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ECFIN Country Focus

ECONOMIC ANALYSIS FROM EUROPEAN COMMISSION'S DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS

HIGHLIGHTS IN THIS ISSUE:

- *One of the thriftier EU countries saw its household saving rate decline abruptly in 2010-2011: what are the reasons behind this and is it a cause for concern?*
- *Consumption smoothing and weakening income growth seem to explain recent swings in the saving rate.*
- *On aggregate, Austrian households have remained prudent and have avoided consumption booms/ busts or excessive leveraging.*

Is the traditional Austrian thriftiness under threat?

By Tsvetan Tsalinski*

Summary

Over 2010-11, the gross household saving rate in Austria declined abruptly to an historical low of 12% of disposable income, despite a marked recovery of output and employment. Prior to that, in 2001-7, the saving rate had been rising steadily to stabilize at a high level of 16% in 2007-9. Such a turnaround warrants examination as a trend decline of the saving rate might be a cause for multiple concerns, e.g. with respect to the financial soundness of households or, in the long run, their capacity to supplement the financing sources of ageing-related expenses.

The main drivers of the recent decline in the saving rate are labour income and property income. The economic downturn of 2009 affected labour income through a pronounced decline in labour utilization (hours worked per employee) and post-recession wage moderation. Consumer price inflation also imposed a drag on household labour income. A decline in property income exacerbated the impact on the saving rate. Property income has exhibited a strong correlation with the saving rate since the late 1990's and was a key driver of the increase in the latter prior to the crisis.

Fluctuations in private consumption have been relatively limited, pointing to consumption smoothing by households. Trend and actual consumption growth do not indicate any consumption exuberance in recent years. Between 2010 and 2012, aggregate household indebtedness did not exceed 90% of gross disposable income and hovered around 70% of cash and deposit holdings. Despite the decline in the household saving rate, Austria remains one of the thriftier nations in the EU. Real household incomes posted a recovery in 2012 on account of the resilient labour market and an increase in negotiated wages. Coupled with consumption restraint, this led to a mild rebound of the saving rate.

The Commission Autumn Forecast 2013 projects an improvement in the economic environment and positive growth rates in employment and real household income for Austria in 2013-15. This is expected to support a continuation of the gradual recovery of the saving rate. With strengthening corporate and household investment, Austria's external balance is expected to increase only moderately over the same period.

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Introduction

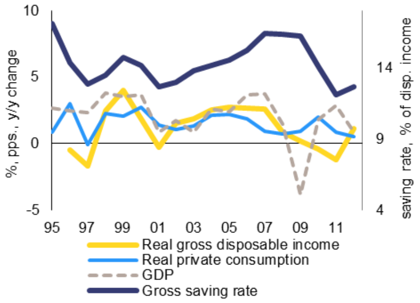
A swift, steep, decline in the savings rate cannot go unnoticed.

After a prolonged period of rising household savings, Austria – one of the thriftier EU countries – saw its household saving rate decline abruptly in 2010-2011, while output and employment growth rates remained robust. This country focus looks into the reasons for this development and considers potential concerns that it may raise.

There are several reasons why it is worth exploring the drivers of the latest cycle in the saving rate. First, do the recent countercyclical dynamics suggest a structural change in consumption/saving patterns? Second, should one expect the country's external surplus to narrow significantly as a result? Third, does the fall in the saving rate give rise to concern for the financial soundness of households?

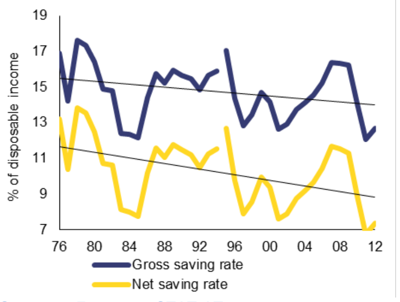
Finally, Austria's pension system operates on a pay-as-you-go principle and funded pension schemes are of relatively limited importance. Although the baseline long-term pension projections do not seem to indicate an aggregate deterioration in pension adequacy (Knell et al., 2006; EC, SPC, 2012), it has been found that the cost of ageing puts Austria in a position of medium risk to fiscal sustainability (European Commission, 2012), which would justify a relatively high saving rate (see Dirschmid and Glatzer, 2004).

