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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 pursue a regional focus on Central, Eastern and Southeastern Europe.

The OeNB offers a stimulating and professional research environment in close proximity to the policymaking process. Visiting researchers are expected to collaborate with the OeNB's research staff on a prespecified topic and to participate actively in the department's internal seminars and other research activities. They will be provided with accommodation on demand and will, as a rule, have access to the department's

computer resources. Their research output may be published in one of the department's publication outlets or as an OeNB Working Paper. Research visits should ideally last between three and six months, but timing is flexible.

Applications (in English) should include

- a curriculum vitae,
- a research proposal that motivates and clearly describes the envisaged research project,
- an indication of the period envisaged for the research visit, and
- information on previous scientific work.

Applications for 2016 should be e-mailed to

eva.gehringer-wasserbauer@oenb.at
by May 1, 2016.

Applicants will be notified of the jury's decision by mid-June. The following round of applications will close on November 1, 2016.

Analyses

Austrian economy fueled by growth stimuli, yet fraught with external risks

Gerhard Fenz,
Fabio Rumler¹

1 Austrian economy grew by 0.7% in 2015

According to the first full release of national accounts data, the Austrian economy expanded by 0.7% in real terms in 2015 (trend-cycle component adjusted for seasonal and working-day effects). As a result, annual Austrian GDP growth remained below 1% for the fourth time in a row.

Austrian economic growth picked up modestly from 0.2% in the first quarter to 0.3% in the fourth quarter of 2015. The demand-side composition of GDP growth reflects a “typical,” albeit muted economic recovery in Austria. Investment and exports bounced back as early as the second quarter of 2015. While cyclically sensitive investment in equipment registered quarterly growth of more than 1%, construction investment stagnated. Despite an acceleration in export growth, the contributions of net exports to growth slipped into negative territory in 2015 – not least in view of

the high import content of investment in equipment. Consumption expenditure expanded more vigorously only by end-2015. Rising real incomes increased the scope of additional private consumption. Expenditures related to the increased arrival of asylum seekers are likely to have fueled growth in government consumption.

Two different seasonally adjusted GDP series have been calculated since the introduction of the European System of Accounts (ESA) 2010. The trend-cycle series, which exhibits a smoother trend and is used by the Austrian Institute of Economic Research (WIFO) and the Oesterreichische Nationalbank (OeNB), indicates steady growth for 2015 (first to fourth quarter of 2015: +0.2%, +0.3%, +0.3%, +0.3%; against the respective previous quarter). By contrast, the more sharply fluctuating seasonally and calendar-adjusted GDP series published by Eurostat signals a downtrend for 2015, with growth picking up again only in

Table 1

Quarterly National Account data: results from February 29, 2016

	GDP	Private consumption	Government consumption	Gross fixed capital formation	Exports	Imports	Domestic demand (excluding inventories)	Net exports	Changes in inventories	Statistical discrepancy	
	Quarterly and annual changes in % (seasonally adjusted trend-cycle series)						Contributions to GDP growth in percentage points				
Q1 15	+0.2	+0.1	+0.2	+0.2	+0.2	+0.4	+0.1	-0.1	-0.2	+0.4	
Q2 15	+0.3	+0.1	+0.3	+0.4	+0.8	+1.0	+0.2	+0.0	+0.2	-0.1	
Q3 15	+0.3	+0.1	+0.3	+0.6	+1.4	+2.1	+0.3	-0.3	+0.4	-0.1	
Q4 15	+0.3	+0.2	+0.6	+0.5	+0.7	+1.3	+0.3	-0.3	+0.3	-0.1	
2012	+0.6	+0.6	+0.1	+2.0	+1.6	+0.9	+0.8	+0.4	-0.6	+0.1	
2013	+0.4	-0.0	+0.4	-0.1	+1.0	+0.5	+0.0	+0.3	+0.0	+0.2	
2014	+0.4	+0.1	+0.8	-0.1	+2.2	+1.1	+0.2	+0.6	-0.4	+0.0	
2015	+0.7	+0.2	+0.8	+0.4	+2.2	+2.2	+0.4	+0.1	-0.1	+0.3	

Source: Austrian Institute of Economic Research (WIFO), OeNB calculations.

¹ Oesterreichische Nationalbank, Economic Analysis Division, gerhard.fenz@oebn.at, fabio.rumler@oebn.at. Parts of this article are available in German in: OeNB. 2016. *Konjunktur aktuell. Berichte und Analysen zur wirtschaftlichen Lage. March 2016.*

the fourth quarter of 2015 (+0.7%, +0.3%, -0.0%, +0.2%). The different development of these two series at the current end is problematic in communication policy terms. The available economic indicators for Austria suggest, however, that the trend-cycle series better reflects the actual picture of the Austrian economy.

2 Results of the OeNB's Economic Indicator of February 2016: one-off effects will spur growth in the first half of 2016

Early 2016 saw a significant increase in risks to the global economy. International equity market losses contributed to growing uncertainty. At the same time, commodity prices continued to tumble. While supply side-driven price slumps generally support global GDP growth, the current development is – at least, in part – attributable to sluggish demand in major markets and should therefore be interpreted as a sign of crisis. In particular, the energy

requirements of China, the world's largest emerging economy, have shrunk owing to the state of the Chinese economy, which grew by only 6.9% in 2015 – its lowest rate for 25 years. China's growth target for 2016 was dialed back to 6.5%. The repercussions of these developments on industrialized countries are currently still minimal. Although the appreciation of the U.S. dollar dampened U.S. growth in the fourth quarter of 2015, the outlook for 2016 remains positive on the back of the country's intact domestic economy. The euro area was on track to modest growth in 2015, expanding by 0.3% quarter on quarter in the fourth quarter of 2015. Economic growth is currently considerably more buoyant in CESEE, with most countries' GDP strengthening by approximately 1% in the fourth quarter of 2015. This development could also benefit Austrian exports. The latest results of the OeNB Export Indicator reveal that Austrian companies sold almost 3% more goods

Truck mileage and goods exports

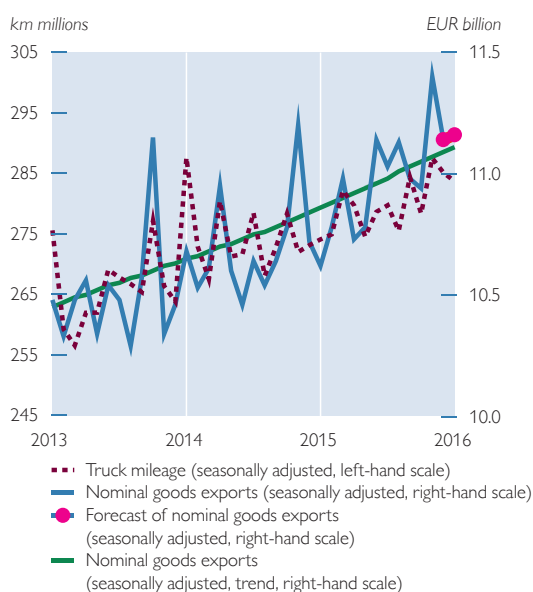
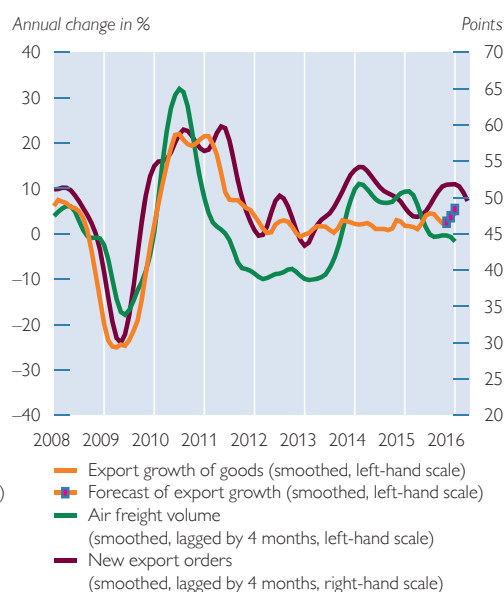


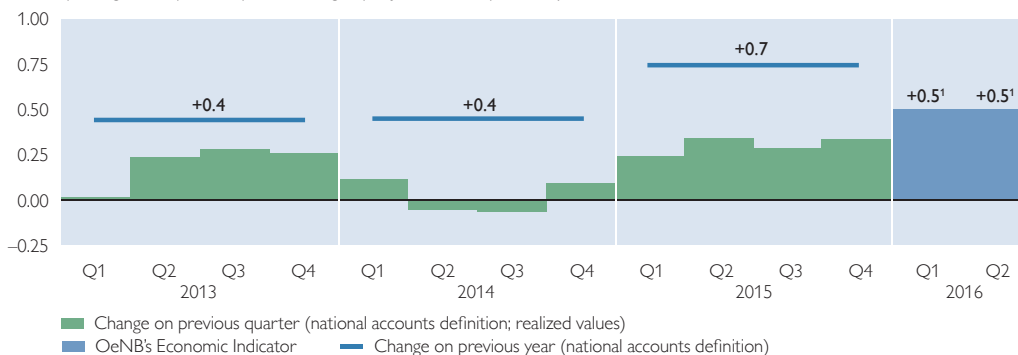
Chart 1

Leading indicators for external trade



Outlook for Austria's real GDP for the first and second quarter of 2016

Quarterly changes in % (seasonally and working-day adjusted trend-cycle series)



Source: OeNB's Economic Indicator of February 2016, Austrian Institute of Economic Research (WIFO).

¹ Forecast.

abroad in 2015 than in the previous year. The available leading indicators such as truck mileage data or new export orders suggest that Austrian exports will continue to advance in the first quarter of 2016 even if their momentum remains restrained in view of the uncertainty outlined above.

Domestic demand is expected to provide stronger positive stimuli in the first half of 2016. Investment activity improved as early as 2015. In addition, consumption in the first half of 2016 will be driven not only by low inflation but also by two one-off effects. Public expenditure on refugees is having the same effect as a deficit-financed economic stimulus program and is reflected particularly in higher government consumption. In addition, the tax reform approved in spring 2015 entered into force at the start of 2016, generating substantial relief for households and triggering a revival in private consumption. Both these one-off effects will each make growth contributions of 0.2 percentage point in the first two quarters of 2016. In its quarterly short-term outlook (the OeNB's Economic Indicator), the OeNB therefore projects real GDP growth of +0.5% for both

the first and second quarter of 2016 (quarterly changes, seasonally and working-day adjusted trend-cycle series). Although the outlook for the first quarter of 2016 was left unchanged on that of November 2015, in recent weeks risks to the downside have increased considerably. If the one-off effects are stripped out, what remains is merely modest underlying economic growth, which is subject to significant risks.

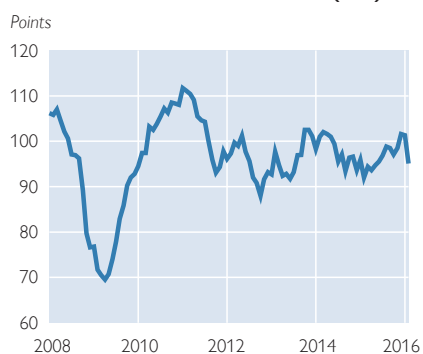
3 Confidence indicators reflect increased risks to the economy

Hard facts that would corroborate a slowdown in Austrian economic activity are still unavailable not least owing to publication delays. Increased risks to the economy have so far led only to a deterioration in some confidence indicators. Nevertheless, the dynamics of these indicators are still uneven, and it remains to be seen if, when and to what extent the latest geopolitical tensions and global turmoil will actually squeeze the Austrian economy.

The ifo Business Climate Index currently indicates a potential deterioration in external macroeconomic conditions. This index recently fell three times in succession, although compa-

Sentiment indicators

Economic Sentiment Indicator (ESI)



Source: European Commission.

ESI: foreign new orders



Source: European Commission.

ESI: industrial confidence



Source: European Commission.

Purchasing Managers' Index (BA PMI)



Source: Bank Austria.

BA PMI: New Orders



Source: Bank Austria.

ifo Business Climate Index



Source: ifo.

nies continued to assess the current situation positively despite revising downward their expectations about future business development. In Austria, confidence indicators are currently sending out mixed signals. The European Commission's Economic Sentiment Indicator (ESI) registered a steep decline in February 2016. It contracted by more than 6 points to 95.1, thereby falling well below its historical average of 100. This slump was primarily attributable to low levels of confidence in industry where particularly sentiment concerning the development of foreign orders was more pessimistic. By contrast, the Bank Austria (BA) Purchasing Managers' Index remained unscathed by the latest turmoil, reaching a value of 51.9

in February 2016 – well above the expansion threshold of 50. Growth in both new orders and the order book also contributed to this upbeat assessment.

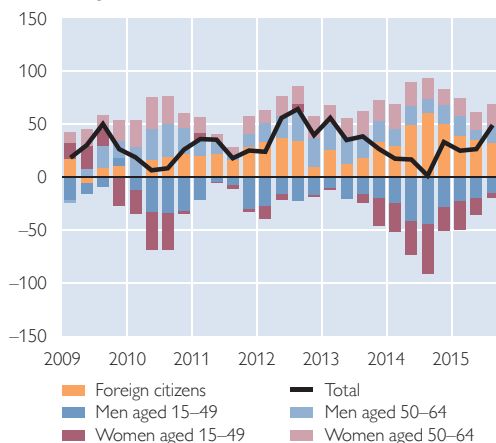
4 No further rise in unemployment in the second half of 2015

Employment in Austria is continuing to rise fairly robustly despite the recently fragile economy. In February 2016, employment growth was 1.3% year on year, with the mild winter additionally fueling employment in the construction sector. Despite dynamic employment growth, the jobless rate is still comparatively high owing to growth in labor supply. Two factors – the increasing number of older labor force partici-

Determinants of labor supply growth in Austria

Labor force (aged 15–64)

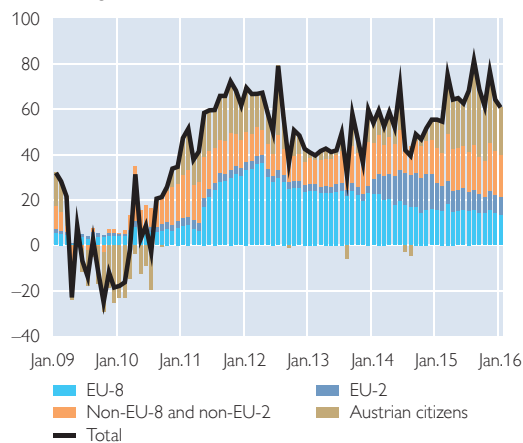
Annual change in thousands



Source: Eurostat, Federal Ministry of Labour, Social Affairs and Consumer Protection (BMASK), Public Employment Service Austria (AMS).

Payroll employees by nationality

Annual change in thousands



Note: EU-8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia.
EU-2: Bulgaria, Romania.

pants and the increased arrival of foreign workers – are playing a crucial role in this respect.

According to the Austrian micro-census, the number of 50 to 64 year-old labor force participants in Austria rose by 32,400 persons in the first three quarters of 2015, i.e. by almost exactly as much as the total number of

economically active persons (+33,700). Although demographic effects explain most of this increase, one-quarter of this rise is attributable to the labor force participation rate of this age cohort growing by 0.8 percentage point to 63%. It is, however, still below the euro area average (66.2%), with Austria's gap relative to peer countries

Table 2

Key figures for the Austrian labor market

	Payroll employment		Unemployed persons		Unemployment rate in %			Registered job vacancies	
	Thousands	Annual change in %	Thousands	Annual change in %	AMS definition (not seasonally adjusted)	AMS definition (seasonally adjusted)	EU definition (seasonally adjusted)	Thousands	Annual change in %
2013	3,483	+0.5	287.2	+10.2	7.6	7.6	5.3	26,383	-10.3
2014	3,503	+0.6	319.4	+11.2	8.4	8.4	5.6	26,320	-0.2
2015	3,535	+0.9	354.3	+11.0	9.1	9.1	5.7	29,251	+11.1
Sep. 15	3,589	+1.1	322.2	+10.3	8.2	9.2	5.7	33,770	+18.4
Oct. 15	3,552	+0.9	339.4	+9.4	8.7	9.2	5.7	31,944	+23.0
Nov. 15	3,542	+1.4	359.3	+8.3	9.2	9.1	5.9	31,021	+25.4
Dec. 15	3,512	+1.2	417.5	+6.1	10.6	9.0	5.9	29,461	+33.1
Jan. 16	3,488	+1.2	425.0	+4.6	10.9	9.0	5.9	33,431	+45.5
Feb. 16	3,502	+1.3	405.7	+2.0	10.4	8.8	×	35,851	+41.4

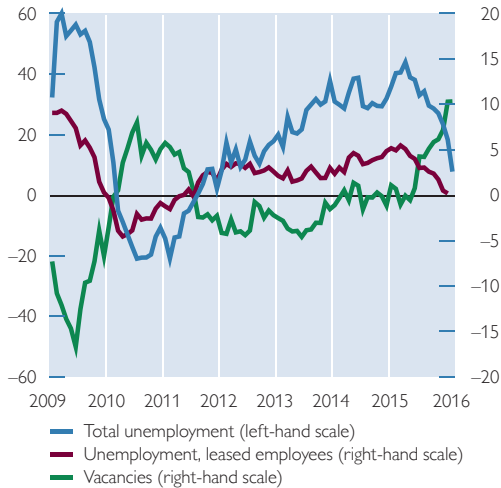
Source: Eurostat, Association of Social Insurance Providers, Public Employment Service Austria (AMS).

