

Research Update

Economic Analysis and Research Department

Content

OeNB Economic Indicator (February 2017)	2
EIB/OeNB Workshop “Investment and investment finance – The Austrian case”	3
“Grows together what belongs together – why sustainable convergence matters?” Presentation by Christine Gartner	4
External Publications by Staff Members	8
Call for Applications: Visiting Research Program	9
Upcoming and Recent Events.....	9
OeNB Courses at the Joint Vienna Institute (JVI)	10

www.oenb.at
cesee.oenb.at
www.hfcs.at

Imprint/inquiries/copyright 2017:
 Oesterreichische Nationalbank, Economic
 Analysis and Research Department
 Postal address: P.O. Box 61, A 1011 Vienna,
 Austria; OeNB.ResearchUpdate@oenb.at

Editorial



by Doris Ritzberger-Grünwald
 Director of the Economic Analysis and
 Research Department

Lost in transition

The speed of the convergence process of CESEE countries was heavily overestimated, and the forecast that they would be on a par with EU countries after one generation was heavily wrong. In reality the transition process will last much longer. Yet unfulfilled expectations make people disappointed, and they start looking for drastic change. At the same time, the starting point is overlooked, either because people tend to keep the good memories, or are simply too young to remember.

Comparisons often overlook how limited the options used to be for the majority of the CESEE population. Borders were closed, economic decisions imposed, and human rights often ignored.

Indeed, the same story holds for the euro zone. Instead of enjoying the advantages of a single currency, people have lost confidence. The original reasons for founding the euro zone, like eliminating exchange rate risk and currency conversion fees are simply forgotten – or for that matter, things like cutting the administrative burden of capital controls, which we achieved even earlier when joining the EU.

Constructive critique is welcome, as are new ideas. But throwing out the EU is not an option, as this would take us back to the starting point, which is not a desirable thing at all.

Doris Ritzberger-Grünwald

OeNB Economic Indicator (February 2017) Austria's economy off to a good start in 2017

The Austrian economy is on a stable growth path since early 2017, after having gained considerable momentum in the course of 2016. Growth in 2016 was driven mainly by private consumption and business investment. An improved outlook for exports compensated for weaker investment activity in the final months of 2016, as a result of which the industry outlook remains very favorable. Private consumption continues to be fueled by strong employment notwithstanding rising inflation. Based on its quarterly forecasting exercise, the Oesterreichische Nationalbank (OeNB) expects real GDP to grow by 0.6% in the first quarter of 2017 and by 0.5% in the second quarter (compared with the previous three months, respectively). The forecast for the first quarter has been revised upward by 0.1 percentage point compared with the November 2016 forecast.

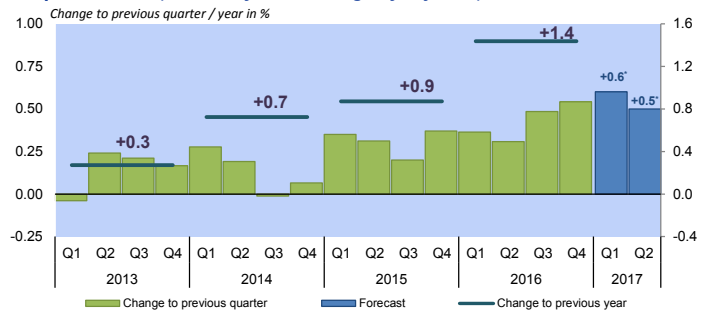
The current outlook for the global economy is heavily influenced by the activities of the new U.S. government. Announcements of protectionist measures coincide with promises of fiscal expansion, making it difficult to assess the impact developments in the United States may have on global conditions. Sentiment indicators like the United States ISM Purchasing Managers Index imply that U.S. companies tend to see the political turn of events as good for the economy, while European sentiment indicators are more mixed in this respect. Brexit notwithstanding, the results of the ifo index published by the German Institute for Economic Research reflect increased optimism among German firms.

Global trade was very weak over the past two years and did not start to pick up significantly until November 2016. Against this backdrop, Austrian goods exports were very weak in the first ten months of 2016. The OeNB's export indicator as well as export orders show a marked increase of momentum in late 2016/early 2017. Tourism was a pillar of service exports in 2016. The number of overnight stays by nonresidents increased by 4.1%, reaching an unprecedented 102.8 million.