Graph 1: Trends in key variables



Source: Eurostat

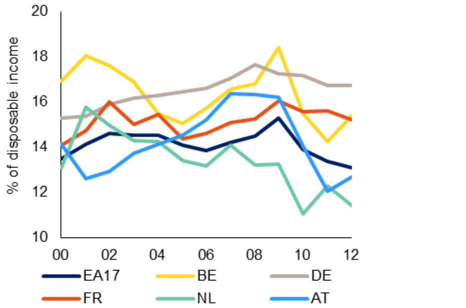
Graph 2: Trends in the saving rate



Sources: Eurostat, STAT AT
Note: Break in 1995

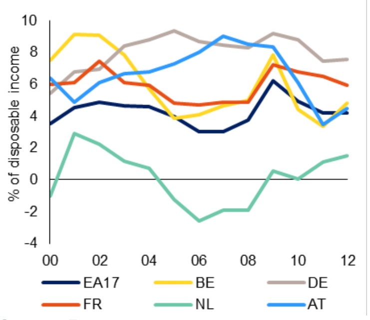
The analysis covers the period from 1995 onwards, for which consistent national sector accounts are available, and more specifically from 2001 to date, encompassing what seems to be a complete trough-to-trough cycle of the saving rate (see Graph 2). Admittedly, by focussing on the more recent developments, it omits earlier interesting episodes of significant fluctuation.

Graph 3: Household saving rate of top saving nations



Source: Eurostat

Graph 4: Household net lending of top saving nations



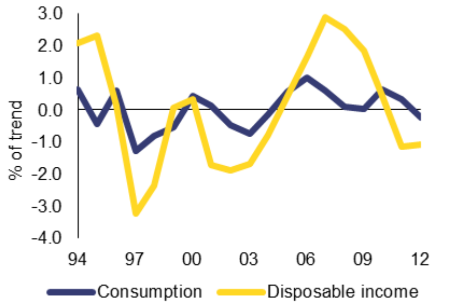
Source: Eurosat

2010-11: a sharp decline in the saving rate amid robust economic recovery

A decline of the saving rate by 4 percentage points in just 2 years (2010-11)

Over 2010-11, the Austrian economy regained the losses in output and employment that it had suffered in the economic downturn of 2009. Against this backdrop, however, the household saving rate underwent an abrupt decline from a relatively high value of above 16% to 12% - a historical low. The amplitude of this fluctuation appears large, especially in comparison with the thriftier nations in the euro area (*see Graph 3*). In the run-up to the latest financial and economic crisis, household savings went through a prolonged and steady upswing. The gross saving rate gradually gained 4 percentage points from 2001 to 2007, stabilizing thereafter until 2009. Regarded in isolation, this could have been interpreted as a welcome equilibrium development in light of the ageing of the Austrian population. The level of the saving rate weathered the economic downturn reasonably well, which makes the ensuing collapse all the more surprising.

Graph 5: Cyclical fluctuations – income and consumption gaps



Source: Eurostat and own calculations
Note: Deviations from Hodrick-Prescott(λ=100) trend; to alleviate the end point problem the sample was augmented with Commission staff forecast values.