Chart 5

Labor market indicators

Unemployment

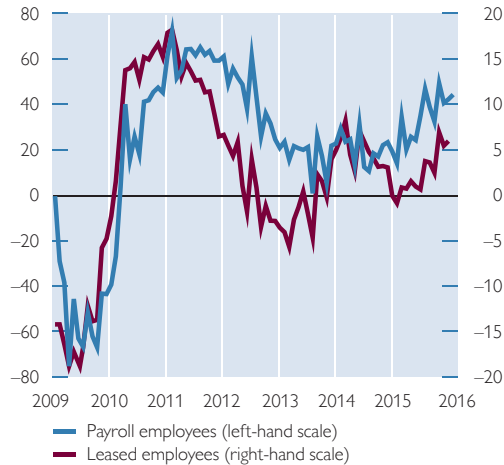
Annual change in thousands, smoothed



Source: Statistics Austria, Public Employment Service Austria (AMS).

Employment

Annual change in thousands, smoothed



such as Germany (76.8%) or Sweden (82.8%) continuing to remain significant.

Foreign labor migration to Austria is unremitting. The average number of economically active persons (payroll employees and unemployed persons) with foreign citizenship has climbed by 42,500 per year since 2011. This level was also attained in 2015 although migration from the EU-10 Member States was down slightly.

While Austria's unemployment rate (Eurostat definition) rose by a mere 0.1 percentage point to 5.7% in 2015, the unemployment rate (national definition) was up by 0.7 percentage point to 9.1%. This difference in unemployment growth is likely to be linked to, among other factors, difficulties in recording foreign workers in the microcensus (Eurostat).

A positive aspect is that the unemployment rate according to both definitions did not rise any further in the second half of 2015. In fact, the rate of unemployment according to the national definition even decreased marginally in

this period. In addition, other indicators suggest that the Austrian labor market situation will ease somewhat in the next few months or, at the very least, not deteriorate any further. The strongest signals are coming from job vacancies registered at the Public Employment Service Austria (AMS), which advanced by 11% in 2015. In the first two months of 2016, these job vacancies even rose by more than 40%. Moreover, the increasing number of leased staff indicates sustained employment growth for the rest of 2016. At the same time, the number of leased staff registered as unemployed is no longer rising. The largest uncertainty factor for the further path of unemployment is the question of how quickly recognized refugees will be integrated into the Austrian labor market and included in the country's labor market statistics.

Overall, however, given the subdued underlying pace of economic growth and the continued increase in labor supply employment growth in the

next few months should not be expected to be vigorous enough to cause a drop in unemployment.

5 Tourism services spur rise in inflation in early 2016

Following a temporary low of 0.5% in November 2015, Austrian HICP inflation has risen again in the previous two months, reaching 1.4% in January 2016. This up-tick was primarily attributable to two factors: growth in services prices and easing downward pressure on energy prices. Core inflation (excluding energy and unprocessed food) climbed at a somewhat slower pace than headline inflation from 1.4% in November 2015 to 2.1% in January 2016. Average annual Austrian HICP inflation stood at 0.8% in 2015 and was thus markedly lower than in 2014 (1.5%). The drop in HICP inflation in 2015 as a whole was primarily attributable to both the direct and indirect effects of the oil price decline, which commenced at end-2014 and regained momentum in the second half of 2015.

Austrian HICP inflation has continued also in recent months to exceed both the euro area average and the inflation rate of Germany, Austria's most important trading partner, which came to 0.3% and 0.4% in January 2016, respectively. The difference in inflation rates between Austria and the euro area as well as Germany is attributable primarily to above-average price growth in the Austrian services sector, which in turn is caused by the public sector's contribution to inflation (via administered services prices and indirect taxes) and the increase in unit labor costs in the services sector.

In the energy sector, although the drop in prices slowed in recent months from -8.6% in November 2015 to -5.2% in January 2016, annual inflation still remained negative. Despite oil

prices sliding in 2015, annual inflation for electricity and natural gas has so far eased only moderately, standing at 0.8% (electricity) and -0.7% (natural gas) in January 2016.

Annual inflation in the services sector ticked up from 2.0% in November 2015 to 2.8% in January 2016. This rise is traceable to growth in services prices in the hotel and restaurant as well as travel industries. For instance, the inflation rate for hotels and restaurants climbed from 2.9% in November 2015 to 3.6% in January 2016. In the same period, the inflation rate for flight tickets and package holidays also rose from -2.7% to 6.5% and from -0.2% to 5.0%, respectively. By contrast, the inflation rate for housing rentals eased from 3.2% to 2.4% over the same period.

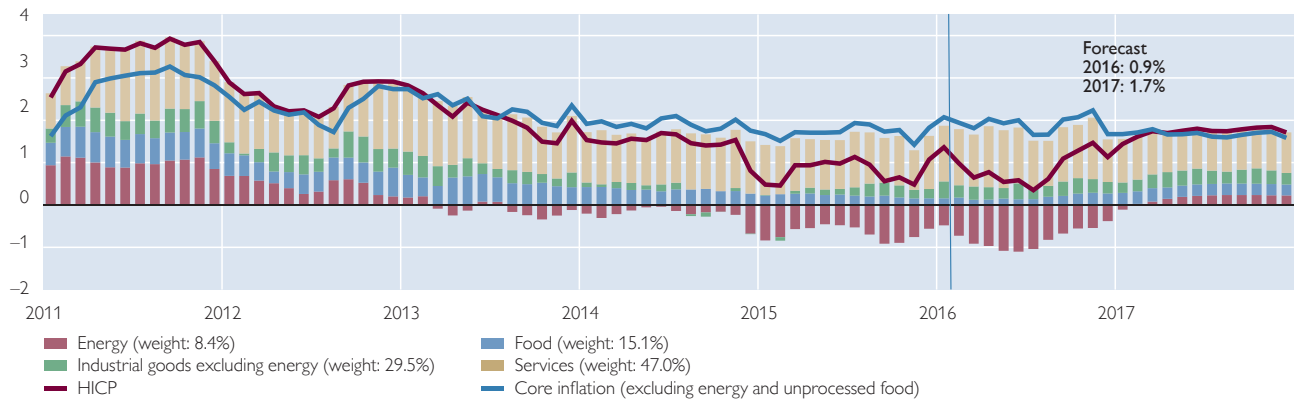
Inflation for industrial goods excluding energy remained stable in December 2015 at the previous month's level of 0.7% and then accelerated to 1.3% in January 2016. The key factor for this rise was the growth in clothing and footwear prices, whose annual inflation rate climbed from 0.4% in December 2015 to 2.6% in January 2016. According to Statistics Austria, seasonally-induced price declines in the textile industry (clearance sales) proved to be smaller in January 2016 than the year before, resulting in an increase in the annual inflation rate for this product group.

The annual inflation rate for unprocessed food remained relatively stable over the past three months and stood at 1.4% in January 2016, with a rise in inflation for meat and fruit being offset by a dip in inflation for vegetables in the same period. Likewise, annual inflation for processed food (including tobacco and alcohol) was stable at 0.9% in December 2015 and in January 2016.

Austrian HICP inflation rate and contributions of subcomponents

Annual change in % (HICP and core inflation)
and percentage points (contributions to inflation)

Last observation: 1.4% (January 2016)



Sources: OeNB, Statistics Austria.

6 Inflation forecast of March 2016: Austrian inflation will rise from 0.8% (2015) to 0.9% (2016) and 1.7% (2017)

Under the March 2016 Narrow Inflation Projection Exercise (NIPE), the OeNB projects an average HICP inflation of 0.9% for 2016 and 1.7% for 2017. Until July 2016, however, headline inflation is expected to ease considerably to 0.3% before ticking up sharply again. The projected drop in inflation in the first half of 2016 is primarily attributable to the infla-

tion-dampening effect of the development in oil prices, which will ease from mid-2016 onward. A modest inflation-accelerating effect will emanate from energy commodity prices in 2017. Demand-side inflationary stimuli will be minimal. In addition, the low inflation rate anticipated and the labor market situation will induce smaller wage cost increases. Core inflation (excluding energy and unprocessed food) should therefore ease slightly from 1.9% in 2016 to 1.7% in 2017.

Saving, portfolio and loan decisions of households when interest rates are very low – survey evidence for Austrian households

Christian Beer,
Ernest Gnan,
Doris Ritzberger-
Grünwald¹

Do Austrian households adapt their savings and loan decisions in an ultra-low interest rate environment? To answer this question, we analyzed a special OeNB barometer survey conducted in spring 2015 that allows us to assess household interest rate perceptions as well as their impact on saving, portfolio allocation and borrowing decisions.

Overall, we find that the very low interest rates were only one of several determinants in savings and loan decisions and have had only a small effect so far. The impact of the ultra-low interest rate environment on portfolio choice is also quite limited. Households that did adapt their portfolio often showed a stronger preference for savings with savings and loan associations than for other options. Furthermore, we observe a shift to real assets. Portfolio rebalancing into riskier assets is not widespread.

Many households at the time of the survey considered circumstances relatively favorable for taking out loans. However, this does not imply that loan demand increased strongly, as borrowing decisions are also affected by other, potentially more important determinants. If they were faced with higher loan installments, most households would cut consumption expenditures.

The survey results may be useful in assessing e.g. the effectiveness of monetary policy. The modest impact of ultra-low interest rates on savings and portfolio rebalancing into riskier assets suggests that ultra-low interest rates have a limited ability to stimulate aggregate demand through the risk-taking and portfolio rebalancing channels, at least in the case of households in Austria.

JEL classification: D12, D14

Keywords: household finance, low interest rates, savings and loan decisions

The Austrian economy is strongly affected by the current phase of ultra-low interest rates. Interest rates on savings products are close to zero, and customer lending rates are extremely low compared to those in other euro area countries. Because inflation is higher in Austria than in the euro area as a whole, real interest rates in Austria are particularly low and even negative for many simple and low-risk savings products. How do Austrian households react to this extraordinary situation? Do low or even negative interest rates affect households' propensity to save? Do they change households' choice of savings products in favor of riskier forms of in-

vestment whose prices increase at low interest rates (e.g. shares)? Do Austrian households use the low interest rate environment to undertake more highly leveraged real investment, in particular in real estate? Which household-specific factors play a role?

To shed light on these aspects, we added questions on the knowledge of the interest rate level, interest rate expectations and the impact of the low interest rate level on households' financial decisions to a special edition of the OeNB barometer survey. Beer et al. (2015) analyzed survey data to determine whether households were aware of the fact that interest rates are cur-

Refereed by:
Werner Hölzl,
WIFO

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rently extremely low and to gauge households' interest rate expectations. In a nutshell, the results can be summarized as follows: Whereas Austrian households' knowledge of the interest rate level is limited, the vast majority of respondents is aware that we are currently experiencing a period of very low interest rates. Nevertheless, Austrian households overestimate the interest rate level. Furthermore, many respondents expect the low interest rate environment to persist in the foreseeable future. However, a large fraction of respondents has not formed any interest rate expectations.² In this paper, we use the same survey data to explore whether Austrian households have adapted their savings behavior and their portfolio allocation to ultra-low interest rates, and if so, how; we also look at whether Austrian households are more inclined to take out a loan now to benefit from the very low interest rates.

The paper is structured as follows: Section 1 discusses how the low interest rate environment has affected households' propensity to save. In section 2, we analyze whether low interest rates have prompted Austrian households to prefer other types of investment. Section 3 looks at households' loan decisions and section 4 concludes.

1 Households' propensity to save in an ultra-low interest rate environment

Generally, one would expect changes in interest rates to affect households' propensity to save. Theory does not allow us to determine the impact of a

change in the interest rate on the saving ratio a priori. Three effects are at play: First, the (intertemporal) substitution effect suggests that people will save less if interest rates decrease because lower interest rates make saving less attractive. Second, the income effect might prompt net savers to save more to make up for lower interest rate income, making it unclear whether the substitution effect or the income effect will ultimately predominate. Finally, wealth effects resulting from a revaluation of assets as a consequence of lower interest rates allow for higher future consumption even with a lower saving ratio (see also Deutsche Bundesbank, 2015). Thus, interest rate changes can affect households quite differently. For example, whether a change in interest rates will increase or decrease net interest income depends on whether a household has positive or negative net wealth. Furthermore, the magnitude of wealth effects depends crucially on the amount and type of assets a household owns (e.g. savings accounts, variable or fixed rate bonds, stocks, real estate).

Moreover, depending on the underlying saving motive, interest changes might have different effects on saving. For example, based on Keynes' General Theory, Browning and Lusardi (1996) list nine saving motives, only one of which (the intertemporal substitution motive) suggests a clear inverse relationship between the rate of interest and the propensity to save. If saving is driven by other motives (e.g. the life-cycle motive or the bequest motive), the income or the wealth effect might take precedence over the substitution

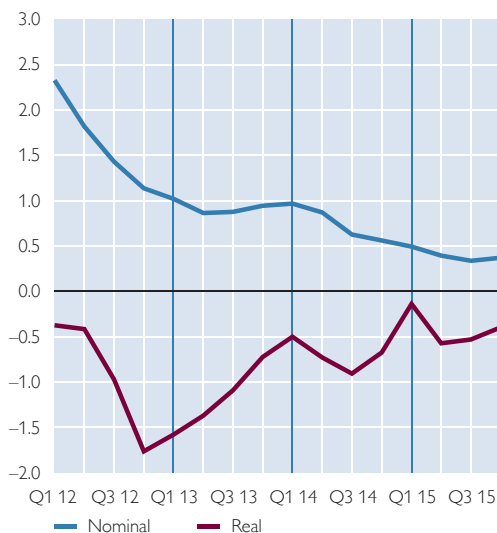
² Respondents were asked whether they expected interest rates to be lower, higher, considerably higher or at about the same level in five years. 48% of those that answered the question expect the monetary policy rate in 2020 to be the same or even lower than it was in 2015, 65% expect lower or stable interest rates for savings accounts and 34% expect mortgage rates to drop or to remain stable. However, 22% of respondents refused to, or were not able to, state their expectations for the monetary policy rate and the mortgage rate; 22% would not or could not state expectations for interest rates on savings accounts.

Chart 1

Interest rates on savings accounts and savings ratio

Interest rates on savings accounts

% per annum

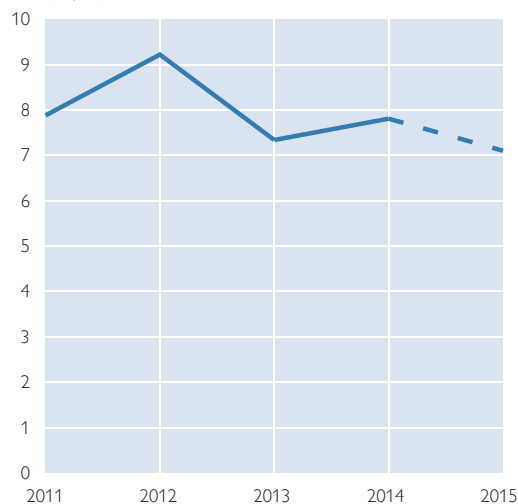


Source: OeNB.

Note: Interest rate: New business with agreed maturity over one year and up to two years. Real interest rate calculated using contemporaneous HICP inflation. Saving ratio: Projected values for 2015 according to OeNB December 2015 economic forecast.

Saving ratio

% of the sum of disposable income and the change in household's net equity in pension fund reserves



effect. Furthermore, saving out of an avarice motive seems to be independent of the interest rate. Finally, the existence of the precautionary motive, the down payment motive and the enterprise motive indicates that other factors, such as capital market imperfections, are more important for saving than interest rate developments.³ Overall, this discussion suggests that interest rates are only one of many factors that affect savings behavior and that interest rate developments are not likely to be the decisive factor.

Chart 1 gives an overview of the evolution of the interest rate on savings accounts and of the aggregate saving ratio. Interest rate statistics show that the nominal interest rate on savings accounts declined between 2012 and 2015 (chart 1, left panel).⁴ However, the real interest rate fell initially and then increased while staying negative.⁵ The saving ratio (chart 1, right panel) dropped initially, and then more or less stabilized, reflecting the development of HICP inflation. The chart suggests that the impact of interest changes on

³ For a survey on how the interest rate elasticity of savings differs by saving motive, see also Elmendorf (1996). Empirical results for Austria based on an error correction model using macrodata by Dirschmid and Glatzer (2004) suggest that Austrian households react to an increase in interest rates by saving a larger fraction of their income. In particular, an increase in the real interest rate by 1 percentage point will raise the savings rate by 0.69 percentage point in the short run and by 1.16 percentage points in the long run.