Industrial activity continued to expand toward the end of 2016, with the automobile sector performing particularly well. Order books have been filling up, and the Purchasing Managers Index published by Bank Austria

also bodes well for Austrian industry, having reached 57.3 points in January 2017, which is the highest result

Short-Term outlook for Austria's real GDP for the first and second quarter 2017 (seasonally and working-day adjusted)



*) Forecast
Source: OeNB's Economic Indicator from February 2017.

in close to six years.

Growth in 2016 was driven mainly by private consumption as well as by business investment. Investment in machinery and equipment – above all transport equipment – grew at a robust pace (+6.0%), but growth rates decreased as the year progressed. Therefore, the stimulus from investment is expected to be weaker in the first half of 2017.

Following a good start into 2016, the construction sector lost some steam during the year. Yet the confidence indicator for the construction sector has been trending upward for two years, peaking at a historical high of 7.3 points in January 2017. Together with the sharp increase in building permits, this indicates an improved outlook for growth, at least when it comes to the construction of buildings. While the exceptionally low temperatures of January had a negative impact on construction activity, this slowdown is likely to be offset in the coming months.

Households have been spending some of the income gains from the tax reform implemented in January 2016 by consuming more. Much of the additional income went into savings, however. These extra savings are likely to boost consumption in the months ahead, but the impact is going to lessen over time. HICP inflation has been increasing in recent months, reaching 1.6% in December 2016. In other words, inflation now exceeds negotiated wage growth. The dampening impact of inflation on real incomes, and thus on consumption, is likely to persist in the months ahead. At the same time,

the outlook for employment is very good, which will continue to support private consumption. The majority of the measures outlined in the government's new work program are scheduled for implementation from mid-2017 onward or in early 2018. Hence, any impact they are likely to have on economic activity will arise beyond the horizon of the current short-term forecast. On

balance, the growth path of the Austrian economy in the first half of 2017 is robust.

Next update of the OeNB's Economic Indicator: May 2017.

[More information](#)

EIB/OeNB Workshop “Investment and investment finance – The Austrian case”

The Oesterreichische Nationalbank (OeNB) and the European Investment Bank (EIB) held a joint workshop on “Investment and investment finance: The Austrian case” at the OeNB on March 20, 2017. The workshop discussed the strengths and weaknesses of Austria as a target for business investments and aimed to identify areas in which the EIB and other institutions could best support business investments in Austria without crowding out other investment. Speakers from research institutes and national and international institutions as well as practitioners shared their views on the topic, reaching the following key findings:

investment in Austria is more favorable to growth than the investment structure observed in the EU, as the share of all components of investment in GDP (except housing) is above the EU average, especially for investment in intellectual property. Nevertheless, Austrian firms seem to invest slightly less than the EU average in developing products that are new to the global market. Despite the high quality of Austrian capital stock, which surpasses the EU average, and a high capacity utilization rate, the main reasons for investment in Austria are still found to be the replacement and rationalization of production. Reasons for new investment are dominated by the market outlook, innovation and digitalization. Firms mention bureaucratic obstacles (“red tape”), labor market regulations and skill mismatches as the main drags on investment activities in Austria.

The workshop also brought insights into investment finance. Internal finance is the most important and stable source of funds for Austrian nonfinancial corporations. Longer-term bank loans are going up, while short-term financing by banks is becoming less important. On balance, banks in Austria are still tightening their credit standards. In this context, Austrian enterprises in particular regard banks' collateral requirements and covenants as restrictive. Insufficient collateral was cited as the main reason for rejecting or reducing loans to SMEs. However, from a macroeconomic point of view, OeNB research does not point to sizeable negative effects of loan supply on investment in Austria in the recent past. From a practitioner's point of view, external financing in Austria is hampered by excessive bureaucratic and regulatory burdens on businesses.