Table 1: Structure of gross household disposable income, % of total

	Net wage, before tax	Monetary tranfers, net	GOS/MI	o.w. Imputed rent	Property income, net	Tax	Saving rate
1995	52.9	33.2	20.5	5.8	8.5	-15.1	17.1
1996	52.2	33.1	20.9	6.1	10.0	-16.1	14.4
1997	52.7	32.2	21.6	6.1	10.9	-17.4	12.8
1998	53.1	32.0	22.2	6.4	10.5	-17.8	13.4
1999	52.7	31.7	22.2	6.5	11.0	-17.6	14.7
2000	52.5	31.5	22.2	6.6	11.0	-17.2	14.1
2001	52.5	33.1	22.5	6.6	10.4	-18.6	12.6
2002	52.3	33.7	23.1	6.7	9.1	-18.2	12.9
2003	51.6	33.6	23.3	6.8	9.3	-17.9	13.7
2004	50.1	32.3	23.8	7.0	11.0	-17.3	14.1
2005	49.1	31.4	24.0	7.5	11.8	-16.3	14.5
2006	49.2	30.6	24.2	7.4	12.5	-16.5	15.2
2007	49.4	30.1	24.4	7.4	13.2	-17.0	16.4
2008	50.6	30.3	23.9	7.3	13.2	-17.9	16.3
2009	50.6	32.0	23.4	7.6	10.8	-16.7	16.2
2010	50.8	32.6	24.1	7.7	9.3	-16.8	14.1
2011	51.4	32.2	24.8	7.8	8.7	-17.2	12.1
2012	51.4	31.9	24.7	7.8	9.6	-17.5	12.7

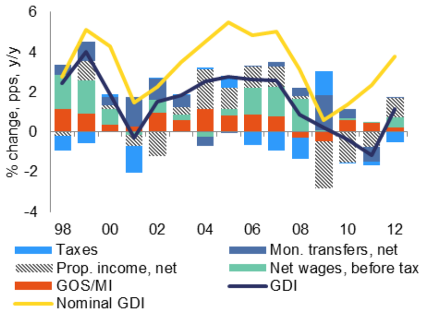
Source: Eurostat and own calculations

Income fluctuations driving the observed saving rate

The saving rate is driven by fluctuations in labour and property income.

The level of the household saving rate seems to be driven primarily by the dynamics of disposable income and less so by swings in consumption. Disposable income has exhibited cyclical fluctuations (gaps with respect to trend) that are significantly more pronounced than those of private consumption (*see Graph 5)*. These measures have been derived using a univariate statistical technique (the Hodrick-Prescot filter), whereby the incorporation of important determinants of consumption and permanent income as income expectations and wealth effects can at best only be assumed. Nevertheless, the relative smoothness of consumption should be considered a plausible result.

Graph 6: Real gross disposable income growth – contribution by component



Source: Eurostat and own calculations
Note: Wages net of social contributions

Of all the major income categories, labour and property income seem to have accounted, equally importantly, for most of the dynamics as well as the growth fluctuations of disposable income (*see Graph 6*). In 2009 an outright decline in aggregate disposable income was prevented by the operation of automatic stabilizers – rising social transfers and declining income tax deductions.

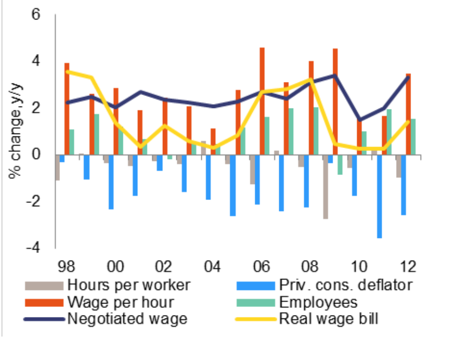
Drivers of labour income

Stagnating real labour incomes contribute to the decline in the saving rate,

Labour income before tax (wages and salaries less employees' social contributions) is the largest component of household disposable income (*Table 1*) and accounts for a significant part of its variation. The contribution of labour income to the growth of household disposable income was essentially zero not only in the recession year 2009, but also when activity posted a marked recovery in 2010-11. Similarly, a previous *largely due to wage moderation and inflation.*

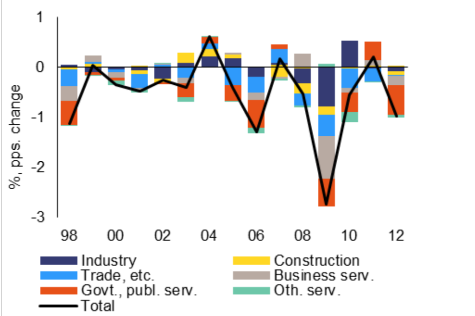
episode of relative economic slack in 2001-2003 translated into subdued or relatively modest labour income growth, which persisted for another two years despite the economic recovery underway. Employment recovered rather quickly from the 2009 downturn and continued to expand; however, post-recession wage moderation and the pick-up in inflation (Fritzer, 2011) put a drag on real income. In contrast to 2004-5, the remaining income components (*see Graph 7)* were not as supportive of overall income growth and the saving rate.

