

# The Determinants of Consumption Growth in Austria – Results of a Representative Survey

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*In the period from 2001 to 2004, Austrian households' consumption expenditure increased by 0.9% per annum in real terms, thus growing 1.6 percentage points more slowly on average than in the period from 1989 to 2000. Subdued consumption growth is attributable not only to economic stagnation, but also to a higher saving rate than is usual at the current stage of the economic cycle.*

*To explain this unusual consumer behavior, numerous hypotheses have been formulated that go beyond the conventional determinants of consumption. In this study, the hypotheses were tested against the results of a representative survey carried out among Austrian households in August 2004. 36% of respondents said they had cut consumption expenditures in the previous 12 months, while 52% claimed to have kept consumption stable and roughly 12% of those surveyed said they had increased consumption expenditures.*

*Among the motives for lower consumption, respondents most frequently cited perceived price increases, the income situation, a pessimistic income outlook and a trend toward smart shopping, while they considered anticipated cuts in pensions or other public benefits, waiting for prices to drop (withholding consumption) and too cautious economic reforms less relevant and geopolitical uncertainties, mounting public debt and liquidity constraints irrelevant.*

JEL classification: E21

Keyword: consumption, Austria.

## 1 Introduction

During the period of economic weakness between 2001 and 2004, euro area households – more specifically Austrian households – did not cut their saving rate to keep their consumption level stable (consumption smoothing) to the same extent as in past downturns. While numerous economic studies attempted to find consistent theoretical explanations for households' low consumption expenditures, we chose a new approach in this study by conducting a representative survey among Austrian households to explore the motives of their consumption decisions.

This paper starts with a presentation of several facts on Austrian households' consumption and saving patterns, focusing, in particular, on the differences between households' behavior today and their behavior in other business cycles, especially in the recession of 1993 and the subsequent upswing. Section 2 summarizes the motives presented most frequently in the economic literature to explain consumption decisions. The actual rele-

vance of these explanatory approaches for Austrian consumers was tested in a survey with 2,000 respondents. Section 3 outlines the survey results, and section 4 compares the respondents' views of the economic situation with available economic data. Section 5 summarizes and concludes the study.

### 1.1 Trends in Austrian Households' Consumption and Saving Patterns

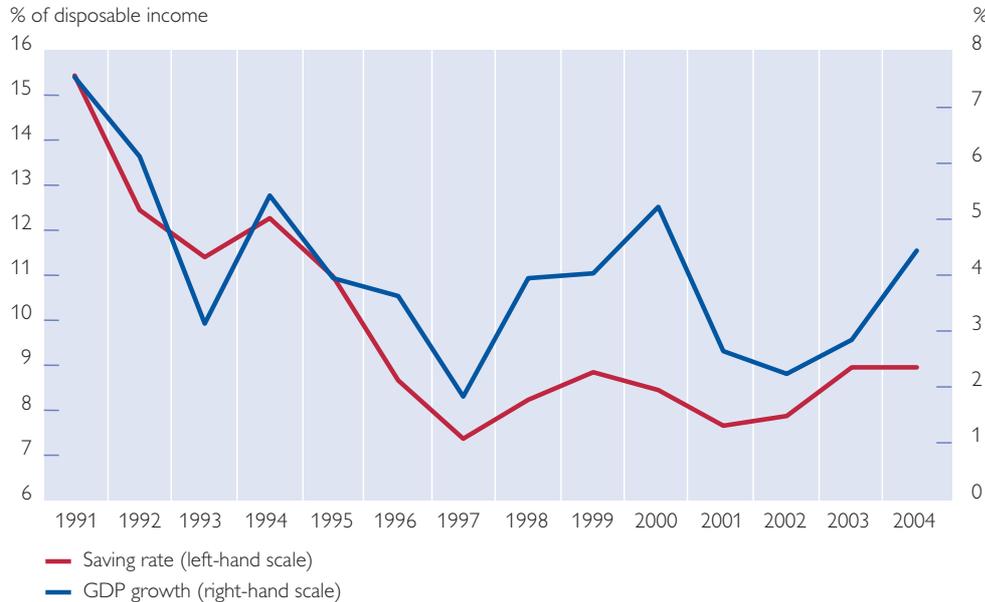
In the years of weak economic growth between 2001 and 2004, Austrian households' consumption expenditures increased by around 0.9% in real terms, thus growing 1.6 percentage points more slowly than in the period from 1989 and 2000 (2.5% per annum on average). This is attributable not only to sluggish economic growth in the period from 2001 to 2003, but also to an unusual development of the saving rate. In the past, households had reacted to economic downturns by temporarily saving less to keep their consumption level stable (e.g. in 1993). Chart 1 compares nominal GDP growth (right-hand scale) with the de-

Refereed by  
Ulrich Schuh, IHS.