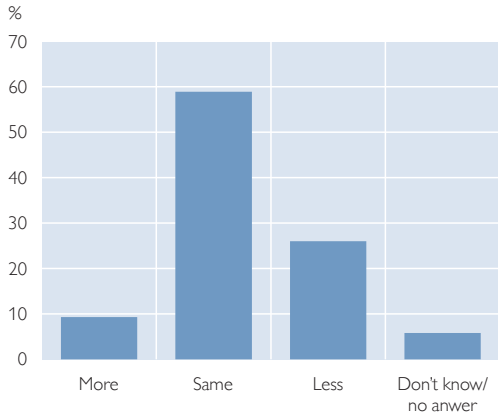
⁴ The appropriate observation period is from the second quarter of 2012 to the second quarter of 2015 because the survey was conducted from end-April to early June 2015 and the question on changes in households' savings behavior applied to the three years before the survey or intended changes in the year following the survey. For general information on the survey, see Beer et al. (2015).

⁵ Note that in calculating real interest rates, we used contemporaneous HICP inflation. In theory, the inflation rate or inflation expectations used should coincide with the investment horizon (not known to us).

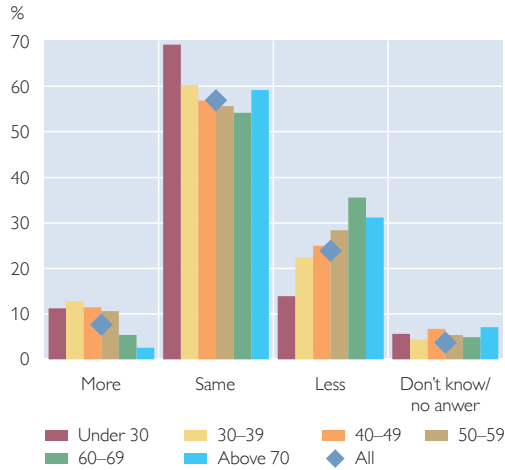
Chart 2

Changes in savings behavior

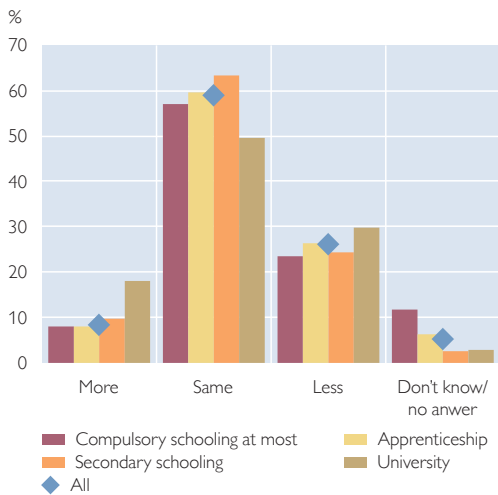
All respondents



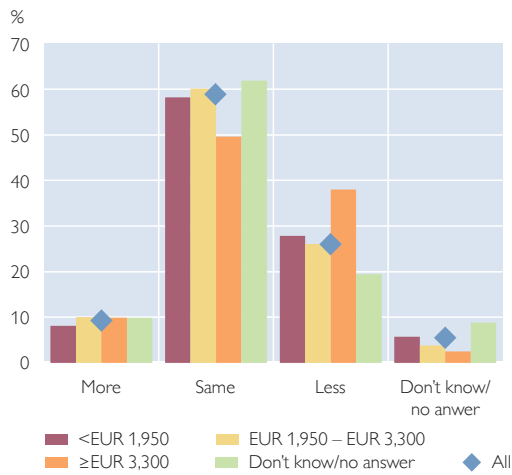
By age



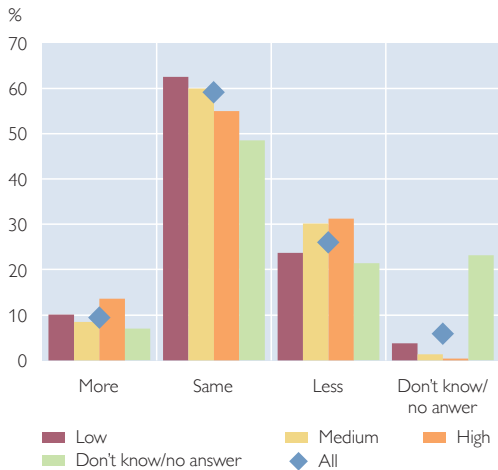
By education



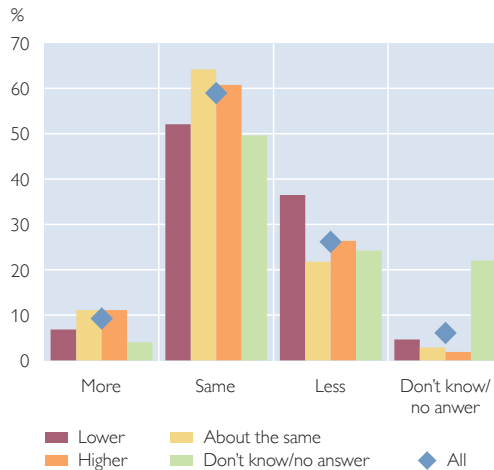
By household income



By assessment of current interest rates on savings accounts



By expectations for future interest rate on savings accounts



Source: Authors' calculations based on the OeNB barometer survey.

Note: Assessment of interest rate on savings accounts: low: less than 0.9%; medium: between 0.9% and 1.5%; high: above 1.5%.

Table 1

Reasons for changes in savings behavior

Why is your household saving more?

	%
Change in household income	39
Larger purchases	32
Personal reasons	16
Low interest rates	14
Other	30
Don't know/no answer	6

Why is your household saving less?

	%
Increase in price level	67
Higher consumption expenditures	54
Low interest rates	45
Higher real estate prices/rent	41
Other	61
Don't know/no answer	1

Source: Authors' calculations based on the OeNB barometer survey.

Note: Multiple answers possible.

the aggregate saving ratio is not straightforward. Lower nominal interest rates on savings by and large correlate with a drop in the saving ratio, whereas no clear-cut correlation can be established between the evolution of the real interest rate and the development of the saving ratio.

To shed some light on whether Austrian households adapted their savings behavior to the ultra-low interest rate environment at a disaggregated level, we asked households whether they increased, decreased or left unchanged savings in the three years before the survey.⁶ If households changed their savings behavior, we additionally asked them why they did so. Reacting to the

interest rate environment was one of several possible answers.

The majority of households (almost 60%) did not change their savings behavior in the three years before the survey. Only 9% of households reported that they were saving more than three years earlier (chart 2). However, only 14% of these households cited interest rate developments as a reason to save more (table 1); this corresponds to 1.3% of all households.

About 26% of households stated that they were saving less than three years before. This behavior is most pronounced among older households, high-income households (these might be particularly financially literate and return oriented), and households that expect lower interest rates (chart 2). The low interest rate environment plays a more prominent role in the decision to save less than in the decision to save more, with 45% of all households that save less citing this factor (11% of all respondents), possibly because they considered income effects less important than the substitution effect in combination with the wealth effect (high-income households are more likely to hold risky assets). Survey data suggest that households specifying the low interest rate as the reason, or as one reason, to reduce savings are more aware of the low interest rate on savings accounts than households that did not state this reason: A smaller proportion of the former households stated that they did not know how high the current interest rate on savings accounts⁷

⁶ More precisely, we asked households whether they increased (decreased) their savings considerably, somewhat or not at all. In the charts, the answers "considerably" and "somewhat" are consolidated in the categories "more" and "less," respectively.

⁷ To assess the interest rate on savings accounts, we asked survey participants what interest rate they would expect to receive if they newly allocated money to a savings account with an agreed maturity of between one year and up to two years. In the figures displaying results by the assessment of interest rates on savings accounts, we aggregated the answers in the following way (fraction of respondents in parentheses): Low: less than 0.9% (45%); medium: between 0.9% and 1.5% (32%); high: above 1.5% (7%); don't know/no answer (16%).

was or refused to give an answer. Moreover, households specifying low interest rates as the reason for reducing savings assessed the current interest rate level for savings accounts as slightly lower than other households, and they had more modest interest rate expectations.

Nevertheless, other reasons are mainly responsible for the decline in savings (table 1). The high proportion of answers in the category “increase in price level” may seem difficult to reconcile with the low inflation environment that has persisted in Austria for some time, even if one allows for group-specific or individually higher inflation rates because of differences in consumption patterns,⁸ but it may reflect the perception that inflation is higher than actual, statistically measured inflation. Higher consumption expenditures were another important reason for households to save less. The answers “increase in price level” and “higher consumption expenditures” might signal the impact of higher living costs (lower real income). However, survey results do not allow the conclusion to be drawn that households responded to low interest rates by decreasing savings and increasing consumption expenditures. 45% of households that save less because of higher consumption expenditures simultaneously mentioned low interest rates.⁹

Our results are roughly in line with those of Deutsche Bundesbank (2015) for Germany. Deutsche Bundesbank (2015) presents results based on micro-

data from the Panel on Household Finances (PHF) survey that suggest that low interest rates prompted only a minority of households to change their savings behavior in 2014.¹⁰ In particular, 77% of households had not changed their savings behavior, 15% said that they were saving less, 7% were investing differently than before, and only 1% were saving more. By contrast, high-wealth households were more inclined to adapt their savings behavior as a result of low interest rates. Deutsche Bundesbank (2015) concludes that the level of interest rates and interest rate expectations only marginally influenced the savings and investment behavior of households. According to Deutsche Bundesbank (2015), other factors, such as the level of wealth or uncertainty (caused by higher volatility as a result of the crisis or by personal investment experience), are presumably more important.

2 Portfolio composition

Households’ savings decisions involve determining the overall household saving ratio and portfolio composition. These factors are interrelated, as e.g. different investment products offer different (expected) returns, which in turn influence the desired level of savings. The different effect of interest changes on the return of diverse investment products could give households a further incentive to change their portfolio composition in reaction to a change in interest rates. According to

⁸ For example, Statistics Austria calculates a price index that permits calculation of the price development of a weekly bulk purchase (“Miniwarenkorb”). The inflation rate for this basket is usually higher than HICP inflation.

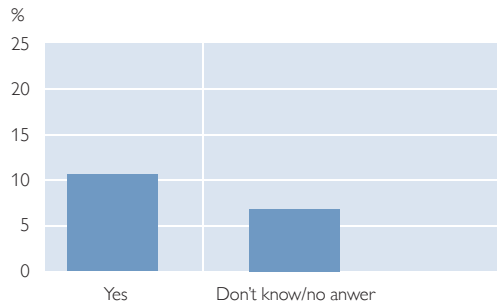
⁹ Furthermore, 6% were not able to, or refused to, answer questions on their savings behavior. Answers on savings behavior (as well as on other questions, see below) suggest that the fraction of “don’t know” is relatively high among those who are financially illiterate (i.e. respondents who answered “don’t know/no answer” on their interest rate assessment and expectations on interest rates). Rational inattention might be another reason why households are not aware of interest rate developments.

¹⁰ In Deutsche Bundesbank (2015), changes in savings behavior means either changes in the level of savings or changes to other types of savings.

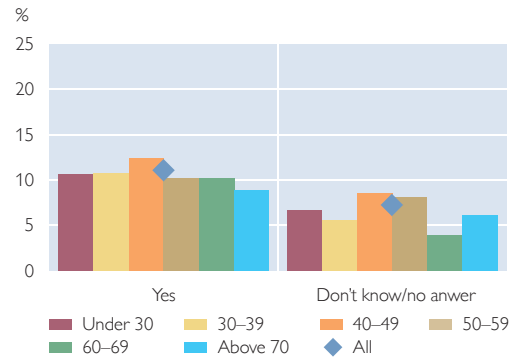
Chart 3

Changes in investment products

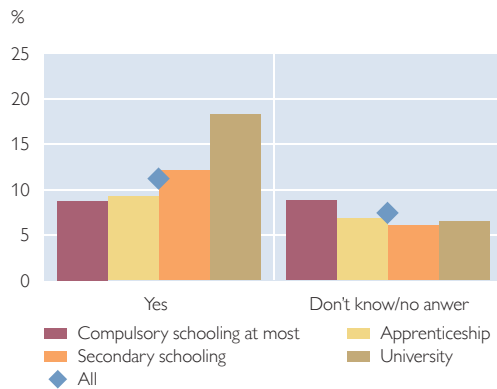
All respondents



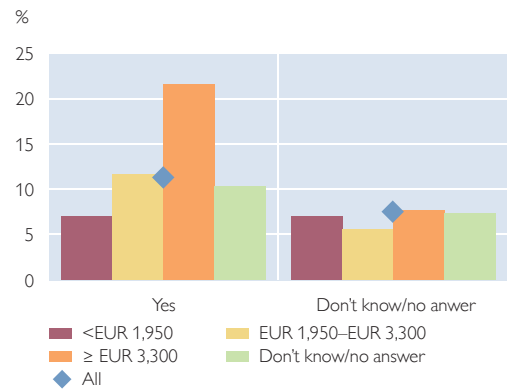
By age



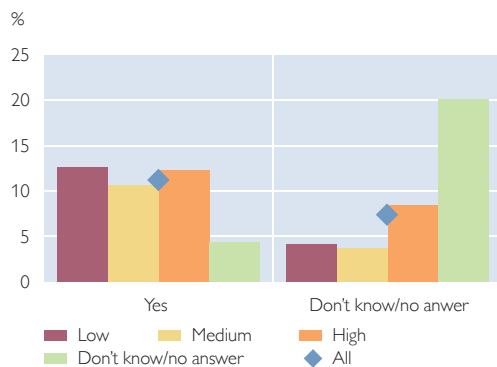
By education



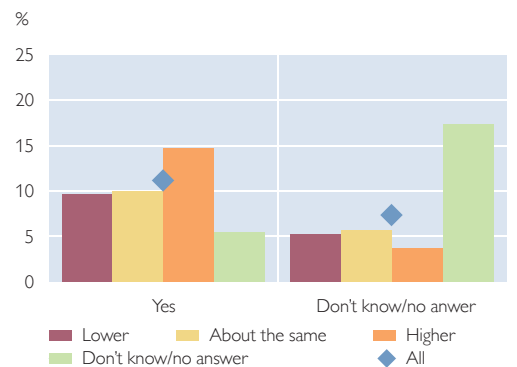
By household income



By assessment of current rates on savings accounts



By expectations for future interest rate on savings accounts



Source: Authors' calculations based on the OeNB barometer survey.

Note: Assessment of interest rate on savings accounts: low: less than 0.9%; medium: between 0.9% and 1.5%; high: above 1.5%.

our survey data, the low interest rate environment had only a modest impact on the portfolio allocation of Austrian households. Overall, low interest rates were a reason for 11% of households to prefer other savings and investment products in spring 2015 than in spring

2012 (chart 3). This fraction is above average for households in which the reference person has tertiary education (22%) and households with high household income (22%), two outcomes that are highly correlated. High-income households might also be wealthier and

might therefore participate more in markets for risky assets. This holding of risky assets makes an adaption of high-income households' portfolios to include even more risky assets more likely. Furthermore, the fraction of households that changed the composition of their portfolio was slightly higher among respondents who expected higher interest rates on savings accounts at the time of the survey.

Table 2 gives an overview of the changed preferences of households by instruments. Deposits with savings and loan associations, holdings in cash and investment in real estate gained the most importance. Savings with savings and loan associations may have become more attractive because interest rates on them were still comparatively high and because a premium is paid on housing savings contracts, albeit a low premium currently, as the premium hinges on the interest rate level. Cash is relatively more attractive in a low interest rate environment because the opportunity costs of holding cash are low; if interest rates should turn negative, holding cash might become even more attractive. 19% of households mention gold as a fairly important investment product; gold resembles cash in that both carry no interest and should react similarly to an interest rate change. Real estate as well as other tangible assets are easier to finance at low interest rates. Households also exhibit a tendency to increase investment in riskier financial products (shares and investment funds).

When gauging the macroeconomic significance of these results, note that only a small fraction of households changed their investment behavior. For instance, even though savings with savings and loan associations gained im-

Table 2
Which products gained importance because of the low interest rate environment?

	%
Savings with savings and loan associations	29
Cash	23
Real estate	20
Gold	19
Shares	18
Other tangible assets	18
Life insurance reserves	16
Investment funds	14
Savings accounts with longer maturities	13
Bonds	8
Other	6
Non-euro cash	4
Don't know/no answer	4

Source: Authors' calculations based on the OeNB barometer survey.
Note: Multiple answers possible. Only households that changed their investments were taken into account.

portance for 29% of all households that changed their investment behavior, this fraction corresponds to only 3% of all households.