Graph 7: Determinants of labour income



Source: Eurostat (National Accounts), STAT AT and own calculations

Graph 8: Change in hours worked per employee – contribution by type of activity

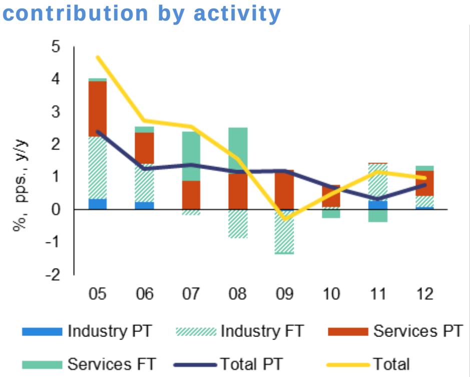


Source: Eurostat (National Accounts) and own calculations

Part-time employment has been gaining importance and has helped to sustain the resilience of the labour market.

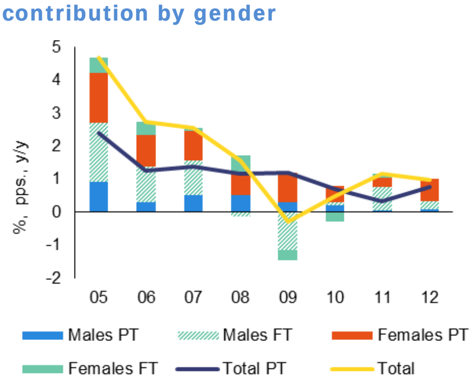
The recession of 2009 seems to have intensified the trend of subsiding labour utilization. The 3% decline in hours worked per employee in 2009 was broad-based across all activities (*Graphs 7 and 8*). Apart from a partial recovery in industry, which saw a strong rebound in activity in 2010-2011, this decline has not been and does not seem likely to be made up for in the medium term. The decline in labour utilization seems to be linked to the increase in part-time employment. Part-time employment has been contributing much more steadily to employment growth, whereas full time employment has exhibited stronger fluctuations. Importantly, part-time employment seems to account for most of the post-recession job creation, with pronounced activity and gender patterns in employment growth (*Graphs 9 and 10*).

Graph 9: Full- (FT) and part-time (PT) employment: percent growth and contribution by activity



Source: Eurostat (LFS) and own calculations

Graph 10: Full- (FT) and part-time (PT) employment: percent growth and contribution by gender



Source: Eurostat (LFS) and own calculations

The share of people employed part-time rose from 17% in 2000 to 26% in 2012. The increase in part-time employment is most pronounced among females and in the services sector. Whereas about 9% of females working part time would explicitly prefer full-time jobs, 38% opt for part-time work to take care of dependents. The rising share of part-time employment may be one determinant of the relatively muted growth of private consumption (*see Graph 1*) and may also be weighing on income expectations. Looking forward, part-time employment is likely to continue to function as a stabilizer of employment growth over the medium term, but may not contribute as strongly to income and saving as full-time jobs. Low earnings and irregular careers could pose a challenge in terms of the pension adequacy and living standards in old age, as labour market inequalities tend to get reproduced within the pension system (see EC, SPC 2012).