<sup>1</sup> The authors would like to thank Martin Schneider and Helmut Stix for their valuable comments.

Chart 1

**Comparison of Nominal GDP Growth and the Saving Rate**



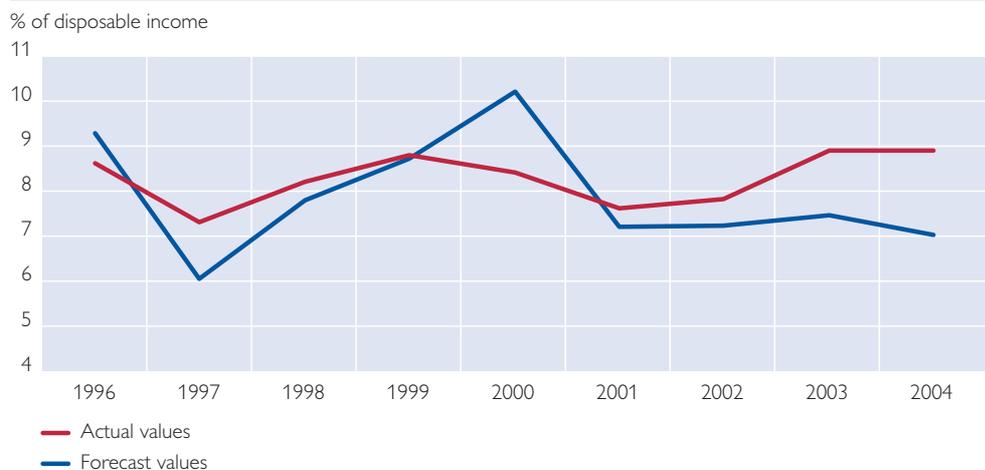
Source: Statistics Austria.

velopment of the household saving rate (left-hand scale). During the downturn of 1993, the saving rate declined and increased again as the economy recovered. In 2001, the saving rate went down, too, but then increased again even though GDP growth stagnated at a low level.

While this study analyzes the short-term development of households' consumption and saving patterns between 2001 and 2004, Dirschmid and Glatzer (2004) focus on the long-term decline in the saving rate in the 1990s. The saving rate forecast by Dirschmid and Glatzer for 2003 and 2004 was lower

Chart 2

**Comparison of Actual and Forecast Saving Rates**



Source: OeNB.

This chart represents the result of a new estimation with revised data until 2004 provided by Statistics Austria using the model published by Dirschmid and Glatzer in 2004. Only two factors changed compared with the original version: the inflation rate coefficient decreased but remained significant, whereas the budget balance, which had already been very close to the significance level of 5% in the 2004 calculation, became insignificant and was therefore not included in the estimation equation.

than the actual rate (see chart 2) – the variables that determine the saving rate in the long run would have suggested a lower rate. This confirms the extraordinary nature of the development depicted in chart 1.

When comparing the two economic downturns, we find that the most recent decline in private consumption spans a longer period than the downturn in the early 1990s (see chart 3). After bottoming out in the first half of 1993, private consumption growth accelerated to 3.5% by end-1994, thus climbing to a level above the average of the 1989 – 2000 period. By contrast, private consumption growth recovered only slightly after its low in the first half of 2002 and

