-performing divided by total loans to priv. HH	OeNB	Composite Indicator of Systemic Stress (CISS)	a contemporaneous financial soundness index quantifies the level of financial stress in the Euro Area. It is unit-free and constrained to lie within the interval [0, 1], with 0 signaling no stress.	OeNB
NPL Ratio - Nonf. Corp.	Loans to NFC classified as non-performing divided by total loans to NFC	OeNB	<b>6 Economic Indicators</b>		
Coverage Ratio I	Risk provision divided by total non-performing customer loans	OeNB	Quarterly GDP Growth Austria	Austrian quarterly real GDP growth	OECD
Counter Balancing Capacity	Realizable liquidity (subsequent month)	OeNB	Quarterly GDP Growth Euro Area	Euro Area quarterly real GDP growth	OECD
Net Interbank Position	Net position of the Austrian banking system in interbank operations (subsequent month)	OeNB	Quarterly GDP Growth Germany	German quarterly real GDP growth	OECD
Cost to Income Ratio			Quarterly GDP Growth CESEE-MS (non-EA)	real GDP growth for the non-euro area EU member states (BG, CZ, HU, PL, IT, RO)	OECD
ROA (r <sub>ROA</sub> )	Return on Assets	OeNB	Austrian CA-balance in % of GDP	Current account balance of Austria divided by Austrian GDP	OeNB
ROE	Return on Equity	OeNB	Inflation - Austria	Quarterly Austrian rate of inflation (measured by consumer price index)	OeNB
Net Interest Margin	Net interest income divided by total assets		Long term real interest rate (10y)		ECB
Total Equity Ratio	Total Equity divided by total risk exposure	OeNB	ECB main refinancing rate		ECB
CET 1 Ratio	CET 1 divided by total risk exposure	OeNB			
Leverage Ratio	Leverage Ratio according to Basel III	OeNB			
<b>B Austrian CESEE Exposure</b>					
<b>1 Credit and Liquidity Risk</b>					
Total CESEE Credit Exposure - Ultimate Risk	CESEE exposure against credit institutions, non-financial customers - ultimate risk basis	OeNB			
Number of Subsidiaries	Number of CESEE subsidiaries owned by Austrian top 7 banks excluding joint ventures	OeNB			
Number of Countries with Subsidiaries	Number of CESEE countries that host subsidiaries owned by Austrian top 7 banks (excl. JVs)	OeNB			
Total Assets of Subsidiaries	Total Assets of Austrian CESEE subsidiaries (incl. YapiKredi)	OeNB			
Total Loans of Subsidiaries	Total Loans of Austrian top 7 bank's CESEE subsidiaries (incl. YapiKredi)	OeNB			
FX-Loans	Total foreign currency loans of Austrian top 7 bank's CESEE subsidiaries (incl. YapiKredi)	OeNB			
Loan Loss Provision Ratio	Loan loss provision divided by total loans of Austrian CESEE subsidiaries (incl. YapiKredi)	OeNB			
Running Risk Costs	Allocation to loans loss provisions / allowances	OeNB			
NPL Ratio - Total	Non-performing loans divided by HH and NFC loans (of Austrian CESEE subsidiaries)	OeNB			