Hence, even though return motives in a low interest rate environment as well as the different development of returns of various asset classes¹¹ suggest that households have some incentives to change their portfolio allocation and to allocate a higher proportion of their financial wealth to risky assets (e.g. shares), we observe only modest changes in households' portfolio allocation. The uncertain macroeconomic environment and the high volatility of stock markets during the crisis may be two of several potential reasons for this reluctance to adapt portfolios and to prefer safer assets. In interpreting the results, one should also heed the low participation of Austrian households in more risky asset classes. As a case in point, according to data from the Household Finance and Consumption Survey (HFCS), only 5.3% of households owned stocks in 2010 (Fessler et

¹¹ See Deutsche Bundesbank (2015) for results on the evolution of returns of different asset classes.

al., 2012). Households are unlikely to invest in instruments they are unfamiliar with just because interest rates are low. Furthermore, since participation in the market for risky assets involves transaction costs, investing in these assets makes sense only for households that are wealthy enough. Moreover, households may be reluctant to boost the share of riskier assets in portfolios because of their bad experience during the crisis. Deposit insurance protecting savers' assets might have also contributed to households' preference for savings accounts. Furthermore, the tax treatment of valuation gains in Austria has deteriorated markedly in recent years. Most likely, other constraints (low financial literacy, a low risk-bearing capacity and risk proneness as well as inertia and the force of habit) also keep households from adapting portfolio allocation to include riskier, more complex products despite higher interest rates or higher expected returns.

For comparison purposes, data from Austria's financial accounts (e.g. OeNB, 2015) suggest that savings accounts repayable on demand gained importance at the expense of fixed term savings accounts between the second quarter of 2012 and the second quarter of 2015. Otherwise, the percentages of most other assets in total financial assets remained relatively stable: The share of debt securities in total financial assets dropped by about 2 percentage points and that of life insurance reserves by 0.75 percentage point. Mutual fund shares gained some ground (1.75 percentage points); the fraction of shares and other equity in total finan-

cial assets remained roughly stable, as did that of savings with savings and loan associations.¹² Hence, at first glance, the financial accounts data appear to resemble the survey answers only to a limited extent. However, the survey data principally only allow for statements about participation, i.e. the fractions of households that e.g. invest in a particular savings product, but not for statements about investment volumes. Hence, even if the change in participation is low, the change in volume could be considerable if a large fraction of wealthy households invested in a product. Conversely, small portfolio shifts might have a negligible effect on financial account data even if they were undertaken by a large number of households.¹³

Most respondents expect the low interest rate environment to persist in the foreseeable future (Beer et al., 2015). Hence, we asked whether Austrian households intended to change their investment and savings behavior in the immediate future and, if so, which products they intended to invest in 12 months into the future.¹⁴ Again, the impact of the interest rate level turned out to be quite limited. Overall, 8% of households confirmed that the low interest rate level would induce them to change savings and investment products in the 12 months following the survey. This number is slightly higher for young households. Otherwise, the same factors as in the case of investment changes already made play a role (the level of education and higher interest rate expectations; see chart 4).

¹² According to annual data from 2012 to 2014.

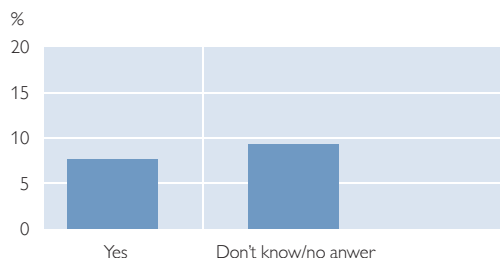
¹³ Furthermore, the survey data do not allow us to determine which savings products became less important.

¹⁴ Until mid-2016.

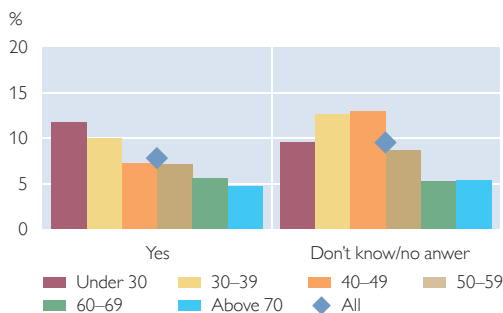
Chart 4

Planned changes in investment products

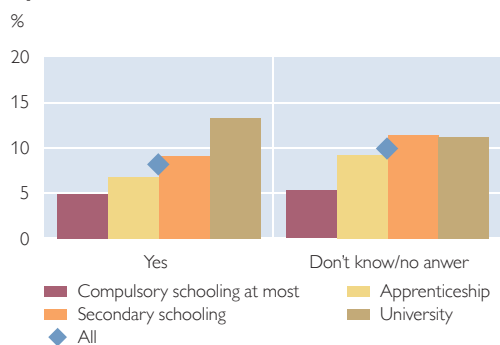
All respondents



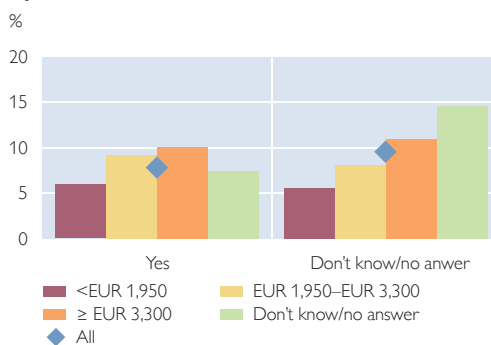
By age



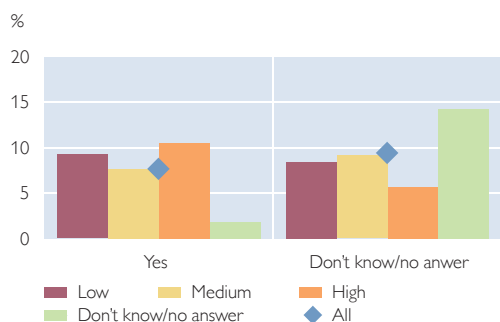
By education



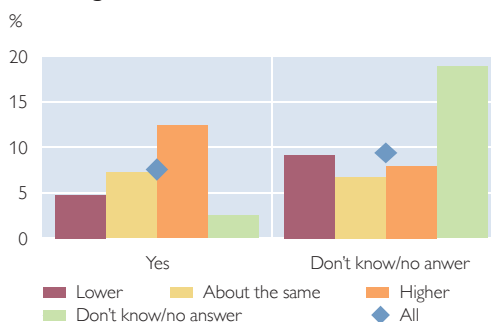
By household income



By assessment of current rates on savings accounts



By expectations for future interest rate on savings accounts



Source: Authors' calculations based on the OeNB barometer survey.

Note: Assessment of interest rate on savings accounts: low: less than 0.9%; medium: between 0.9% and 1.5%; high: above 1.5%.

Households that plan portfolio shifts stated that they would assign a higher share of their savings to gold and savings with savings and loan associations (see table 3). Comparing realized and planned changes in portfolio allocation, gold, real estate and shares are expected to gain popularity. Savings with savings and loan associations will remain in demand, whereas life insurance products will lose attractiveness.

Altogether, the survey results suggest that the low interest rate environment has so far had only a limited impact on the savings behavior and portfolio composition of Austrian households, which is consistent with the finding that interest rates are just one of many explanatory factors in savings decisions and may have generally ambiguous effects on savings.

Table 3

Which products do you intend to invest in?

	%
Gold	24
Savings with savings and loan associations	23
Shares	23
Real estate	23
Savings accounts with longer maturities	16
Other tangible assets	15
Cash	15
Investment funds	12
Bonds	9
Non-euro cash	7
Life insurance reserves	6
Other	5
Don't know/no answer	5

Source: Authors' calculations based on the OeNB barometer survey.
Note: Multiple answers possible. Only households that intend to change their investments were taken into account.

3 Loans

Households may also react to the ultra-low interest rate environment by changing the composition of their liabilities. When interest rates fall, the substitution effect and the income effect should both favor borrowing: Lower interest rates should unambigu-

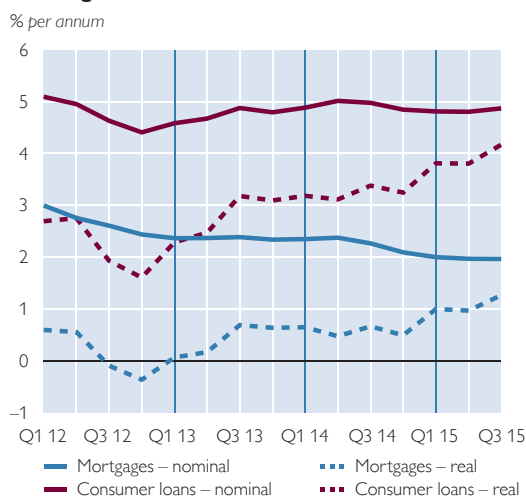
ously lead to higher demand for loans because they prompt households to spend rather than save at low returns (substitution effect) and because they leave more income otherwise needed to pay interest on loans for spending (income effect). However, interest rates are only one factor that determines household loan demand. Unfavorable macroeconomic developments, uncertainty about future developments, low confidence in growth prospects as well as relatively high and/or rising unemployment dampen the demand for loans.

Interest rates on variable rate mortgage loans behave much the same as interest rates on savings accounts: The nominal rate declines but the real rate increases because of the recent drop in inflation (chart 5). In contrast, the nominal interest rate for consumer loans was more stable, resulting in a more pronounced increase of the real rate. The right panel of chart 5 shows that households took out more housing loans in 2015 than in 2012. Conversely,

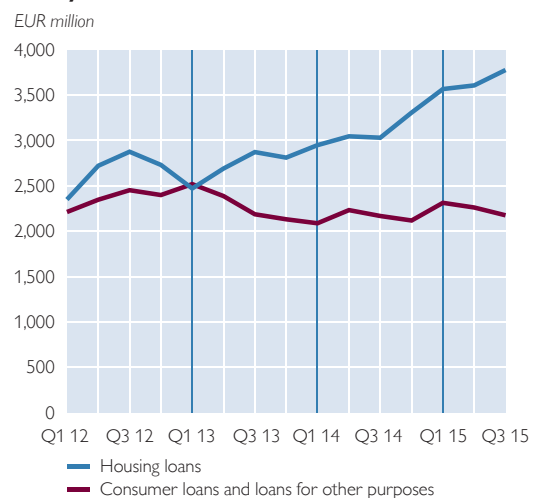
Chart 5

Lending rates and lending volumes

Lending rates



Newly allocated loans



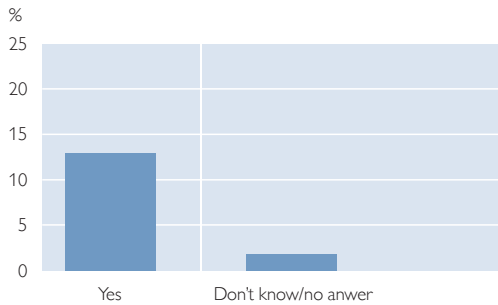
Source: OeNB.

Note: Lending rates: New business with initially agreed maturities of up to one year. Real interest rates calculated with the contemporaneous inflation rate.

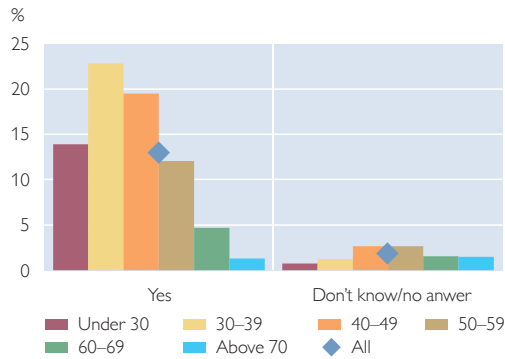
Chart 6

Took out a loan in the three years preceding the survey

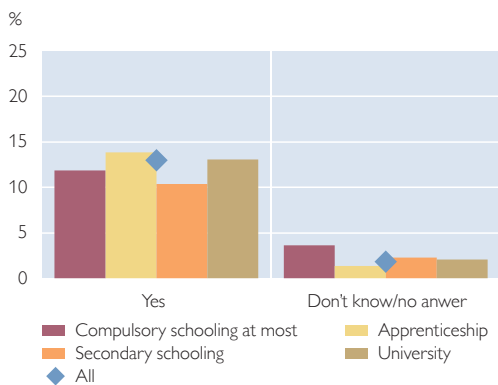
All respondents



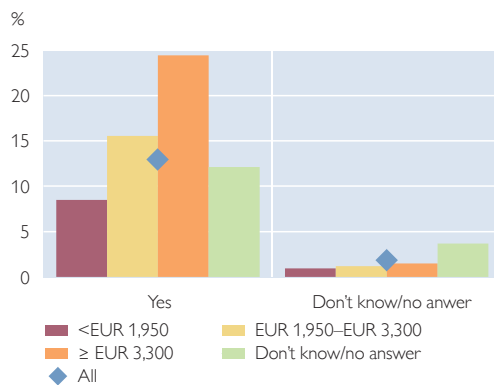
By age



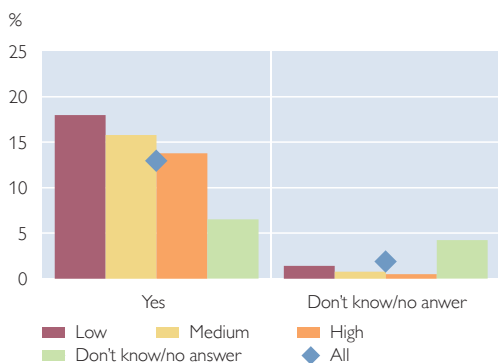
By education



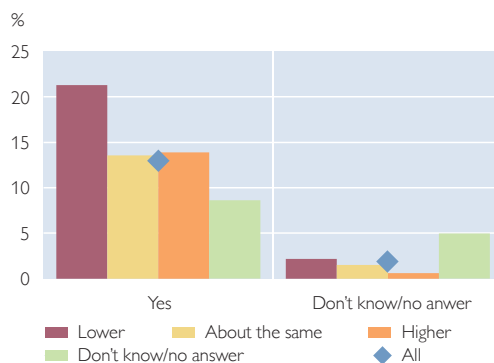
By household income



By assessment of current interest rates on loans



By expectations for future interest rate on loans



Source: Authors' calculations based on OeNB barometer survey.

Note: Assessment of interest rate on loans: low: less than 1.5%; medium: between 1.5% and 3.5%; high: above 3.5%.

the volume of newly allocated consumer loans and loans for other purposes dropped slightly.

Overall, 13% of households indicated that they took out a loan in the three years preceding the survey. The

low interest rate environment played an important role in about 40% of these households' decision to take out a loan. Apart from life-cycle factors (households aged 30 to 39 had the highest propensity, 23%, to take out a loan) and

correlation with household income, we also observe some correlation with interest rate perceptions¹⁵ and expectations. Households that are aware of the low level of current interest rates and those that expect interest rates to decrease are more likely to have taken out a loan. However, only a small fraction of respondents expects interest rates to fall.

Low interest rates should also result in lower interest expenditures for those 23% of households that have an outstanding loan¹⁶ (at least in the case of variable rate loans, which make up the bulk of loan contracts in Austria)¹⁷. 40% of these households indicated that their loan expenditures had declined because of the low interest rate environment. In addition, households can profit from a low interest rate environment by renegotiating their loan or by converting debt and taking out a new loan (changing a fixed rate loan into a variable rate loan or into a lower interest fixed rate loan). However, the costs usually involved in loan renegotiations and debt conversions (e.g. bank fees) reduce the profitability of this option. Survey data suggest that 30% of all indebted households attempted to change the conditions of their loans in this way.¹⁸ 70% of these households indicated that their loan burden had eased.

While the current low interest rate environment makes it easier to pay in-

terest on loans, an eventual future hike in interest rates could pose problems for indebted households with variable rate loans to an extent that could affect the macroeconomy or financial stability. To shed some light on this question, we asked indebted households how they would react if their monthly loan installments increased by EUR 100. The survey data suggest that in such a situation, households would mainly opt to reduce expenditures (table 4). 57% said that they would decrease consumption expenditures, 37% would delay large purchases, and 31% would spend less for holidays. Altogether, three-quarters of indebted households would take at least one of these measures. Another widely suggested reaction is negotiating with the bank. For example, households could try to reduce installments by extending the term of the loan.

At the time the survey was conducted, the impression that it was a relatively favorable time to take out a loan was relatively widespread among the Austrian population. Overall, 44% of households questioned thought that circumstances for taking out a loan were favorable; the number is higher for other loans (55%) than for mortgages (39%). More highly educated households and higher income households were more likely to think that it was a favorable time to take out a loan (chart 7).

¹⁵ We asked survey participants how high they expected the interest rate to be if they took out a variable rate euro-denominated mortgage of EUR 100,000 with a maturity of 20 years. In the results on the assessment of the interest rate on loans, we aggregated the answers in the following way (fraction of respondents in parentheses): low: less than 1.5% (16%); medium: between 1.5% and 3.5% (31%); high: above 3.5% (23%); don't know/no answer (30%).

¹⁶ This number is considerably lower than the fraction of indebted households according to 2010 HFCS data (36%). However, the HFCS figures also include overdrafts and outstanding balances on credit cards (see Fessler et al., 2012).

¹⁷ In Austria, variable rate loans make up the bulk of outstanding loans (about 80% at the end of 2015, compared to just under 30% in the euro area).

¹⁸ See Andersen et al. (2015) on inertia and inattention in refinancing decisions.

Table 4

How would you react if your loan expenses increased by EUR 100?

	% of indebted households
Decrease consumption expenditures	57
Negotiate with the bank	49
Delay large purchases	37
Spend less for holidays	31
Work more	23
Dissave financial assets	13
Don't know/no answer	4
Other	2

Source: Authors' calculations based on the OeNB barometer survey.