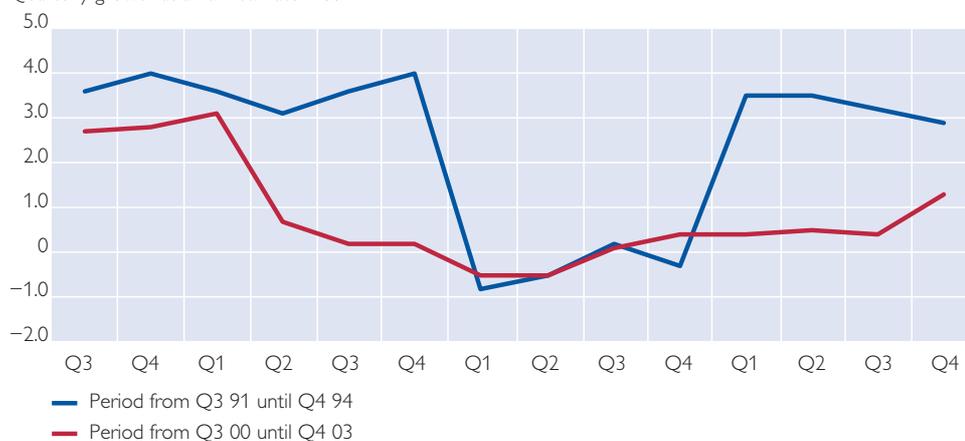
has remained below the long-term average since. It is important to bear in mind, however, that this slowdown in growth has lasted much longer than the one in 1993.

While the European Commission's econometric estimations (2004b) were relatively accurate in tracking the development of consumption expenditures in the EU in the 1990s, their explanatory power diminished for the years 2001 to 2003, which is generally regarded as an indicator of extraordinary factors. Consumption growth for this period was also overestimated in the OeNB's short-run and long-run consumption equations (OeNB, Fenz and Spitzer, 2005).

Chart 3

### Real Consumption Growth in Economic Downturns

Quarterly growth at an annual rate in %



Source: Eurostat, WIFO.

## 2 Determinants of Consumption Growth

### 2.1 Permanent-Income Hypothesis and Life-Cycle Hypothesis

In economic theory,<sup>2</sup> the permanent-income hypothesis (Friedman, 1957) is generally accepted as an explanation of consumer behavior. Under this ap-

proach, households' consumption decisions are regarded as intertemporal optimization problems, i.e. households decide on how to divide their current disposable income between consumption and saving and thus determine their future consumption level. The permanent-income hypothesis postu-

<sup>2</sup> See Attanasio (1999) or Deaton (1992) for more information on consumption theory.

lates that these decisions are based not only on the level of currently disposable income, but also on (rational) expectations of lifetime income and wealth. This presupposes that households assess the present value of assets available for consumption in the future and distribute it evenly into an income stream (permanent income) so that they can afford constant consumption levels.

The life-cycle hypothesis was proposed by Modigliani and Brumberg (1954) and Ando and Modigliani (1963 and 1964). Like the permanent-income hypothesis, it is based on the concept of a constant consumption level over life, but it places special emphasis on a person's position in the life cycle. It postulates that people need to take out loans to reach this consumption level while they are young and have a low income, whereas they can afford to save for retirement when their income peaks several years later.

Both theories assume that a household's consumption path is determined by expectations of its future income stream and wealth as well as real interest rates (which determine the present value of these assets).<sup>3</sup> The permanent-income hypothesis postulates that households will adjust the consumption level only when they consider changes in disposable income to be of a permanent nature and thus sufficiently large to necessitate a revaluation of permanent income. The impact of temporary changes in disposable income on the consumption level will therefore be rather small. Both theories underpin

the empirical observation that temporary income shocks, which occur in periods of economic fluctuation, hardly impact on the ratio of consumption expenditures to disposable income (Hall, 1978). Accordingly, households tend to cut the saving rate during economic downturns to keep consumption constant despite a temporary income loss; this phenomenon was observed in Austria in 1993 (see section 1.1).

By contrast, when households' future income expectations change to such an extent that they impact on expectations of the lifetime income stream (e.g. owing to pension reforms), this translates into instantaneous and permanent changes of the consumption path. The same holds true for expectations of asset price developments (e.g. real estate or stock prices), which can also change households' consumption patterns.

Another reason put forward in the economic literature to explain households' increased saving rate is the lack of budgetary discipline, or more specifically, the associated increase in public debt. In times of rising public debt, people assume that they will have to pay higher taxes in the future and therefore cut spending already in the present (non-Keynesian effect of government consumption).<sup>4</sup>

The revaluation of future income may also be attributable to bequest motives – the wish to leave more to heirs may in part explain the high saving rate.