The role of property income

Net property income has been at least as important as labour income in driving the dynamics of disposable income and the saving rate. Since the late 1990's, the share of property income (*Table 1*) in disposable income has exhibited strong co-movement with the saving rate (a correlation of 0.8). In addition, property income of Austrian households does not seem to be a key determinant of consumption. A cointegration regression (*Table 2*, see Hamilton, 1994) of real private consumption on the two major categories of income – *occupational income and net social transfers* (combining together net wages, income from self-employment, net social transfers less interest and taxes, all flows over which the individuals have some control and/or are predictable), and *property income* - indicates that the propensity to consume out of property income (0.2) is significantly lower than from occupational income and transfers (0.9) (for a discussion of differential propensities to save, see Taylor, 1971).

Property income has a small share in total income, but it is a key driver of fluctuations in aggregate household savings.

The weaker link between consumption and property income is consistent with the high correlation between property income and savings. Property income made an important contribution to the increase of household income and savings in the run-up to the crisis, as well as to their declines over 2010-2011.

Table 2: Statistical evidence on differential propensities to consume from various income categories.

Dependent Variable: **Real quarterly private consumption, seasonally adjusted**
Method: Fully Modified Least Squares (FMOLS)
Sample (adjusted): 1999Q2 2013Q1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Real occupational and other non-property income, less interest and taxes	0.89	0.03	27.7	0.0000
Real property income, received	0.23	0.06	3.77	0.0004
Constant	3429.7	1079.6	3.18	0.0025
Adjusted R-squared	0.95			
Durbin-Watson stat	1.33			

Data source: Eurostat, own calculations.
Note: All variables deflated with the private consumption deflator and seasonally adjusted with the Tramo-Seats procedure

Income from equity (distributed income of corporations) is the category that accounts most strongly for the overall dynamics of property income. The 2009 recession and the uneven recovery have affected the performance of equity portfolios through declining dividend payouts. A decomposition of the income from equity into net acquisitions, valuation changes and implicit returns (*Graph 11*) reveals significant fluctuations in returns and valuations of equity portfolios, but, on aggregate, rare and rather limited exits from investments or sell-outs. This especially applies to direct equity holdings (as opposed to holdings of mutual funds), highlighting the nature of these investment as long-term precautionary savings.

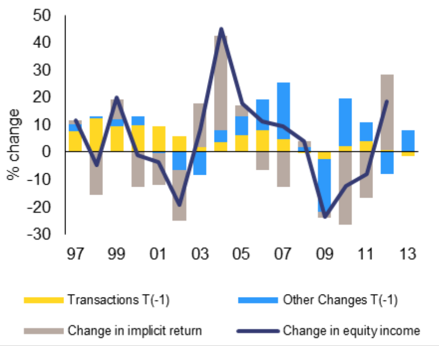
Households hold on to their equity portfolios.

Interest income has been a less important driver of property income fluctuations. It should be noted that Austrian households have an aggregate net-asset position regarding interest bearing assets, i.e. they hold deposits and bonds exceeding the stock of loans for which they are liable. Interest rates have been on a downward trend since the late 1990's (*Graph 13*). Declining interest rates (especially after 2008) have dented returns from interest bearing assets, but have also created opportunities for alleviating the interest burden of debtors (*Graph 12*). Graph 12 also highlights the lack of any significant domestic fallout of the distress, which some major banks suffered in relation to the sovereign debt crisis and deteriorating asset quality in a number of Central and Eastern

Declining interest income – a blessing in disguise.

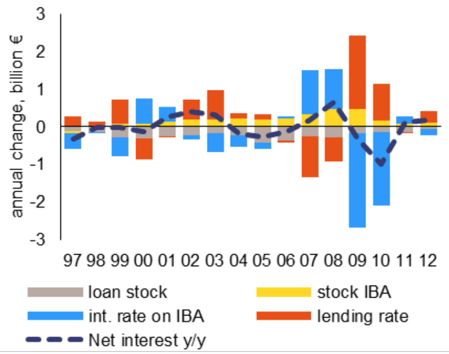
European countries. Indeed, these developments triggered neither a reduction in the level of deposits, nor a household credit crunch.