Note: Multiple answers possible.

At first glance, the lack of a clear-cut correlation of the impression that it was a favorable time to take out a loan with perceptions and expectations of loan interest rates looks counterintuitive. Potentially, respondents had different types of loans in mind when answering this question. If respondents had a fixed rate loan in mind, they might have said now was a good time to take out a loan if they perceived the current rate as low and expected rates to increase. They may also have thought that circumstances were favorable for taking out a variable rate loan if they expected interest rates to fall.

The survey data indicate that about 7% of households eventually intended to take out a loan in the year following the survey. About 3.4% of households intended to take out a loan for real estate purchases and about the same fraction of households for other purposes. The breakdown of households intend-

ing to take out a loan reflects the life-cycle factors we observed for most loan-related variables; moreover, households that assess current interest rates as low and those that expect interest rates to fall are represented more strongly (chart 8).¹⁹ Furthermore, 71% of households that intended to take out a loan said that the current ultra-low interest rate environment played a role in their decision.

Apart from demand factors, supply factors also play a role in enabling households to eventually take out a loan. Specifically, households must not be credit constrained. Our survey shows that overall 56% of households think that they would qualify for a loan. This fraction is lower among the youngest and oldest households in the survey; it amounts to 46% among households that have a reference person that is younger than 30 and to 37% in the group of over 70-year-olds. The lower fraction of older households may reflect a possible reluctance of banks to lend to people above a certain age.²⁰ In the youngest age group, low household income may play a role. Homeowners' higher confidence that they are eligible for a loan is likely to reflect the availability of collateral. The fraction of households that think that they would qualify for a loan amounts to 90% of households that intend to take out a loan.²¹ Among those households that think that they would qualify for a loan almost 12% actually intend to take out a loan.

¹⁹ See also Beer et al. (2015) on interest rate perceptions and expectations of households that want to take out a loan.

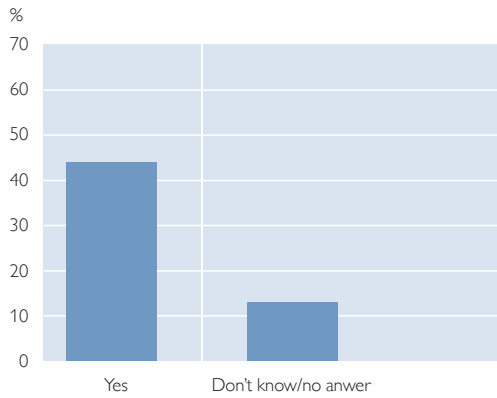
²⁰ The obstacles senior citizens face in taking out a loan have come under scrutiny, e.g. in the media, and it seems that banks' resistance to lending to older people is softening.

²¹ According to HFCS data, in 2010, 21% of households that had applied for a loan within three years (7.4% of all households) were rejected or offered a smaller amount than they applied for (ECB, 2013).

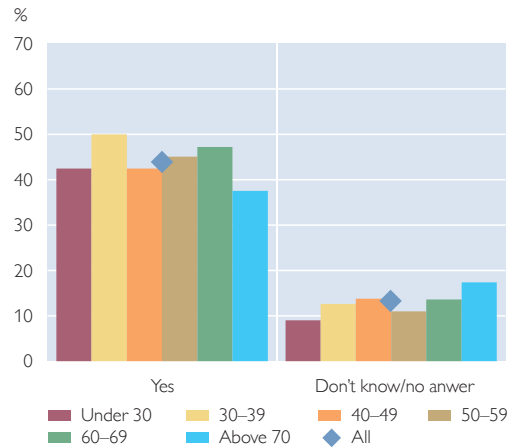
Chart 7

Now is a favorable time to take out a loan

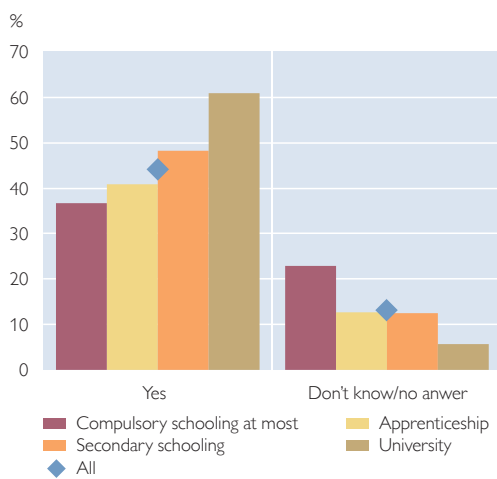
All respondents



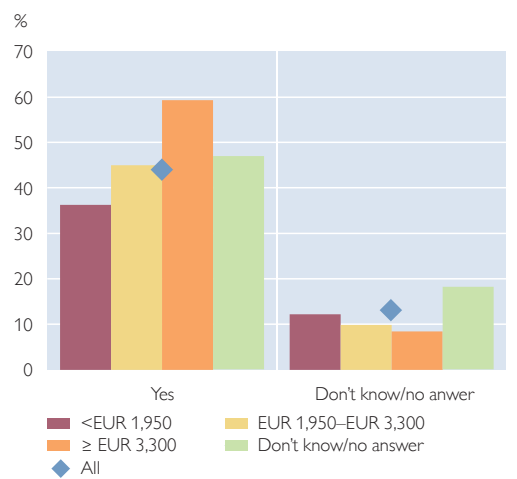
By age



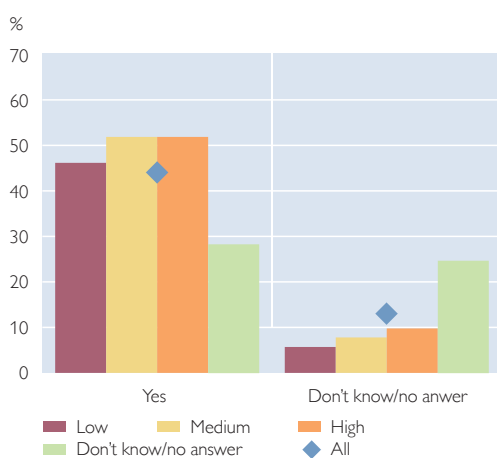
By education



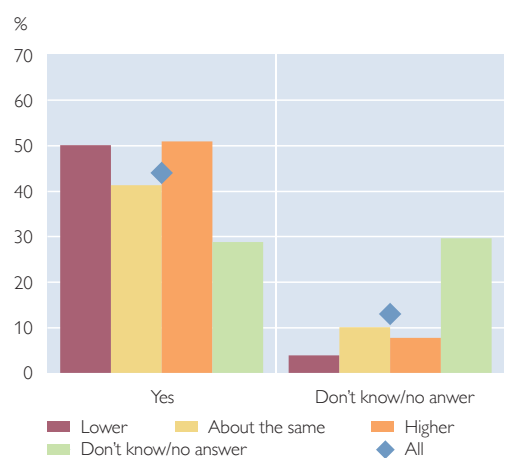
By household income



By assessment of current interest rates on loans



By expectations for future interest rate on loans



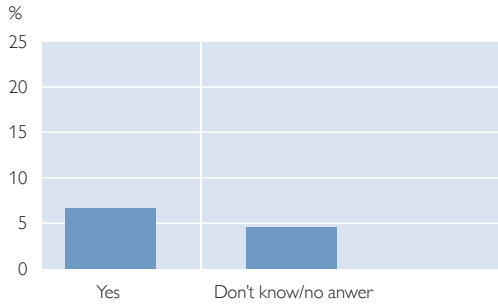
Source: Authors' calculations based on the OeNB barometer survey.

Note: Assessment of interest rate on loans: low: less than 1.5%; medium: between 1.5% and 3.5%; high: above 3.5%.

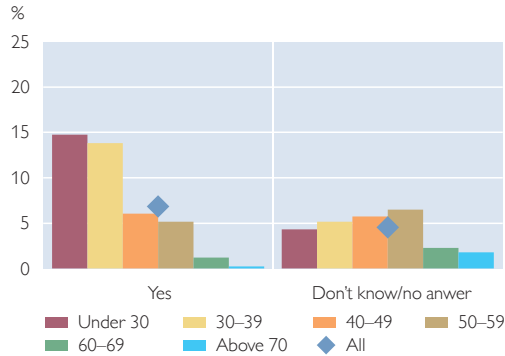
Chart 8

Intention to take out a loan

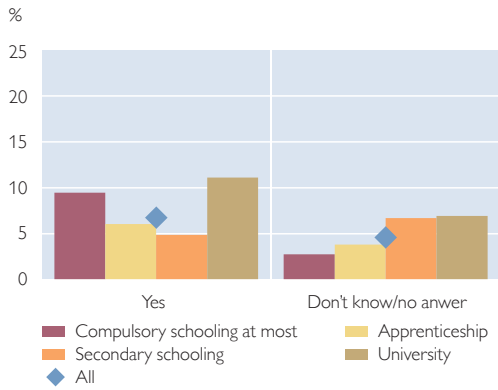
All respondents



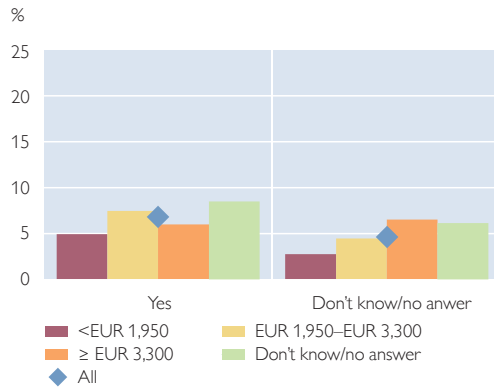
By age



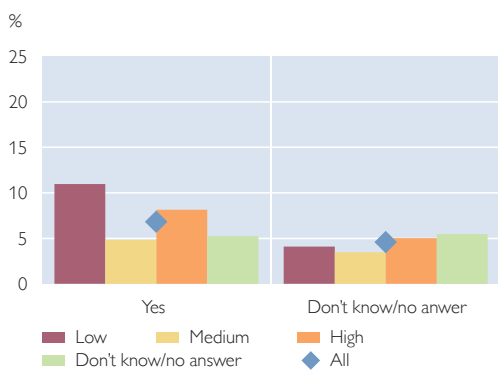
By education



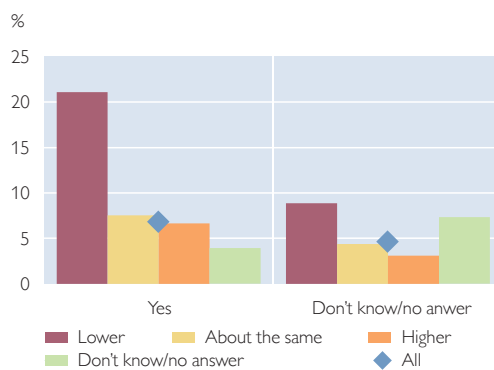
By household income



By assessment of current interest rates on loans



By expectations for future interest rate on loans



Source: Authors' calculations based on the OeNB barometer survey.

Note: Assessment of interest rate on loans: low: less than 1.5%; medium: between 1.5% and 3.5%; high: above 3.5%.

4 Summary and conclusions

In this paper, we analyzed whether the current very low interest rates affect savings, portfolio choice and loan decisions of Austrian households using data from a special OeNB barometer survey conducted in spring 2015.

The theoretical effects of interest rates on savings are ambiguous a priori because income and wealth effects that incentivize more savings if interest rates decrease might offset or even outweigh the intertemporal substitution effect that implies a drop in savings in

times of low interest. Our survey suggests that Austrian households' propensity to save dropped compared to three years before the survey because the fraction of households that indicated that they were saving less is higher than the fraction of households that were saving more. However, closer inspection of the survey results revealed that low interest rates were only one of several relevant factors that prompted households to save less.

The survey data suggest that only a relatively small fraction of Austrian households adjusted their portfolio composition in response to ultra-low interest rates. Among these households, safe haven motives, i.e. the flight to real assets like real estate, gold, and other tangible assets, seem to have played a role. The extent of portfolio rebalancing into riskier assets (e.g. shares) has been limited. Households have used investment funds to shift into riskier investments, though. Households' reluctance to adapt their portfolio composition despite potentially higher returns could be explained by the uncertain macroeconomic environment, the high volatility of stock markets, bad experiences with investment during the crisis as well as other factors such as transaction costs, stickiness of behavior, the changed tax treatment of valuation gains and limitations to financial literacy.

Furthermore, low interest rates would be expected to boost demand for loans. Although a large fraction of Austrian households regards the current circumstances as favorable for taking out a loan, only a relatively small number of surveyed households indicated that they have taken out a loan or in-

tended to do so. Clearly, ultra-low interest rates are not a sufficient condition to prompt, or enable, households to take out a loan just for their own sake. If interest rates were to increase again, resulting in higher loan installments, most indebted households indicate in the survey that they would react by cutting consumption expenditures.

Even though our survey data allow only statements about participation (percentages of respondents) and not about volumes (amounts of savings or investments), the limited empirical support for a reduction in savings and portfolio rebalancing toward riskier assets suggests limits to the effectiveness of ultra-low interest rates in stimulating aggregate demand through the risk-taking and portfolio rebalancing channels, at least as far as households in Austria are concerned. The effectiveness of ultra-low interest rates in any potential loan-financed increase in consumption or (housing) investment by households appears to be limited as well. The data suggest that other factors play a more important role in Austrian households' decision making. This finding, alongside the finding that respondents had limited knowledge of the interest rate level (as discussed in Beer et al., 2015), should be taken into account when assessing the effectiveness of monetary policy. However, the present analysis applies only to the direct impact of low interest rates on households. Ultra-low interest rate will have a direct impact on other sectors of the economy²² and may also have an indirect impact on households e.g. because of changes in the investment behavior of investment funds held by households.

²² For example, financial accounts data show the volume of outstanding loans of nonfinancial corporations to be about twice that of households. Furthermore, companies use other instruments for financing, so that their total financing volume may well be much larger.

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Annex

Table A1

Summary statistics

	%
Age	
<30	14
30–39	15
40–49	23
50–60	19
60–69	12
≥70	17
Education	
Compulsory schooling or less	10
Apprenticeship	62
Secondary schooling	17
University	10
Household income	
<EUR 1,950	36
EUR 1,950–EUR 3,300	26
≥EUR 3,300	10
Don't know / no answer	29
Assessment of current monetary policy rate	
Low	36
Medium	25
High	4
Don't know / no answer	35
Assessment of current interest rate on savings accounts	
Low	45
Medium	32
High	7
Don't know / no answer	16
Assessment of current interest rate on loans	
Low	16
Medium	31
High	23
Don't know / no answer	30
Expectations for the future monetary policy rate	
Considerably higher	7
Somewhat higher	33
About the same	32
Lower	5
Don't know / no answer	22
Expectations for future interest rate on savings accounts	
Considerably higher	3
Somewhat higher	26
About the same	38
Lower	17
Don't know / no answer	15
Expectations for future interest rate on loans	
Considerably higher	11
Somewhat higher	40
About the same	24
Lower	3
Don't know / no answer	22

Source: Authors' calculations based on the OeNB barometer survey.

The Stability and Growth Pact since 2011: More complex – but also stricter and less procyclical?

The European fiscal framework has been extensively reformed since 2011. Nevertheless, it is consistently criticized for its procyclicality, its complexity and its large consolidation requirements.

We provide a general overview of European fiscal rules. Then we argue that while recent reforms have undoubtedly made the Stability and Growth Pact more complex, one cannot make such a general statement concerning its procyclicality and its strictness. The preventive arm of the SGP has been made both stricter and less procyclical, while the newly introduced debt benchmark is not only very complex, but also more procyclical than the rest of the SGP. Furthermore, the effect on the procyclicality of Excessive Deficit Procedures is ambivalent; procyclicality was increased by the introduction of intermediate headline targets, but also decreased via new effective action indicators.

JEL classification: E61, E62, H60

Keywords: Stability and Growth Pact, fiscal rules, fiscal policy

Doris Prammer,
Lukas Reiss¹

The Stability and Growth Pact (SGP) lays down fiscal rules to ensure that EU Member States pursue sound public finances, preventing negative spillovers to other Member States and to common policy areas such as monetary policy within the euro area.

The establishment of the SGP in 1997 followed the Maastricht criteria applicable from 1993, in turn setting the basis for the current fiscal governance framework. The SGP has been adjusted several times since 1997, with the most important reforms dated 2005 and 2011, and a few smaller reforms coming into effect after 2011. This article serves as an update to Holler and Reiss (2011), which focused on those portions of the so-called six-pack of EU regulations specifically aimed at reforming the SGP in 2011. In the following, we discuss important changes since the finalization of the previous article:²

1. Two new regulations (the two-pack) and one intragovernmental treaty

(the Fiscal Compact) related to the SGP have been agreed and implemented.

2. The European Commission has adjusted its interpretation of existing rules, most importantly by changing the methodology for assessing effective action and by refining the assessment of the required adjustment path to the medium-term budgetary objective (MTO) (European Commission, 2015f).
3. Last but not least, the European Commission has implemented the new rules for about four years. The application of some six-pack-related elements specifically offers the opportunity for a first assessment of the implications for Member States' recent fiscal policies and the European Commission's handling of the enhanced fiscal framework.