Since all these considerations are based on what consumers can actually get for their money, (permanent)

<sup>3</sup> Other factors that impact on intertemporal consumption decisions are the duration of a household's planning horizon and its time preference rate. Real interest rates influence the consumption path in a number of ways, not only via assets' present value (Hall, 1988). For the sake of clarity, we refrained from including an in-depth analysis of these factors in this study. See e.g. Bayar and Mc Morrow (1999) for a more detailed discussion.

<sup>4</sup> In its 2004 Autumn Economic Forecast (p. 78), the European Commission stated the following: "Moreover, private confidence may be undermined by the fact that the tax cuts are leading to a wider government deficit than originally announced." The OECD makes similar statements (OECD, 2004, p. 29).

changes in price expectations may also impact on the consumption path.

### **2.2 Determinants in Empirical Consumption Estimation Equations**

Empirical consumption estimation equations mirror economic theory findings. Over time, consumption is positively correlated with lifetime income and wealth – in the long run, their values (i.e. that of consumption on the one hand, and that of lifetime income and wealth on the other) grow approximately at a one to one ratio (Friedman, 1957). Accordingly, the OeNB bases its estimates of household consumption levels – e.g. in the long-run consumption equation (Fenz and Spitzer, 2005) – on real disposable income, liquid assets and long-term real interest rates. However, actual consumption patterns deviate from the consumption behavior assumed by the above-mentioned hypotheses, and consumption is not completely smoothed over the life cycle for a number of reasons. Empirical evidence shows that the correlation of current incomes and consumption levels in the short run is stronger than suggested by the hypotheses. Therefore, the OeNB includes only real disposable income growth and lagged consumption growth rates in its short-run estimation equation for consumption growth. How can we explain short-term deviations of consumption growth from long-term patterns? What are the reasons for the stronger-than-expected correlation of current income levels and current consumption levels?

### **2.3 Liquidity Constraints on Households**

Liquidity constraints on households are among the reasons cited most frequently to explain deviations from the permanent-income hypothesis.

When a household expects its income to increase, it will not necessarily find lenders enabling it to step up consumption in the present, e.g. owing to information asymmetries between the household and the lender regarding the household's future solvency. If this is the case, the respective household consumes less than its permanent income would allow, and it is limited more to disposable income. The expectation of possible future liquidity constraints may also impact directly on consumption, as households spend more on precautionary saving to protect themselves against future income fluctuations (Zeldes, 1989). In addition, if a household is planning to make a large purchase, it has to save the required sum first. Campbell and Mankiw (1989) estimate that about half of all U.S. households are subject to liquidity constraints, which means that their consumption levels are mostly determined by disposable income, while the consumption path of the other households is determined by permanent income and wealth as suggested by the permanent-income hypothesis.

### **2.4 Uncertainty and Precautionary Saving**

Uncertainty is another possible reason why consumption is not smoothed completely over a life cycle. In terms of its effects, this motive is quite similar to that of liquidity constraints, but the underlying reasons are different. As a rule, consumers have no way of knowing exactly how much income they will earn in their lives or how much wealth they will accumulate. The buffer-stock theory of saving (Carroll, 1992 and 1997) e.g. postulates that people accumulate precautionary savings to prevent unexpected income shocks from impacting on their consumption level. When a household's assessment of un-

certainty changes, it will adapt the volume of precautionary savings and its consumption path accordingly.

This seems to have been the case in the first half of 2003, when the European Commission's seasonally adjusted consumer confidence indicator for Austria (provided by the market research institute FESSEL-GfK) declined massively; it has not fully recovered since. In the international debate on the reasons for this growing uncertainty, the following are cited most frequently: changed labor market conditions, the geopolitical situation and population aging in the context of debates on its impact on pension systems as well as the fear that the effective implementation of structural reforms might dampen income expectations and the propensity to consume.<sup>5</sup>

In the following, we tested the relevance of the different explanatory approaches (permanent-income and life-cycle hypotheses, i.e. income and wealth developments in real terms, as well as liquidity constraints and the various reasons for uncertainty) for Austria by comparing them with the survey results.