Currently, the EIB mainly provides finance for the Austrian transport, energy and SME sectors. For 2017, it is targeting an even higher lending volume in Austria



Austria has one of the highest investment-to-GDP ratios in the EU, but this ratio has been declining since the 1990s. While the gross investment ratio (including depreciation) has declined moderately, the net investment ratio has dropped significantly since 2000, pointing to a substantial increase in the depreciation rate. The decline in Austria's investment ratio over the last decades can be explained by lower long-term growth prospects, with demand being the main driver. The structure of

than in 2016, with a strong focus on EFSI (European Fund for Strategic Investments) activities. In line with market needs and country aspirations, in 2017 the EIB aims at projects that strengthen Austria's innovation capacity by reallocating resources toward high-tech sectors and

supporting innovative SMEs, transport, the health sector, energy efficiency and municipal infrastructure.

The workshop presentations are available at <https://www.oenb.at/en/Monetary-Policy/Research/workshops.html>.

ANNOUNCEMENT I

44th OeNB Economic Conference in cooperation with SUERF The Financial System of the Future

May 29 and 30, 2017
Vienna Marriott Hotel
Parkring 12a, 1010 Vienna

Modern economies need a functioning financial system. In principle, the financial system has four main functions: providing a payment system, matching borrowers and lenders, enabling people to manage their personal finances across their lifetimes and between generations, and sharing and managing risk. Despite the implementation of a series of reforms in 2010, including enhanced capital requirements for banks, new banking resolution legislation and the centralization of derivatives markets, the question whether the current financial system is fit for the future remains unanswered. Critics claim that the financial system today is still very similar to what it was before the financial crisis started in 2007. So is the financial system fit for the future? Will its current structure allow it to fulfill its main functions? Do we need further structural changes? If so, what kind of changes? Are tighter banking regulation, an increasing role for shadow banking and the EU's project of establishing a capital markets union the way to go? What opportunities and potential risks do such changes involve? How will technological developments like fintech and digital money shape the future financial system?

Participation by invitation only.

[More information and program](#)

“Grows together what belongs together – why sustainable convergence matters?” Presentation by Christine Gartner (Principal economist, Convergence & Competitiveness Division, Directorate Economic Developments, European Central Bank)

On February 2, 2017, the OeNB hosted a presentation by Christine Gartner, Principal Economist at the European Central Bank (ECB), on the factors determining sustainable real convergence. Building on the ECB's convergence analysis of EU Member States that are not yet members

of the euro area, Gartner focused on four key lessons on convergence among EU and euro area member countries.

First, she pointed out that the fulfilment of the “Maastricht” nominal and legal convergence criteria in

the run-up to euro adoption is no guarantee for smooth membership in the euro area over time. According to Gartner, real and institutional convergence is crucial for the sustainability of convergence. In particular, sustainable real convergence (SRC) would support economic and social cohesion in the absence of fiscal transfer mechanisms and would imply sustainable inflation differentials across euro area countries, thus not fueling boom-bust cycles via lower real interest rates and not hampering competitiveness. Interestingly, real and institutional convergence went hand in hand mainly in the case of EU countries that joined the EU after 2002.

Second, Christine Gartner pointed out that convergence calls for policy efforts before and after euro adoption as no automatism in the convergence process could be established. Accordingly, the euro adoption, i.e. deeper monetary integration, supported investor confidence, fueled capital inflows and reduced interest rates prior to the 2007/2008 crisis. Since then, however, some euro area member countries have even established a trend of divergence.

A third lesson learned is that national policies and policies at the European level should accompany and support a successful process of convergence – this applying for both euro area countries and aspiring euro area members. In particular, Christine Gartner highlighted the enhanced integration evidenced by the financial markets union and the fiscal union since the establishment of the European Semester in 2011.

Fourth, it was stressed that the costs related to euro adoption, as for instance, related to information or transactions may prove to be sizable. In particular, economic costs may be high in terms of loss of competitiveness housing boom-bust cycles or lower productivity. At the same time, there are benefits in terms of enhanced trade and higher capital inflows as well as lower borrowing costs, while the technical benefits have proven to amount to up to 0.4% of euro area GDP.