Graph 11: Drivers of income from equity



Source: Eurostat, own calculations

Graph 12: Drivers of net interest income

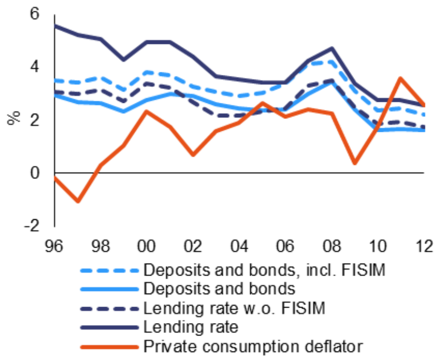


Source: Eurostat, own calculations
Note: IBA – interest bearing assets (deposits and bonds)

A dual saving rate?

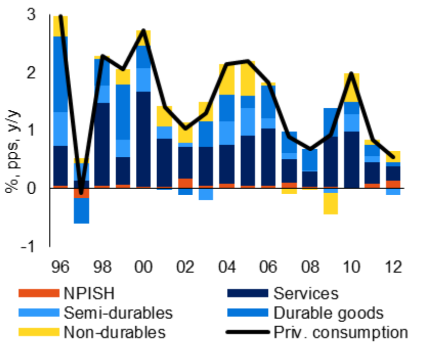
While of high importance for the overall saving rate, property income may be of limited relevance for the saving behaviour of the "representative household". Risky assets, such as equity and bonds, are held by less than 10% of households, with holdings concentrated among high-income/wealthy households (Andreasch et al., 2009). Thus there may be a duality of the household saving rate in Austria, implying that the swings in the national saving rate may be closely correlated with the property income developments of the most wealthy parts of society, whereas the underlying saving rate is much more stable. This hypothesis merits further analysis, but is outside the scope of this country focus as it requires more detailed micro data.

Chart 13: Trends in interest rates



Note: aggregate implicit interest rates on household assets and liabilities
Source: Eurostat, own calculations

Chart 14: Private consumption by product category



Source: Eurostat, own calculations

Consumption and investment

No consumption booms/ busts.

Consumption has stayed relatively smooth since the late 1990's, acting as a stabilizing factor for domestic demand, and has not been subject to major booms or busts. Indeed, consumption smoothing is evident from comparing actual and trend growth of consumption and disposable income (*Graph 5*) and could offer a plausible explanation for the variability of the saving rate.

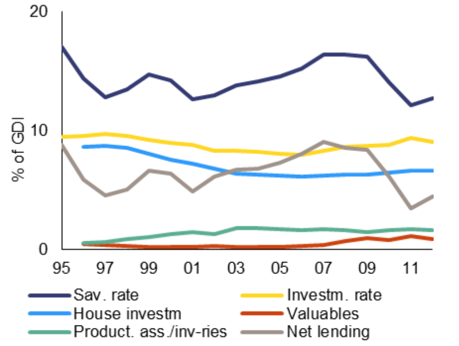
However the extent of the drop in the savings rate cannot be explained by dynamic consumption growth and there is no sign that the low interest rate environment has induced any consumption exuberance. On the contrary – private consumption growth was rather sluggish in 2011-12 amid deteriorating consumer sentiment. Sustained employment growth and more generous wage settlements brought about a mild increase in real labour incomes in 2012 which, together with some degree of consumer restraint, helped the saving rate to recover.

Earlier advances in the saving rate and the declining interest rates have enabled households to increase their investment rate. The increase in the share of investment outlays, and thus a portion of the contraction in the net lending position (*Graph 4)*, seems to come mostly as a transformation of savings into value-storing assets: valuables (precious stones and metals, art objects, etc.) and, to a lesser extent, housing (*Graph 15*). However, similarly to consumption, appetite for investment has remained restrained. On the whole the financial soundness of households has remained largely unimpaired as suggested by an indebtedness rate of less than 90% of disposable income and a loan-to-deposit ratio of around 70% (see also Albacete and Lindner, 2013).

Prudence prevails.