### 3 Survey Results

#### 3.1 Methodology

In this representative survey, a sample of 2,000 Austrians was randomly chosen; in August 2004, the respondents were questioned about their consumption behavior over the past 12 months in a personal interview.<sup>6</sup> To make the results more representative, we applied a post-stratification technique to align the sample structure

with the population structure as surveyed in the latest population census: the data was grouped into clusters based on age, gender and place of residence in one of the nine Austrian provinces. The resulting strata were weighted so that their weight in the survey corresponds to the population structure in Austria.

In essence, the available response options were based on the above-mentioned motives, i.e. those listed in the theoretical and empirical literature to explain reduced or expanded consumption expenditures. In addition, motives that have been increasingly put forward in economic analyses in recent months to explain sluggish consumption (e.g. European Commission, 2004a or OECD, 2004) were included.

#### 3.2 Survey Results

Around 36% of respondents said they had cut consumption expenditures during the past 12 months, while 52% claimed to have maintained a stable consumption level and roughly 12% of respondents said their consumption expenditures had increased. All in all, this result is in line with the weak consumption data. However, respondents were only asked whether they had cut, maintained or expanded consumption. The extent of these changes was not explored in this survey, as the reliability of quantitative statements on past consumer behavior tends to be low. Only few respondents can be expected to have kept records of their consumption expenditures over the past 12 months; in most cases, responses to such questions would thus

<sup>5</sup> See e.g. European Commission (2004c, p. 20): "The slow speed of recovery of some household confidence indicators . . . probably reflects concerns related to . . . the uncertainty generated by the very slow progress with structural reforms."

<sup>6</sup> In the survey, we refrained from distinguishing between durable and nondurable consumer goods, since both are fully included in the domestic demand component "household consumption," and we explore potential reasons for this component's slow development in recent years.

involve a high level of uncertainty. In light of these facts, the expansion of consumption expenditures (12% of those surveyed) could basically have more than compensated the reduction in consumption expenditures (36% of respondents). Furthermore, this survey does not distinguish between real and nominal consumption for two reasons: First, its main focus was on finding explanations for slow consumption growth, and second, we assumed that respondents would find it difficult to make this distinction. Therefore, the survey results presented in section 3 are concerned with consumption in general, and especially with consumption decisions.

Respondents were presented with a list of possible explanations for why they had reduced (or expanded) consumption expenditures over the past 12 months and were asked to indicate the degree to which each statement applied to them. Response options were: the given statement is completely applicable (1), applicable (2), not very applicable (3) or completely inapplicable (4). Answers (1) and (2) were considered as agreement with the respective statement, while (3) and (4) were considered as disagreement. The charts below compare the percentage shares of the two groups.<sup>7</sup>

Table 1

### Changes in Consumer Demand Over the Past 12 Months

	Number of respondents	%
much less	237	12
somewhat less	474	24
no changes	1,041	52
somewhat more	194	10
much more	54	3
Total	2,000	100

Source: IFES, OeNB.