In a further step, Christine Gartner drew attention to the ECB's analytical framework for monitoring the compliance with the Maastricht criteria and exploring euro area enlargement. A key document in this context is the biennial ECB Convergence Report, which analyses the four quantitative criteria for sustainable economic convergence for EU Member States with a derogation (i.e. Bulgaria, the Czech Republic, Croatia, Hungary, Poland, Romania and Sweden). Beyond the Maastricht

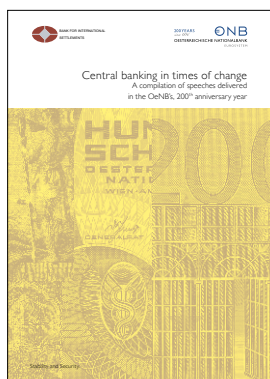
criteria, the ECB's convergence analysis is aligned with the indicators as embedded in the EU economic governance framework, in particular the macroeconomic imbalance procedure. The ECB's analysis also encompasses the evaluation of the compatibility of the overall policy framework with exchange rate mechanism II, which is a precondition for eventually adopting the euro. The analysis considers factors related to macroeconomic stability, financial stability, external imbalances as well as the quality of product markets regulation, the latter being key for structural reforms.

Gartner outlined that the analysis of the 2016 ECB Convergence Report pointed toward compliance with the price stability criterion as none of the EU non-euro area countries have been above the reference value in 2016. At the same time, the ECB's analysis of the fiscal convergence aspect, concluded that only Croatia and Hungary exhibited a debt-to-GDP ratio above the 60%. Again, Croatia was the only country subject to the EU's excessive deficit procedure in 2016, with a fiscal deficit above 3% of GDP. In 2016, the exchange rate criterion was not fulfilled due to relatively high exchange rate volatility in most countries. By contrast, the convergence of the long-term interest rate was complied with in all countries under scrutiny.

In conclusion, Christine Gartner stressed that overall a continued real convergence among EU Member States has taken place since 1999. At the same time, little real convergence has been achieved among euro area member countries and in particular among "early euro adopters." According to Gartner, one way to accelerate catching up would be to set up and promote a sound institutional framework and structural conditions that are conducive to productivity growth and enhanced competitiveness.



ANNOUNCEMENT II



We should like to draw your attention to the volume *Central banking in times of change* – A compilation of speeches delivered in the OeNB's 200th anniversary year, which presents speeches given at both the anniversary ceremony in June 2016 and the high-level research conference in September 2016.

The anniversary ceremony focused on past challenges and future perspectives of central bank politics, while at the conference, which was organized in cooperation with the Bank for International Settlements (BIS), leading members of the global central banking and academic communities discussed some of the core issues of present-day monetary policy:

- evolving central bank mandates
- monetary independence and
- the 2% price stability target.

The volume is available at the OeNB's website at <https://www.oenb.at/en/About-Us/History/200th-anniversary-of-the-OeNB/publications.html>.

OeNB Periodical Publications

List of all Publications since 2001 (by staff of the Economic Analysis and Research Section)



Focus on European Economic Integration Q1/17

How does foreign currency debt relief affect households' loan demand? Evidence from the OeNB Euro Survey in CESEE

(Elisabeth Beckmann)

How do resource-driven economies cope with the oil price slump? A comparative survey of ten major oil-exporting countries

(Stephan Barisitz, Andreas Breitenfellner)

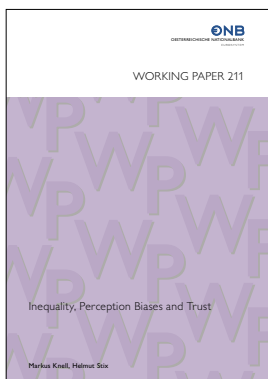
How would a fiscal shock in Germany affect other European countries? Evidence from a Bayesian GVAR model with sign restrictions

(Markus Eller, Martin Feldkircher, Florian Huber)

[Read more](#)

Working Papers

<http://www.oenb.at/en/Publications/Economics/Working-Papers.html>



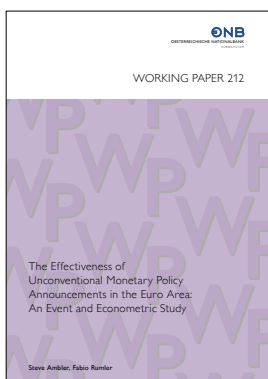
Inequality, Perception Biases and Trust

Markus Knell and Helmut Stix (Working Paper 211)