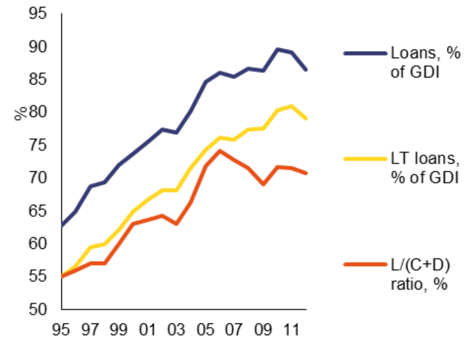
In the medium term, the Commission Autumn 2013 forecast projects a continuous recovery of household savings as the economic environment improves, sustaining healthy labour and property income flows. With strengthening corporate and household investment, Austria's external balance is expected to increase only moderately.

Graph 15: Saving and investment by households



Source: Eurostat, own calculations

Graph 16: Financial soundness indicators for households



Source: Eurostat, own calculations

Conclusion

The variability of the Austrian household saving rate over the latest saving cycle of 2001-2011 can be explained by the variability of disposable income. Prior to the crisis, labour and property income complemented each other as sources of disposable income growth. However, over 2009-2011, real labour incomes stayed flat, due to some degree of wage restraint and somewhat higher inflation, while property income declined markedly. This crisis-related deterioration in the performance of equity portfolios has been a main driver behind the drop in the saving rate in recent years.

Fluctuations in consumption have been far less pronounced than in disposable income, staying clear of booms and busts and suggesting consumption smoothing as another explanation for the variability of the saving rate. The financial soundness of households has weathered the crisis, confirming the traditional thriftiness of Austrian households.

Indeed, the saving rate collapsed by almost four percentage points in just two years. In a historical perspective, however, such swings do not appear uncommon to Austria and do not stand out in comparison to the rest of the euro area. Even at around 13% of disposable income in 2012, the Austrian household savings rate remains among the highest in the EU and there is no evidence of a shift of underlying consumption/saving patterns. Rather, it seems that the drawn-out rise in the saving rate over 2002-2009 was at least partly cyclical in nature.

Looking forward, prospects for positive employment and real labour income growth rates remain sound, based on tangible wage increases negotiated in 2012, the resilience of the labour market and easing inflation. Property income is also expected to strengthen as the economic environment improves. These factors are expected to support a gradual recovery of the saving rate, which started already in 2012. At the same time, the promotion of full-time employment opportunities would boost income and savings, thereby sustaining a relatively high saving rate in view of an ageing population.

References

Albacete, N. and Lindner, P. (2013), Household Vulnerability in Austria – A Microeconomic Analysis Based on the Household Finance and Consumption Survey, Financial Stability Report 25, Oesterreichische Nationalbank, 57-73.

Andreasch, M., Fessler, P. and Schürz1, M. (2009), Austrian Households' Equity Capital – Evidence from Microdata, Monetary Policy & the Economy Q4/09, Oesterreichische Nationalbank, 61-78.

Dirschmid, W. and Glatzer, E. (2004), Determinants of the Household Saving Rate in Austria, Monetary Policy & the Economy Q4/04, Oesterreichische Nationalbank, 25-38.

European Commission (2012), Fiscal Sustainability Report 2012, European Economy 8/2012, 119-120.

European Commission, Social Protection Committee (2012), Pension Adequacy Report 2012.

Fritzer, F. (2011), Inflation Differentials between Austria, the Euro Area, Germany and Italy, Monetary Policy & the Economy Q4/09, Oesterreichische Nationalbank, 31-42.

Hamilton, J. (1994), Time Series Analysis, Princeton University Press, 613-618

Knell, M., Köhler-Töglhoffer, W., Prammer, D. (2006), The Austrian Pension System – How Recent Reforms Have Changed Fiscal Sustainability and Pension Benefits, Monetary Policy & the Economy Q2/06, Oesterreichische Nationalbank, 69-93.

Taylor, L. (1971), Saving out of Different Types of Income, Brookings Papers on Economic Activity, vol. 2, issue 2, 383-416.