### 3.3 Reasons for Reducing Consumption

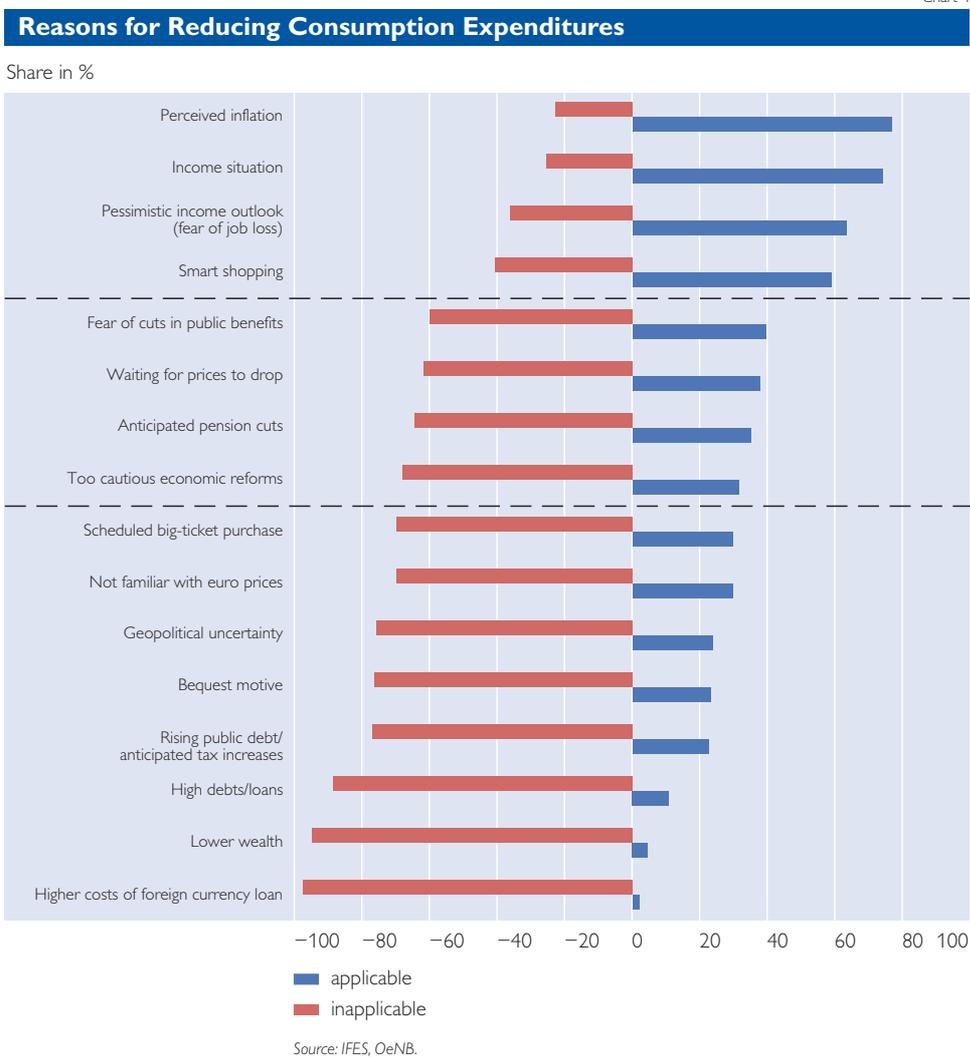
Chart 4 shows the degree of respondents' approval of the 16 explanations presented to them as possible reasons for why they had cut spending. The explanations listed above the first broken line gained more than 50% approval, while those above the second broken line received more than 30% approval. This means that the number of respondents who supported the first four explanations was larger than that of respondents who rejected them. The perceived rise in inflation was met with the largest share of approval, followed

closely by the current income situation. Negative income expectations and smart shopping (e.g. Internet or wholesale shopping) were also motives with which respondents clearly agreed more often than they disagreed.

All other explanations may have been important reasons for some individuals to cut spending, but overall, these options were more often rejected than supported. About one-third of those respondents who said they had reduced consumption expenditures (i.e. around 10% of the Austrian population) claimed that they had done so owing to the fear of pension reforms

<sup>7</sup> In these charts, the values in the left-hand bar and in the right-hand bar add up to 100%.

Chart 4



and cutbacks in other public benefits (e.g. in the field of education and health care). A similarly large share of those surveyed approved of the statements that they preferred to wait for prices to drop and that too cautious economic reforms in Austria were the reason for their pessimistic outlook.

We used association tests to assess the relative importance of given explanations for different consumer groups<sup>8</sup> and arrived at the following

conclusions: Perceived inflation and the income situation (i.e. the two arguments with the highest share of approval) as well as smart shopping (which ranked fourth) were chosen most often by respondents with a low household income. The motive of a pessimistic income outlook was especially relevant for persons aged 60+, while expected cutbacks of public benefits (e.g. in the field of health care and education) was the reason supported most

<sup>8</sup> The chi-square test of independence examines whether two nominally scaled (qualitative) variables are independent of each other or not. All listed relations are significant at the 5% level. When a significant linear relation is found for two variables, the direction of the correlation can be determined with a rank correlation coefficient.

strongly by people aged 45 to 60. The expectation of having a low income under state pension arrangements in old age motivated especially persons with a high income to cut spending and increase private pension provisions. This may have had disproportionate effects on consumption expenditures. However, the last two correlations should be interpreted with caution, as the respective cell values are relatively small.

In general, it seems that households' real income is – either actually or in line with subjective perception – stagnating (e.g. owing to high unemployment, subdued wage growth, lower profits or perceived higher inflation). The prolonged duration of the current economic downturn compared with previous periods of economic weakness seems to be responsible for respondents' uncertainty in the assessment of their lifetime income, thus dampening consumption growth and leading to increased precautionary saving.