Since the beginning of the financial crisis, Member States have made massive consolidation efforts irrespective of

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² Note that we have also published a much shorter article in German (Prammer and Reiss, 2014b) discussing flexibility in the SGP before publication of the so-called flexibility note of January 2015 (European Commission, 2015f).

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Nadine Leiner-Killinger,
European Central
Bank

their cyclical situation, partly owing to the need to meet SGP requirements. Hence, the SGP has attracted substantial criticism for its lack of flexibility and its procyclicality. The changes in interpretation of existing SGP rules after the six-pack reforms, such as the effective action methodology, and the interpretation and guidance contained in the communication referred to as the flexibility note (European Commission, 2015f), partly addressed this criticism. This flexibility, however, comes at the cost of even more complexity. Precisely this tradeoff will be one of the main topics in this article: Section 1 outlines the current SGP and stresses its partly new flexibility elements. Section 2 discusses whether the changes to the fiscal framework since 2011 (including the six-pack) have really made the European fiscal framework stricter. Section 3 then goes into detail in explaining the tradeoff between complexity and procyclicality in the SGP. Section 4 concludes.

1 The Stability and Growth Pact in a nutshell

The most important legal texts and guidelines constituting the Stability and Growth Pact are:

1. Articles 121 (preventive arm), 126 (corrective arm) and 136 of the Treaty on the Functioning of the European Union (TFEU) as well as Protocol No 12 annexed to the TFEU;
2. Council Regulations (EC) 1466/97 (preventive arm), 1467/97 (corrective arm) and 1173/2011 (additional sanctions regulation of the six-pack);

3. The Code of Conduct (European Commission, 2012a); and
4. Commission communications like the flexibility note (European Commission, 2015f).

This legal basis is complemented by Council Regulation (EC) No 479/2009 on the application of the Protocol on the EDP, Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States,³ the two-pack regulations (Regulation (EU) No 472/2013 and Regulation (EU) No 473/2013) and the Fiscal Compact (fiscal part of the intergovernmental Treaty on Stability, Coordination and Governance, TSCG) of March 2012. Note that the mentioned articles of the TFEU as well as regulations and directives are legally binding while documents like Commission communications, the Vade mecum on the Stability and Growth Pact (European Commission, 2016b) or the SGP chapters in the annual Reports on Public finances in EMU of the European Commission are not.

The rules of the SGP are set out in *two arms*, the preventive and the corrective arm:

The *corrective arm* aims at correcting government headline deficit ratios or headline debt ratios deemed “excessive.” It is based on the so-called Maastricht criteria requiring a government budget deficit of no more than 3% of GDP and a debt ratio which is either below 60% of GDP or sufficiently diminishing. If the Member State does not comply with these rules, an excessive deficit procedure (EDP) can be launched.

³ Directive 2011/85/EU, Regulation (EU) No 1173/2011, Regulation (EU) No 1175/2011 amending Council Regulation (EC) 1466/97 and Regulation (EU) No 1177/2011 amending Council Regulation 1467/97 as well as two regulations on the prevention and correction (Regulation (EU) No 1176/2011) and on the enforcement of the correction of macroeconomic imbalances (Regulation (EU) No 1174/2011) form the so-called six-pack.

The *preventive arm* aims at preventing Member States from breaking their commitments to observe the deficit and debt requirements of the corrective arm. Hence, as long as a Member State is in an EDP, the preventive arm does not apply. It calls for “sound fiscal positions,” which are achieved when a Member State respects its MTO, i.e. the country-specific budget balance target measured in structural terms. If the Member State does not comply, a significant deviation procedure (SDP) can be launched.

1.1 The preventive arm aims at long-term sustainability

The medium-term target for the structural balance is the cornerstone of the preventive arm

Pivotal to the preventive arm of the SGP is the *medium-term objective (MTO)* of achieving a *structurally balanced budget*.⁴ Member States are to achieve and maintain a budgetary position that allows automatic stabilizers to play their full role in mitigating possible economic shocks. Generally, the minimal MTO is calculated every third year, taking into account the Member State’s cyclical sensitivity and the sustainability risk measured by the current debt ratio and implicit liabilities arising from population aging (the calculation for Austria is sketched in box 1). Respecting these minimum requirements, Member States set their MTOs themselves. Most Member States have MTOs between -0.5% of GDP and a balanced budget.

Box 1

Calculation of Austria’s MTO (using updated aging-related costs)

The new MTOs taking into account the 2015 Ageing Report (European Commission, 2015g) have not yet been published. Therefore, in early 2016, Austria’s MTO was still set at -0.45% of GDP, respecting the calculated minimum for Austria of -0.5% of GDP based on the 2012 Ageing Report (European Commission, 2012d).

Applying information from the 2015 Ageing Report and from the Fiscal Sustainability Report 2015 (European Commission, 2015g and European Commission, 2016a) to the formulas used in the 2016 update of MTOs (European Commission, 2016b), Austria’s minimum MTO still comes to -0.5% of GDP for 2017 onward. It is derived as the maximum of three different components:

1. The first component provides a safety margin to the 3% of GDP deficit limit, taking into account output volatility and the budgetary sensitivity to output fluctuations of a country. For Austria, according to the European Commission (2016b), this amounts to about -1.8% of GDP.
2. The second component ensures the sustainability of public finances, taking into account the current debt ratio and future aging-related costs. For Austria, it amounts to -0.75% of GDP (based on publicly available data in the most recent Ageing and Fiscal Sustainability reports). This figure is lower than the one calculated for the 2013 update of MTOs, despite a considerably higher debt ratio. However, the lower projected increase in aging costs in the recent Ageing Report overcompensates the increase in the debt ratio compared to the 2013 update.
3. The last component sets a minimum of -0.5% of GDP for euro area countries with debt ratios of above 60% (based on the Fiscal Compact).

⁴ The structural budget balance is calculated as the budget balance minus an estimated cyclical component minus one-off or other temporary measures. A more detailed explanation can be found in Reiss (2013).

Member States must adjust until they reach the MTO

Member States have to improve their structural budgetary positions toward their MTO, with the amount of required adjustment depending on their debt level and their cyclical position. Adjustment thus allows for built-in flexibility. The matrix on adjustment requirements (table 1) was only published in early 2015 in the flexibility note (European Commission, 2015f):⁵ Adjustment requirements (table 1) range from “no adjustment” in “exceptionally bad times” (negative real GDP growth and/or an output gap below –4%) to a structural adjustment of 1% of GDP in “good times” (for countries with debt ratios above 60%). However, overachievement of the MTO is not required. Moreover, *explicit exemption clauses* allow Member States to temporarily deviate from the MTO or the adjustment path toward the MTO (see next subsection).

The MTO is complemented by an *expenditure benchmark*, a major novelty of the six-pack reforms). The bench-

mark limits the growth rate of adjusted⁶ real primary government spending to a country’s medium-term potential economic growth rate or to below that rate. Expansionary (restrictive) discretionary measures on the revenue side decrease (increase) the allowed expenditure growth rate. If a country is on the adjustment path to its MTO, the applicable maximum expenditure growth rate is reduced in line with table 1: For example, for a Member State with a structural primary expenditure ratio of 50%, a required change in the structural balance of 0.6 percentage point would translate into a real expenditure growth requirement of 1.2 percentage points (= 0.6/50%) below potential.

Explicit exemption clauses allow for temporary deviations from the MTO or its adjustment path

Apart from cyclical conditions, several factors can temporarily reduce consolidation requirements under the preventive arm. The most notable exemptions

Table 1

Required annual fiscal adjustment under the preventive arm of the SGP

	Real GDP growth in %	Output gap (OG) in %	Debt ratio <60% AND low/ medium sustainability risks	Debt ratio >60% OR high sustainability risks ¹
Exceptionally bad times	real growth < 0 or OG < –4		no adjustment	
Very bad times	>0	–4<=OG<–3	0	0.25
Bad times	>0, <potential	–3<=OG<–1.5	0	0.25
	>0, >potential		0.25	0.50
Neither good nor bad times ²	>0	–1.5<=OG<1.5	0.50	0.60
Good times ²	>0, <potential	OG>=1.5	0.60	0.75
	>0, >potential		0.75	1.00

Source: European Commission.

¹ Note that their high debt ratios put all larger euro area economies in this category.

² >0.5 is interpreted as >=0.6.

⁵ Similar tables were used to assess the adjustment path toward the MTO from 2013; however, they were not published.

⁶ Primary expenditure is adjusted for nondiscretionary changes in unemployment-related spending and expenditure matched by EU funds; furthermore, investment spending is smoothed over four years.

are provided under the structural reform clause, the investment clause, and the general escape clause.

Structural reforms such as pension, healthcare or labor market reforms represent one important justification for allowing a temporary deviation from the adjustment path or the MTO under the *structural reform clause*. The allowed deviation is capped at 0.5% of GDP, except in the case of pension reforms.⁷ Reforms (or reform packages) qualifying for these exemptions must

1. have a major impact,
2. have verifiable direct long-term positive budgetary effects, including raising potential growth in a sustainable way, and
3. must be fully implemented or, if not fully implemented, must be formulated in a detailed reform plan submitted to the European Commission.

The exemption can be applied only once until the Member State has reached the MTO. Furthermore, the structural reform clause can only be activated subject to the following *budgetary requirements*:

1. The Member State must remain in the preventive arm of the SGP;
2. The Member State must ensure a safety margin relative to the 3% limit for the headline deficit; and
3. The structural balance must be expected to return to the MTO four years after the submission of the Stability and Convergence Programme (SCP) requesting the structural reform clause.⁸

Under certain conditions, an *investment clause* may be invoked for investment expenditures co-funded by the EU to

allow a temporary deviation from the adjustment path and the MTO. The deviation is limited by the total amount of cofinancing in the first year and is also capped at 0.5% of GDP. A Member State can invoke the investment clause

1. if it does not reduce public investment,
2. if it experiences bad economic times (with an output gap below -1.5%), and
3. if it meets the same budgetary requirements as for the structural reform clause.

The *cumulative deviation* allowed by invoking the structural reform clause and the investment clause is *capped at 0.75% of GDP* (European Commission, 2015a, page 74).

Also, unusual events outside the control of the Member State (e.g. natural disasters) allow for a temporary departure from the adjustment path or the MTO itself. Moreover, a *general escape clause* can be applied to all Member States in periods of severe economic downturn for the euro area or the EU as a whole. However, it can only be activated if fiscal sustainability in the medium term is not endangered. Activation suspends adjustment requirements in both the preventive and the corrective arm.

The European Commission can issue an early warning if countries significantly deviate from requirements

Deviations from the MTO or from the adjustment path toward it can trigger sanctions only if they are *significant*, coming to 0.5 percentage point over one year or cumulated over two years

⁷ Pension reforms in this context are typically reforms creating schemes classified outside the general government (typically via a mandatory private second pillar).

⁸ Boxes II.4.1 and II.4.2 in the Report on Public Finances in EMU 2015 (European Commission, 2015a) explain this issue in detail.

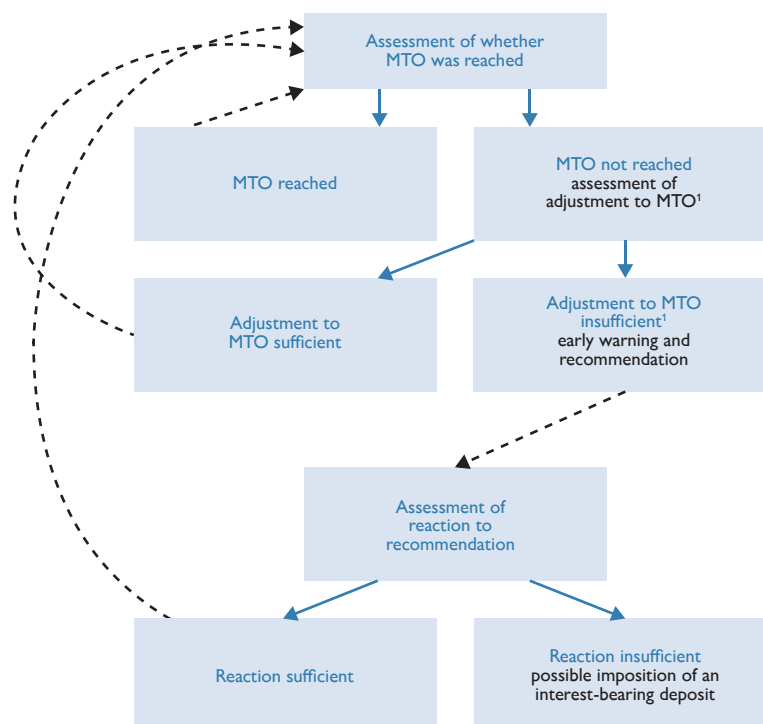
(as specified in European Commission, 2012a). For example, a country with an adjustment requirement of 0.6% of GDP would hence only significantly⁹ deviate from the required adjustment if the structural budget balance improved by less than 0.1 percentage point in one year (= 0.6–0.5) or by less than 0.7 percentage point over two years (= 2*0.6–0.5); the margins for the expenditure benchmark are calculated accordingly. Moreover, the MTO itself is considered as reached within a margin of 0.25 percentage point (European

Commission, 2015a, page 42). This stands in contrast to conditions under the corrective arm, for which the Code of Conduct (European Commission, 2012a) does not specify such margins.

In case of a *significant deviation based on ex post data*,¹⁰ the European Commission (without involvement of the Ecofin Council) can issue an *early warning* and launch an *SDP*. The European Commission assesses both the expenditure benchmark and the (change in the) structural balance. It automatically launches an SDP if a Member State

Chart 1

Simplified sketch of steps in the preventive arm of the SGP



Source: European Commission (2016b, 2015a), OeNB.

¹ If the MTO was reached previously, the European Commission assesses whether there was a significant deviation from the MTO (and whether the expenditure benchmark was met).

⁹ The European Commission refers to a deviation as significant if it is larger than authorized by the margins. If not referred to as “significant,” a deviation is below the threshold.

¹⁰ Negative *ex ante* assessments conducted by the European Commission (based on Stability and Convergence Programs in spring or on Draft Budgetary Plans in autumn) cannot lead to an early warning.

deviates significantly from the requirements on both indicators. In all other cases of deviation, an overall assessment is needed. Only if at least one of the deviations is found to be significant might an SDP be launched (for details, see section 2.3 in European Commission, 2015a).

An early warning is accompanied by a recommendation (chart 1) to which the Member State has to react within at most five months. If the reaction is deemed to be insufficient, a financial sanction may be imposed, namely an interest-bearing deposit of 0.2% of GDP (which was introduced via the six-pack) for euro area countries only.

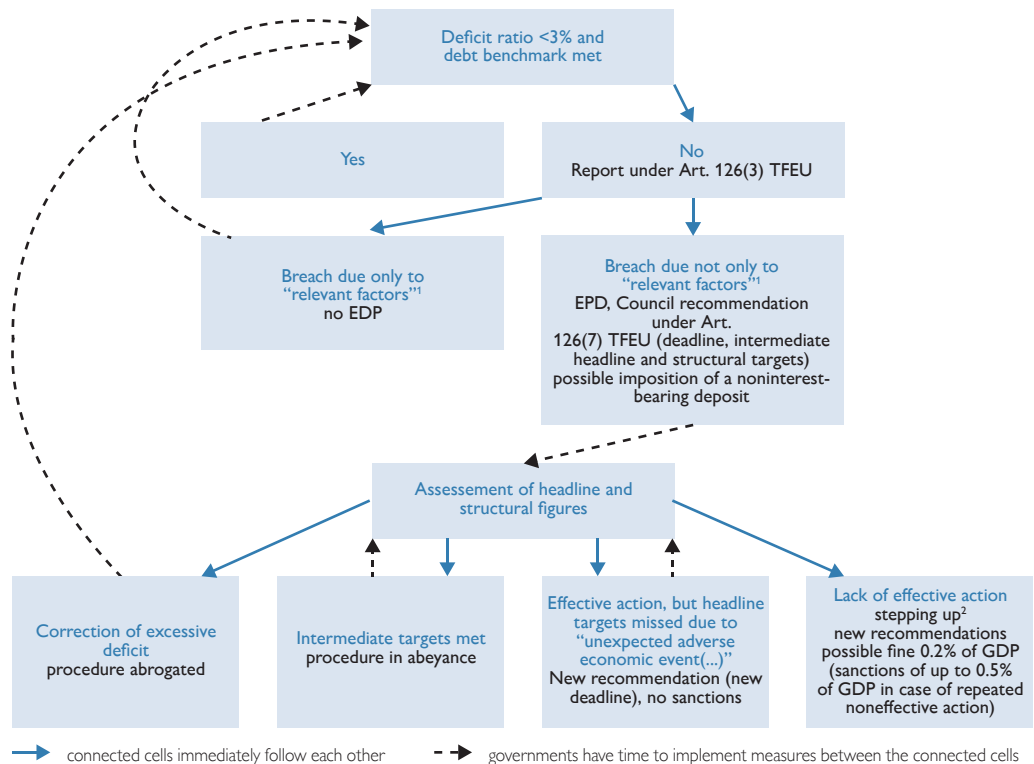
1.2 The corrective arm requires relatively large consolidation when Maastricht criteria are not met

An EDP may be launched for Member States deviating from deficit and debt benchmarks

While the Maastricht criteria of a maximum deficit of 3% and a debt ratio of 60% have been the unchanged core elements of the corrective arm since the beginning, the exact requirements for a *sufficient reduction in the debt ratio* for Member States above 60% of GDP were only laid down with the six-pack in 2011. Since then, the rules have required an average annual reduction in the debt ratio of 1/20th of the gap to 60%.