We present a theoretical framework that links trust, trustworthiness and inequality. It is assumed that an individual's level of interpersonal trust is related to expected trustworthiness among his reference group and that trustworthiness decreases when interpersonal income differences increase. As a consequence, inequality affects trust via the individual-specific perception of inequality which might not coincide with aggregate measures of inequality

like the Gini coefficient. We work out the implications of our model for empirical estimations of the trust-inequality nexus and show that such regressions are very likely to understate the true effect of inequality. This might lead to the erroneous conclusion that inequality exerts no effect on trust. Survey data from Austria support the predictions of our framework. Individual-specific perceptions of inequality have a strong negative effect on trust while aggregate measures of inequality show no significant relation.

[Read more](#)



The Effectiveness of Unconventional Monetary Policy Announcements in the Euro Area: An Event and Econometric Study

Steve Ambler and Fabio Rumler (Working Paper 212)

We use daily data on government bond yields and market-based inflation expectations (from inflation-linked swaps) to measure the effects of unconventional monetary policy (UMP) announcements in the euro area. We focus on the effects of policy announcements on ex-ante real interest rates, since the main transmission mechanism of monetary policy is through real interest rates and their effect on aggregate demand. We find evidence of statistically significant effects of UMP announcements of the ECB on real interest rates at maturities of five and ten years that operate by raising inflation expectations. When

distinguishing among UMP announcements that exceeded or disappointed market expectations, we find that the former significantly reduced nominal and real interest rates and increased inflation expectations while the latter had the opposite effect.

[Read more](#)

External Publications by Staff Members

The Return on Social Security with Increasing Longevity

by Markus Knell

Macroeconomic Dynamics 21(2), 2017, 462–487.

In this paper I study the impact of increasing longevity on pay-as-you-go pension systems. First, I show that increasing longevity increases the internal rate of return. The size of the effect differs for different policy regimes. It is higher for the case where the retirement age is increased to keep the system in balance than for the case where the necessary adjustment is achieved by reducing pension benefits. Second, I study optimally chosen retirement decisions and I show that the socially optimal policy involves a shorter working life than the private optimum. The social optimum can be implemented by the use of a PAYG system that combines an actuarial and a flat pension.

[Read more](#)

Increasing life expectancy and NDC pension systems

by Markus Knell

Journal of Pension Economics and Finance, first view,

DOI: <https://doi.org/10.1017/S1474747216000226>, published online: 23 November 2016, pp. 1-30.

In this paper, I study how pay-as-you-go pension systems of the notional defined contribution type can be designed such that they remain financially stable in the presence of increasing life expectancy. For this to happen three crucial parameters must be set in an appropriate way: the notional interest rate, the adjustment rate and the annuity conversion factor. I show that there exist two main approaches to implement a stable system. The first uses period-specific annuitization and indexation rates that correct for labor force increases, which are only due to rises in the retirement age which are necessary to 'neutralize' the increase in life expectancy. The second approach uses cohort-specific annuitization and indexation rates that are larger than in a stationary situation. This is due to the fact that a continuously increasing life expectancy leads to higher internal rates of return that can be passed on via the indexation.

Consumer Cash Usage and Management: A Cross-Country Comparison with Diary Survey Data

by John Bagnall, David Bounie, Kim P. Huynh, Anneke Kosse, Tobias Schmidt, Scott Schuh and Helmut Stix

International Journal of Central Banking, December 2016, pp. 1–61.

We measure consumers' use of cash by harmonizing payment diary surveys from seven countries. The seven diary surveys were conducted in 2009 (Canada), 2010 (Australia), 2011 (Austria, France, Germany and the Netherlands), and 2012 (the United States). Our paper finds cross-country differences – for example, the level of cash usage differs across countries. Cash has not disappeared as a payment instrument, especially for low-value transactions. We also find that the use of cash is strongly correlated with transaction size, demographics, and point-of-sale characteristics such as merchant card acceptance and venue.

[Read more](#)

Call for Applications: Visiting Research Program

The Oesterreichische Nationalbank (OeNB) invites applications from external researchers (EU or Swiss nationals) for participation in a Visiting Research Program established by the OeNB's Economic Analysis and Research Department. The purpose of this program is to enhance cooperation with members of academic and research institutions (preferably postdoc) who work in the fields of macroeconomics, international economics or financial economics and/or with a regional focus on Central, Eastern and Southeastern Europe.