Chart 2

Simplified sketch of steps in the corrective arm of the SGP (euro area countries only)



Source: European Commission (2016b, 2015a), OeNB.

¹ If the debt ratio >60% and the breach of the 3% limit is not temporary and is small, an EDP is opened in any case.

² Exception "in case of severe economic downturn in the euro area or the Union as a whole."

In principle, the European Commission has to prepare a report under Article 126(3) when one of the two benchmarks is breached in notified data or is expected to be breached based on projections (chart 2). Note, however, that Article 126 of the Maastricht Treaty and Regulation (EC) 1467/1997 specify some exceptions:

No EDP needs to be launched¹¹ if the breach of the 3% limit is small, temporary and due to exceptional circumstances, the latter being either an “unusual event outside the control of the Member State” (e.g. a natural disaster) or a “severe economic downturn” (an output gap far below zero or negative GDP growth) (Council Regulation (EC) No 1467/97).

In case of the debt criterion, the benchmark is not only assessed over the past three years, but also over the projection horizon of the European Commission and in cyclically adjusted terms (for details, see European Commission, 2016b). The debt criterion is considered to be breached only if all benchmarks are missed. A transitional minimum linear structural adjustment (MLSA) requirement applies to countries which were subject to an EDP on November 8, 2011, when the six-pack entered into force. The MLSA sets a structural adjustment path for the deficit such that the debt criterion is met at the end of the three-year period after which the country has exited the EDP.¹²

When either the deficit or the debt criterion has been breached, the Euro-

pean Commission prepares an Article 126(3) report looking at *relevant factors* which might have contributed to these breaches and therefore *prevent the opening of an EDP*. These relevant factors comprise the medium-term economic (e.g. GDP growth, inflation) and budgetary positions (such as stock-flow adjustments) or other factors such as financial assistance to banks or to other Member States (e.g. bilateral loans to Greece). When a country with a debt ratio above 60% breaches the deficit criterion, relevant factors can only be taken into account when the excess over 3% is small and temporary.

The assessment of effective action in EDPs: Consolidation requirements are relatively high, but the large number of indicators provides flexibility

Both debt-based and deficit-based EDPs begin with a recommendation that sets the minimum annual headline targets and structural adjustment requirements¹³ and a deadline for the correction of the excessive deficit (i.e. for the year in which the deficit ratio is below 3% and the debt rule is met).¹⁴ In most cases, the consolidation requirements required ex ante in EDPs will be above the requirements in the preventive arm (especially when accounting for the effect of the explicit margins used in the latter).

The European Commission assesses *compliance* with the *recommended targets* according to *four different indicators* (for a more detailed description of the time-

¹¹ There is also an exception for cases when “the (deficit) ratio has declined substantially and continuously and reached a level that comes close to the reference value” (Art. 126(2) of the TFEU). This clause was relevant only during the setup of EMU.

¹² See annex 6 of European Commission (2016b) for the calculation of MLSAs.

¹³ Structural requirements are set both in terms of a required change in the structural balance and in terms of the size of discretionary measures to be taken compared to a no-policy-change scenario.

¹⁴ Compliance with debt adjustment requirements might require a fiscal trajectory with nominal deficits of well below 3% of GDP. If the EDP was opened before November 2011, the debt benchmark does not need to be met for the abrogation of the EDP.

line of EDPs, see European Commission, 2016b):

1. the level of the headline budget balance,
2. the change in the structural budget balance,
3. the change in the structural budget balance adjusted for revisions of potential output growth and adjusted for unexpected revenue windfalls (or shortfalls, respectively),¹⁵ and
4. the separate quantification of the effects of individual policy measures using a bottom-up approach.¹⁶

Compliance with any of these indicators determines the country's position in a complex decision tree, where the *possible outcomes* are:

1. If the excessive deficit has been corrected based on both realized headline figures and European Commission projections, the *EDP* is *abrogated*.
2. If the excessive deficit has not been corrected, but the intermediate headline target and the structural indicators are met, the *EDP* is held in *abeyance*.
3. If the Member State has conducted effective action (measured by indicators two through four) but has missed the headline (deficit) target due to unexpected adverse economic events, the Council issues a *new EDP recommendation* (likely with new consolidation targets and a new deadline) *without any sanctions*. This

typically¹⁷ also holds when a Member State misses its deadline for the correction of the excessive deficit, but has conducted effective action.

4. If the European Commission's assessment determines a lack of effective action, the *EDP* is *stepped up* and new recommendations are issued.

Stepping up an EDP can also be accompanied by a fine, which – when countries repeatedly fail to abide by the recommendations – may reach up to 0.5% of GDP (chart 2; for details see European Commission, 2016b). The most recently published decision tree for the assessment of effective action can be found in European Commission (2016b), which also states (page 91) that an EDP cannot be stepped up if an intermediate headline deficit target has been met, regardless of whether structural consolidation is sufficient or not.

Moreover, as in the preventive arm, adjustment requirements and sanctions are explicitly suspended “in case of severe economic downturn in the euro area or the Union as a whole, provided that this does not endanger fiscal sustainability in the medium-term” (Regulation (EC) No 1466/97).

1.3 The role of the Fiscal Compact and the two-pack

The ECB (2012a) describes the most important innovations of the Fiscal Compact. Most importantly, in the Fiscal Compact, euro area countries com-

¹⁵ Revenue windfalls (shortfalls) are developments of government revenue above (below) expectations based on a naïve projection using the amount of discretionary revenue measures, GDP developments and an aggregate revenue elasticity with regard to the output gap.

¹⁶ Indicators two and three are compared to the required change in the structural balance and indicator four is compared to the required size of discretionary measures.

¹⁷ The SGP Code of Conduct (European Commission, 2012a, page 12) states that “if effective action has been taken (...) and unexpected adverse economic events with major unfavourable consequences for government finances occur after the adoption of that recommendation or notice, the Council may decide (...) to adopt a revised recommendation (...). However, if structural consolidation efforts were deemed sufficient but headline targets were still not met, this was likely due to events outside the control of Member States. The European Commission did not step up EDPs in any of the numerous cases of missed headline or EDP targets since 2011.

mitted to amending national legislation to include a structural balance rule as well as some correction mechanism for noncompliance (i.e. parts of the preventive arm). They also agreed on a sanctioning mechanism with fines of up to 0.1% of GDP for cases in which this agreement is not implemented. Furthermore, the Fiscal Compact commits euro area Member States to following all European Commission recommendations in deficit-based EDPs unless a qualified majority of euro area countries are opposed to a recommendation.

The *two-pack* consists of two regulations, one which increases surveillance of euro area countries in potential serious difficulties (Regulation (EU) No 472/2013) and one which increases reporting requirements and asks for the setup of independent fiscal institutions (Regulation (EU) No 473/2013). Both are described in more detail by the ECB (2013a); most importantly, as the article points out, the latter regulation requires euro area countries to submit so-called draft budgetary plans in October. These documents provide general government fiscal projections for the current and the following year and are assessed by the European Commission to determine compliance with SGP requirements. No direct financial sanctions are attached to this new process, but noncompliance with an opinion or an autonomous recommendation¹⁸ by the European Commission released in the context of the draft budgetary plan review can be an aggravating factor in an EDP.

2 Has the European fiscal framework really become stricter since 2011?

One would assume that the SGP has become much stricter after the publication of the six-pack (see section 1 and, for example, European Commission, 2011, page 91, or ECB, 2011a¹⁹), especially due to the above-mentioned reforms to the preventive arm (particularly the expenditure benchmark and sanctioning possibilities), the introduction of the debt benchmark and the strengthening of the European Commission in EDPs via reverse qualified majority voting (also through the Fiscal Compact). At the same time, fiscal consolidation in the euro area has been very large since 2010. Chart 3 shows that according to the OECD,²⁰ the underlying (structural) primary balance of the euro area improved by about 3½ percentage points from 2009 to 2014. How much of this improvement can be attributed to the substantial changes of the EU fiscal rules over that timespan?

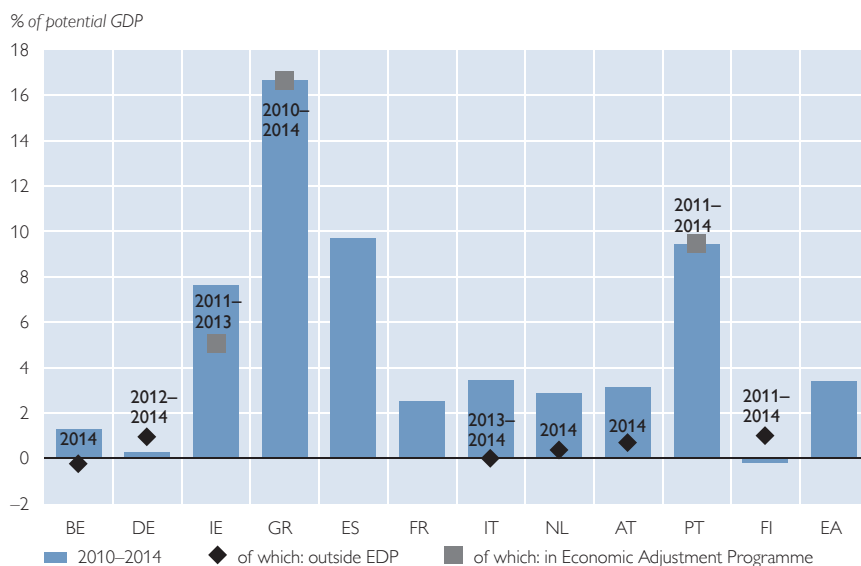
Chart 3 indicates that countries in macroeconomic adjustment programs (Greece, Portugal, Ireland; gray squares in chart 3) and/or subject to (temporarily) high sovereign risk premia (Spain, Italy) made the *largest consolidation progress* from 2010 to 2014. These countries were all in EDPs during these programs or during this time of market stress. Most consolidation in the remaining larger euro area countries was also conducted during times in which they were subject to an EDP, as fiscal adjustments outside EDPs (relevant for

¹⁸ These are recommendations issued by the European Commission which, unlike country-specific recommendations, have not been endorsed by the Council of the European Union.

¹⁹ Note, however, that the ECB publication qualified the assumption of greater strictness by pointing to some shortcomings of the reforms.

²⁰ We used OECD estimates, as the European Commission has not published structural (primary) balance estimates for 2009.

Chart 3

Fiscal consolidation in large euro area countries from 2010 to 2014

Source: OECD (*Economic Outlook*, November 2015), European Commission, OeNB.

Note: Consolidation is measured by the change in the underlying primary balance as defined by the OECD (the European Commission did not publish its estimates of the change in the structural primary balance in 2010). Years above the gray (black) squares show which years of consolidation from 2010 to 2014 were covered by an adjustment program (outside the EDP).

Belgium, Germany, Italy, the Netherlands, Austria and Finland; black squares in chart 3) were comparatively small. In the following, we will argue that only a small portion of the very large consolidation in 2010 to 2013 can be attributed to the changes to the European fiscal framework. In some countries, adjustment requirements were even reduced by innovations to the SGP.

2.1 The preventive arm is clearly stronger than before 2011, but has so far been responsible only for a small fraction of consolidation in the euro area

It remains to be seen whether there will be any sanctions (including the nonmonetary sanction of an early warning) in the preventive arm; as of early 2016, there have been no sanctions since 2011. However, the preventive arm was practically nonexistent until 2011, so the reform steps of the

six-pack and the implementation of structural balance rules into national legislation to meet Fiscal Compact requirements definitely strengthened the preventive arm.

The stronger preventive arm had an impact on countries like the Netherlands and Austria (chart 3 and box 2); both continued their consolidation course in 2014 even though their EDPs had already been abrogated. The case is similar for Germany and Finland, whose EDPs ended earlier. However, note that Germany significantly overachieved its MTO in 2013 and 2014 (i.e. less adjustment would have sufficed to meet EU fiscal rules). In 2015, the Netherlands (European Commission, 2015e) and Belgium (European Commission, 2015c) benefited from the fact that the European Commission looks at both the change in the structural balance and the expenditure benchmark in assessing the adjustment path toward the MTO. The European

Commission (European Commission, 2015c and 2015e) assessed that the expenditure benchmark (which points to a higher adjustment in both cases) provides more reliable figures for these two countries because revenue developments were weak. One year earlier, the European Commission (European Commission, 2014b) assessed the projected progress of Austria toward its MTO solely based on the change in the structural balance, as the expenditure benchmark was distorted by several large one-off measures from 2013 to 2015.²¹

Italy, whose EDP was abrogated already in early 2013, was de facto less restricted by the strengthened preventive arm. The margin to the 3% deficit limit has remained small after 2012 be-

cause of the country's continued adverse macroeconomic performance. Therefore, the room for fiscal maneuver was determined by the restrictions of the corrective arm of the SGP. Furthermore, because Italy's estimated output gaps were far below zero, consolidation requirements under the preventive arm were substantially reduced by the new flexibility elements of the SGP (section 1). More recently, Italy was also able to activate the structural reform clause; it applied for the investment clause described in section 1.1, too (European Commission, 2015d). Therefore, Italy might de facto be allowed to have an expansionary fiscal stance in 2016 and thereby further postpone the adjustment toward its MTO.

Box 2

SGP implementation for Austria from 2009 to 2015

According to spring 2009 data, Austria recorded a headline budget balance of -0.4% of GDP (later revised to -1.4% of GDP) in 2008. In autumn 2009, due to a strong drop in tax revenue on account of a decline in real GDP and an income tax cut, both the Austrian government and the European Commission projected deficits of significantly more than 3% of GDP for 2009 (Ministry of Finance projection of the budget balance: -3.9% of GDP, European Commission projection: -4.3% of GDP). Furthermore, the European Commission also expected that the deficit would deteriorate further in 2010 and 2011. Therefore, the Council – based on a European Commission recommendation – opened an EDP for Austria with a deadline of 2013.

This illustrates two important aspects of EDPs. While EDPs can only be abrogated based on *ex post* data (e.g. if the deficit ratio was below 3% in the last year), they can be opened based on projections. Furthermore, when deciding on whether to open a deficit-based EDP for a country with a debt ratio of more than 60%, relevant factors can only be taken into account when the excess over 3% is small, temporary and due to exceptional circumstances. And while the latter was definitely the case, the European Commission projected (correctly) that the breach of the 3% criterion was neither small nor temporary. This stands in contrast to the debt benchmark implemented in 2011, where relevant factors can always be taken into account.

Another important aspect of EDPs was illustrated in 2012 and 2013, namely that EDPs can only be abrogated if compliance with the corrective arm is expected to hold over the forecast horizon (European Commission, 2012a, page 12). Therefore, Austria stayed in an EDP until spring 2014, even though the headline deficit ratio was well below 3% in both 2011 and 2012, as according to the European Commission, there were large uncertainties related to the possible deficit effect of support to the financial sector (see, for example, European Commission, 2013b).

²¹ In contrast to the other consolidation indicators in the SGP, the expenditure benchmark does not correct for the impact of one-off effects.

After the EDP was abrogated in spring 2014, Austria became subject to the new debt benchmark and the preventive arm. Unlike an EDP, a significant deviation procedure (SDP) can only be opened “based on outcomes as opposed to plans” (European Commission, 2012a, page 7), i.e. ex post. Due to a negative bias in recent structural balance projections of both the Ministry of Finance and the European Commission, the European Commission indicated several times that Austria might breach the preventive arm (e.g. in draft budgetary plan reviews 2013 and 2014), but ex post significant deviations have not been assessed or detected so far. Based on the MLSA for the period for 2014 to 2016, the requirements of the debt rule were less demanding than the requirements of the preventive arm. From 2017 onward, the standard debt benchmark will be applied to Austria.

Five larger euro area countries (France, Greece, Ireland, Portugal, and Spain) have not been affected by the reforms of the preventive arm, as they are still in an EDP as of early 2016.

2.2 The debt rule may seem strict on paper, but it has many exceptions and leaves large room for discretion to the European Commission

France, Greece, Ireland, Portugal, and Spain are not yet bound by the new debt benchmark: It has not applied to countries with an ongoing EDP since 2011. Assuming non-negative deficit-debt adjustments, reducing the difference of the debt ratio to 60% by 1/20th per year should typically be much harder to achieve than a deficit ratio smaller than or equal to 3% (unless nominal GDP growth is higher than around 5½%; see Holler and Reiss, 2011). This is especially true for countries with high debt ratios and/or low nominal GDP growth. However, while breaches of the 3% deficit limit will typically lead to the opening of an EDP, breaches of the 1/20th benchmark for reduction of the headline debt ratio might not, mainly for the following two reasons:

1. The debt criterion is only considered to have been breached if the 1/20th benchmark is met neither in backward-looking nor in forward-looking terms; moreover, a devia-

tion from the benchmark must not be attributable to the impact of the (real) economic cycle.