See also: [Visiting Research Program 2017](#)

Upcoming and Recent Events

The following events are organized by the OeNB. Please note that attendance is by invitation only. If you are interested in participating in one or more of the events, please send an e-mail to OeNB.ResearchUpdate@oenb.at or take a look at <http://www.oenb.at/en/Calendar.html>

Upcoming

April 28, 2017	Friday Seminar*: John Muellbauer (University of Oxford): Consumption and Microeconomics
May 12, 2017	Friday Seminar*: Jean-Baptiste Michau (Ecole Polytechnique, Paris): Secular Stagnation: Theory and Remedies
May 29 and 30, 2017	44 th OeNB Economic Conference in cooperation with SUERF: "The Financial System of the Future" (by invitation only)
June 29 and 30, 2017	25 th Anniversary of the Joint Vienna Institute: "Globalization, Technology and Lifelong Learning" (by invitation only!)
June 9, 2017	Friday Seminar*: Rama Cont and Eric Schaaning (Imperial College, London): Fire Sales, Indirect contagion and Systemic
June 23, 2017	Friday Seminar*: Evren Damar (Bank of Canada): International Banking and Cross-Border Effects of Regulation: Lessons from Canada
September 18, 2017	81 st East Jour Fixe: "Non-Performing Loans" (working title) (by invitation only!)
November 20 and 21, 2017	Conference on European Economic Integration (CEEI): "A modern take on structural reforms – past and future challenges for CESEE and Europe at large" (by invitation only!)

*) Friday Seminar: Friday from 11:00–12:30 at the Oesterreichische Nationalbank

Recent Events

January 16, 2017	Seminar on World Bank Report: "Risks and Returns: Managing Financial Trade-Offs for Inclusive Growth in Europe and Central Asia" (by invitation only)
January 19, 2017	Presentation of the EBRD Transition Report jointly by the BMF and the OeNB (by invitation only)
January 26, 2017	Fourth Research Workshop of the Task Force on Banking Analysis for Monetary Policy of the MPC (by invitation only)
January 26 and 27, 2017	HFCS-CESEE Workshop: "How to use survey data for financial stability analysis in CESEE countries" (by invitation only)
March 3, 2017	Conferene on "Investment and investment finance: the Austrian story", jointly organized with the European Investment Bank (by invitation only!)
March 10, 2017	Friday Seminar: Filiz Derya Unsal (IMF): Macroprudential Policy, Incomplete Information and Inequality: The Case for Developing Countries
March 30, 2017	Press conference Annual Report of the OeNB (by invitation only)
March 31, 2017	80 th East Jour Fixe: "Bulgaria and Romania – 10 years after EU accession" of the Oesterreichische Nationalbank (by invitation only)
April 4, 2017	Friday Seminar*: Roger Wattenhofer (ETH Zürich): Bitcoin, Blockchain & Beyond

OeNB Courses at the Joint Vienna Institute (JVI)

For further details see: www.jvi.org

January 23 – 26, 2017	Advanced Course on Financial Stability Stress Testing for Banking Systems
January 30 – February 3, 2017	Banking Supervision within the Basel Framework (in cooperation with JVI and DBB)
March 2 – 3, 2017	International Cooperation in Central Banks
March 13 – 17, 2017	Monetary Policy Implementation (in cooperation with JVI and DBB)
March 20 – 22, 2017	Financial Education
May 8 – 12, 2017	Integration in Europe: European Union and Eurasian Economic Union (in cooperation with the Austrian Federal Ministry of Finance)
September 11 – 15, 2017	Challenges for Candidate and Potential Candidate Countries in the EU and EMU Accession Process (in cooperation with the Austrian Federal Ministry of Finance and the ECB)
October 9 - 13, 2017	Macro-Financial Stability in Central, Eastern and Southeastern Europe (in cooperation with the ECB)
November 22 – 24, 2017	Financial Translation and Editing: New Skills for New Challenges
November 27 – 29, 2017	Cash Circulation and Payment Systems in Austria