2. If the debt criterion is breached, relevant factors can always be taken into account. Conversely, in breaches of the deficit criterion, relevant factors can be taken into account (for countries with a debt ratio of larger than 60%) only when the breach is both small and temporary.

Italy, ostensibly one of the main target countries for the relevance of the debt benchmark thanks to its traditionally low trend GDP growth and high debt ratio, benefited from relevant factors: According to a European Commission assessment of early 2015 (European Commission, 2015b), Italy was projected to fall about 2 percentage points short of the adjustment required by the MLSA. However, invoking relevant factors like compliance with the preventive arm (thanks to the increase in flexibility of the preventive arm) and the weak economic situation (including a projected increase in the GDP deflator by only around ½% in 2014 and 2015), the European Commission did not recommend that the Council open an EDP. Similarly, the European Commission also assessed a deviation from the MLSA for Belgium, but based on relevant factors, it did not suggest opening an EDP (ECB, 2015a).

While it may seem reasonable that a country is not put into an EDP because

poor cyclical developments cause a debt rule breach, note that there is a discrepancy compared to what can and has to be done if the deficit criterion is breached. Most notably, in late 2009, an EDP was opened against Germany, as it was (correctly) projected to overshoot the 3% limit in 2009 and 2010, even though the breach could be mainly attributed to factors related to the Great Recession (Germany's headline budget balances were close to zero in both 2007 and 2008). The case was similar for Austria (box 2).

2.3 The European Commission's role in EDPs has been strengthened, but an enlarged decision tree makes it easier to avoid a stepping-up

The initial presentations of the six-pack and Fiscal Compact reforms of the excessive deficit procedures tended to focus on increasing the relative role of the European Commission (as opposed to the Council) and on introducing new sanctions. In particular, the implementation of reverse qualified majority voting has increased automaticity in decision-making and has strengthened the role of the European Commission. For

example, Commission recommendations for imposing financial sanctions in EDPs are deemed to be adopted unless the Council decides, by qualified majority, to reject them. So far, the European Commission has not proposed any financial sanctions under the new regime. The relevance of these reforms is hard to assess, as we have no counterfactual. Still, if the six-pack and the Fiscal Compact had been the only reforms, the corrective arm of the SGP would at least be as strict as before 2011.

However, at least two other *important changes under the six-pack* de facto tended to ease consolidation requirements for countries in EDPs:

1. The amended Article 3(4) of Regulation (EC) No 1467/1997 states that EDP recommendations should include annual budgetary targets; and
2. The new Article 3(5) of the same regulation as amended now states that EDP deadline extensions should be “one year as a rule” rather than “one year.”

According to the European Commission, reaching the *annual budgetary targets* introduced in Article 3(4) is

Table 2

Fiscal developments in Spain since 2013

	2013	2014	2015	2016
%				
EDP scenario (spring 2013)				
Real GDP growth	-1.5	-0.5	+0.7	+0.9
Headline budget balance	-6.5	-5.8	-4.2	-2.8
Change in structural balance	+1.1	+0.8	+0.8	+1.2
European Commission projection (autumn 2015)				
Real GDP growth	-1.7	+1.4	+3.1	+2.7
Headline budget balance	-6.9	-5.9	-4.7	-3.6
Change in structural balance	+1.4	+0.1	-0.7	-0.1
Cumulative difference				
Real GDP growth	-0.2	+1.7	+4.1	+5.9
Change in structural balance	+0.3	-0.4	-1.9	-3.2

Source: European Commission.

sufficient for not stepping up an EDP (see section 1.2). This provision can turn out to be highly relevant for multiyear EDPs, as in the case of Spain. As of early 2016, the most recent EDP recommendation for Spain was issued in spring 2013 (European Commission, 2013c), when the European Commission assumed rather weak real GDP growth for Spain (table 2). Therefore, the relatively large structural requirements translated into relatively modest required improvements in the headline balance in the EDP scenario. In 2014, Spain fell short of structural requirements and did not bring its deficit ratio below 3%, but thanks to much better than expected GDP growth (table 2), it met its headline target (in real time) and the EDP was not stepped up. Thus, short-run consolidation requirements were actually significantly reduced by a very procyclical six-pack innovation.

Using the new Article 3(5) of Regulation (EC) No 1467/1997 as amended, the European Commission has recommended several multiyear deadline extensions for countries in EDPs that missed their previous deadline for the correction of the excessive deficit but conducted effective action (section 1.2). The most notable cases were France in 2013 (from 2013 to 2015; ECB, 2013b) and 2015 (from 2015 to 2017; European Commission, 2015a) and Spain in 2013 (from 2014 to 2016; ECB, 2013b). The time of year in which European Commission is supposed to assess consolidation efforts in EDPs (i.e. winter, spring or autumn) is not clearly specified, nor are the periods it should include in the assessment (i.e. whether it should include projections). This vagueness gives the Euro-

pean Commission considerable leeway, especially in the case of multiyear deadlines. For example, in its spring 2013 assessment, the European Commission included 2013 figures for its assessment of effective action in France, whereas it did not include 2015 figures in its assessment of early 2015 (ECB, 2015a). If the European Commission had done the opposite – exclude 2013 data in the 2013 assessment and include 2015 data in the 2015 assessment – France would have clearly missed its respective targets for effective action in both cases (ECB, 2015a).

Furthermore, after introduction of the six-pack, the European Commission *changed its method of measuring the size of consolidation efforts* (effective action) in EDPs. It complemented the unadjusted change in the structural balance by the adjusted change in the structural balance and the bottom-up fiscal effort (section 1.2 and European Commission, 2014a).²² The two new indicators both adjust for revisions of potential growth and of revenue windfalls/shortfalls between the time of the EDP recommendation and the assessment of effective action.²³ These changes were particularly helpful for Spain, whose fiscal adjustment in 2011/2012 was deflated by the performance of tax revenue, which was poor even when controlling for the weakness of GDP growth and whose potential growth was revised downward around that time (European Commission, 2012c and 2013c).

The two new indicators also increase the predictability of the European Commission's assessments, as governments are not penalized for downward revisions of potential growth

²² This publication also explains the most important differences between these two indicators.

²³ These two new indicators are conceptually similar to the expenditure benchmark in the preventive arm, which also tackles the issues of potential output uncertainty and revenue windfalls/shortfalls.

or for upward revisions of revenue shortfalls. Furthermore, similarly to the new headline targets, they make a positive assessment of effective action more likely, as the European Commission apparently tends not to make a negative assessment if at least one indicator points to sufficient action.

2.4 Breaching the rules is a necessary but not sufficient condition for sanctions

The six-pack and the Fiscal Compact have considerably reduced the room for maneuver of the Council in both the preventive and the corrective arm. However, the Council is still in a position to reject all European Commission recommendations in the corrective arm (recommendations on the existence of an EDP, adjustment requirements in the EDP, deadlines on stepping up the EDP, etc.) via (reversed) qualified majorities.²⁴

Generally, noninterest-bearing deposits under the EDP can be imposed only if the Member State has already lodged an interest-bearing deposit following noncompliance with recommendations in the preventive arm, or in case of severe noncompliance with EDP requirements. However, the European Commission may also recommend that the Council refrain from lodging a deposit or reduce the amount on grounds of exceptional economic circumstances or upon reasoned request by the Member State.

So far, no financial sanctions have been imposed since the six-pack. For example, the European Commission (European Commission, 2013e) as-

essed in 2013 that Belgium did not conduct effective action, but the relevant EDP recommendation was issued before the six-pack reforms. So Belgium's EDP was only stepped up, and no financial sanction has been recommended.

3 The tradeoff between complexity and procyclicality in the reformed SGP

The SGP is subject to substantial criticism both for its complexity and its procyclicality. In principle, there is a tradeoff between these two aspects, as acyclical or countercyclical fiscal rules require at least an estimation of the trend (potential) growth rate of an economy to determine what degree of spending growth should be considered expansionary.

This tradeoff can be easily exemplified in the 2004/2005 reform of the Stability and Growth Pact. Since this reform, it has been explicitly stated in the SGP that countries are not to be made subject to a stepping-up of an EDP when they have missed their deadline for bringing the deficit ratio below 3% due to unexpected adverse events, but have reached their structural consolidation targets (see, for example, Morris et al., 2006, page 21). This reform clearly reduced the procyclicality of the SGP, but at the same time it increased its complexity by strengthening the role of the unobservable structural balance, whose calculation requires an estimate of the output gap.

However, we will also argue that certain aspects of the SGP are both very complex and highly procyclical, especially the debt benchmark.

²⁴ For details, see ECB (2012a) and Annex 7 in European Commission (2016b).

3.1 The preventive arm has become both more complicated and less procyclical

The reforms since 2011 have increased the complexity of the preventive arm by introducing a new indicator (the expenditure benchmark) while keeping the old indicators (the level of, and change in, the structural balance) and by introducing various provisions that de facto reduce consolidation requirements when the output gap is low (see previous sections). The latter innovation has clearly reduced the procyclicality of the preventive arm, as should the introduction of the expenditure benchmark, though to a smaller extent.²⁵

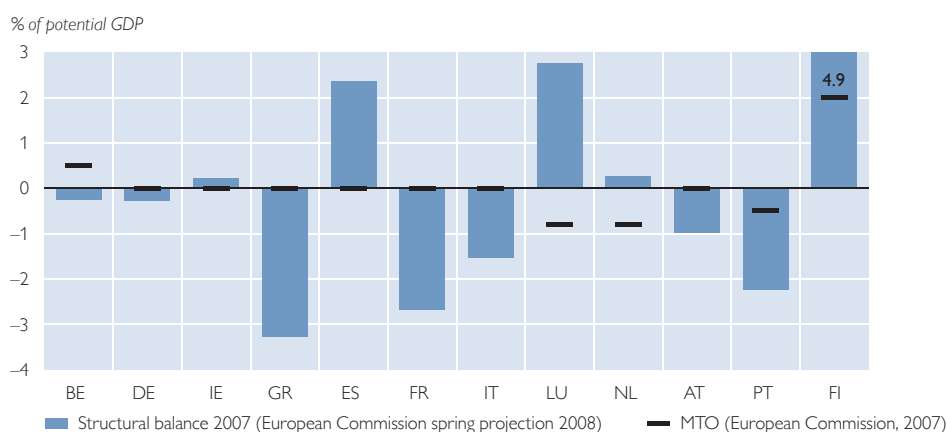
Furthermore, the overall strengthening of the preventive arm should also decrease the overall procyclicality of the European fiscal framework, as the preventive arm is by nature much less procyclical than the corrective arm. Not only is the MTO under the preven-

tive arm defined in structural terms (while limits under the corrective arm are set for the headline deficit and debt), consolidation requirements are also lower in bad times if the MTO has not been met.

As explained above, reaching the MTO should in most cases shield countries from large consolidation requirements stemming from the corrective arm. One important reason for the large consolidation in many euro area countries was that structural fiscal positions were exceptionally bad before the crisis (chart 4). This is particularly true for France, Italy, Greece and Portugal, whose structural budget balances were far below their MTOs (even when measured in real time).²⁶ Ireland and Spain had structural balances that were in line with the respective MTOs in 2007, but these two countries were hit especially hard in 2008/2009, especially Ireland, where the cost of finan-

Chart 4

Structural balances and MTOs in 2007



Source: European Commission.

²⁵ The reliance on a medium-term average of potential growth rates should decrease procyclicality, while the effect of nonadjustment for one-offs and use of revenue measures (instead of the change in structural revenue) is less clear. The latter effect depends on whether the budgetary semi-elasticity used to calculate the structural balance and its change is smaller or larger than the true semi-elasticity.

²⁶ Note that in Portugal and especially Greece, the 2007 structural balances changed ex post not only because of revisions of output gaps and budgetary elasticities, but also because of revisions of headline budget balances.

cial sector support was exceptionally large. Also, these countries' pre-2008 structural balances were inflated by revenue windfalls, so post-2009 consolidation was still above the euro area average.

3.2 The newly operationalized debt rule is both more procyclical and more complicated than the other SGP rules

Changes in the unadjusted debt ratio are not necessarily economically meaningful over the time span of three years. Thanks to the denominator effect, the debt ratio reacts much more strongly to nominal GDP developments than the budget balance does.²⁷ Furthermore, changes in the debt ratio are also driven by certain deficit-debt adjustments for which governments should be neither punished nor rewarded, e.g. the accumulation or withdrawal of cash reserves, privatizations or nationalizations, the issuance (redemption) of bonds above (below) par, the build-up or reduction of trade credits. The current specification of the *debt rule* acknowledges these caveats by *accounting for cyclical developments as well as other relevant factors* (sections 1.2 and 2.2).

Note that these factors make the debt rule extremely complicated and give the European Commission substantial leeway. As the debt benchmark is also assessed in forward-looking terms, it is highly sensitive to the accuracy of the European Commission's projections, and the change in the debt ratio is inherently difficult to predict because of deficit-debt adjustments (see also Prammer and Reiss, 2014). Moreover, accounting for the cycle means that potential output estimates are

needed, which – thanks to the denominator effect – play a much larger role for the cyclical adjustment of the change in the debt ratio than for the change in the structural budget balance. Further complexity is added by the MLSA for countries in their first three years after the abrogation of an EDP that started before 2011.

Compounding the drawbacks of the debt rule, the *debt benchmark* is also both *more procyclical and more asymmetric than other SGP rules*:

1. While a debt-based EDP may not be opened if the breach of the headline criterion is due only to poor cyclical developments or (certain) large positive deficit-debt adjustments, it cannot be opened when meeting the headline criterion is due only to good cyclical developments or large negative deficit-debt adjustments.
2. Given that relevant factors can always be taken into account and as the recent cases of Italy and Belgium have shown, countries do not have to comply with any of the different benchmarks of the debt rule to avoid being put into debt-based EDP. However, compliance with the forward-looking benchmark is a necessary condition for abrogating an EDP (European Commission, 2012a, page 12).

Note that the rules for the headline deficit do not include such extreme asymmetries (especially for countries with debt ratios above 60%). The European Commission seems to have partly acknowledged these problems, de facto sidelining the debt rule (at least temporarily) with its 2015 decisions on Belgium and Italy (section 2.2), where even large deviations from the bench-

²⁷ When starting from a debt ratio of close to zero (possibly even with significant cash reserves), the case may be different. However, this is not relevant in this context, as the 1/20th rule only applies when the debt ratio is above 60%.

marks did not lead to an EDP. In Italy, sidelining the debt rule included specifying the budgetary requirements for the activation of the structural reform clause or investment clause, which calls for a safety margin vis-à-vis the 3%-limit for the headline deficit, but does not require compliance with the debt benchmark.

3.3 Reforms of the effective action assessment have an ambiguous effect on procyclicality

The assessment of effective action in EDPs has also become more complex by virtue of having four indicators to look at now: the level of the headline balance, the unadjusted change in the structural balance, the adjusted change in the structural balance, and the bottom-up fiscal effort. As mentioned in section 2.3, the introduction of the latter two indicators has definitely increased predictability for governments. Furthermore, these new consolidation indicators also tend to *decrease procyclicality* of EDPs, as they account for unexpected revenue shortfalls (which tend to pop up in economically bad times) and possible downward revisions to potential output (especially relevant when actual GDP growth is revised downwards). The same is true for the possibility of multiyear deadline extensions if macroeconomic conditions deteriorate strongly compared to previous EDP recommendations (as for Spain in 2013). However, meeting the intermediate headline targets as a sufficient condition for not stepping up an EDP clearly *increases procyclicality*. Spain exemplified such a process in 2014 (see section 2.3 for details): After making a

large consolidation effort from 2010 to 2013 during which GDP contracted substantially, Spain was not required to consolidate further in 2014 thanks to its much better than expected GDP growth.

4 Conclusions

Reforms since 2011 have definitely made the European fiscal framework *more complex*; whether they have made it stricter and less procyclical depends on which part of the SGP is analyzed: The new intermediate headline targets in EDPs have de facto contributed to making the fiscal framework *less strict and more procyclical in certain cases*. Furthermore, the six-pack and the flexibility note have made the preventive arm of the SGP more complex, but also less procyclical (even allowing small fiscal expansions for countries in bad economic times). The newly operationalized debt rule stands out by being both highly procyclical (especially in times of low inflation) and complex at the same time, but has recently been (at least temporarily) sidelined by the European Commission via its decisions on Belgium and Italy.

Furthermore, complementing the rather crude unadjusted change in the structural budget balance by additional consolidation indicators has increased predictability for governments (and has decreased procyclicality), but having three indicators (expenditure benchmark, adjusted change in structural balance, bottom-up fiscal effort) to correct for the same problems (potential output revisions, revenue windfalls/shortfalls) may have added unnecessary complexity to the SGP.

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Notes

List of studies published in Monetary Policy & the Economy

For further details on the following publications, see www.oenb.at.

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The Stability and Growth Pact since 2011: More complex – but also
stricter and less procyclical?

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