The rise in perceived inflation seems to be another reason for reduced consumption levels, especially for persons in the lower income segment; this also confirms the view that households assume their lifetime incomes to have dropped (i.e. consumers believe they can actually afford less now). The trend toward smart shopping, which is relatively new in Austria and cuts expenses without restricting utility of consumption, might have evolved in direct response to the perceived price increases, stagnating income levels and economic uncertainty. However, it might also reflect technological change (price comparison websites, e-commerce) or altered retail trade structures (increasing number of discount

shops, positioning strategies via aggressive or, in certain business sectors, predatory pricing).

Finally, the debate over cutbacks in public benefits seems to have led to a higher saving rate; the discussion about the future of the Austrian pension system and the implemented reforms have prompted especially persons with a high income to spend less and save more. About one-third of respondents who cut spending because of a decline in expected pension benefits chose to invest a larger share of their income in private pension schemes. This behavior is in line with the theory of consumption smoothing, which postulates – just like the permanent-income hypothesis – that changes in the long-term income outlook impact on consumer behavior.<sup>9</sup>

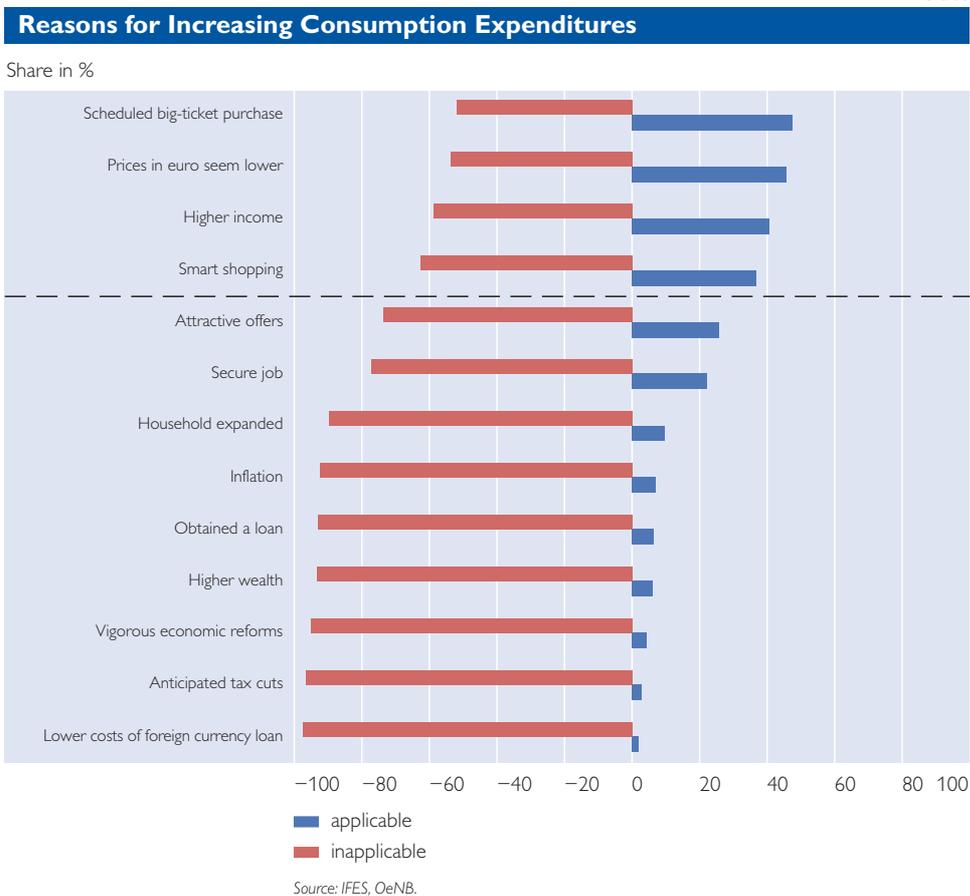
Waiting until prices dropped before making purchases was considered less relevant, which may be attributable to market-related factors (slump in electronics prices, i.e. sectoral deflation) or may be weak evidence of withheld consumption.

What is remarkable about the current phase of weak consumption and rising saving rates is that *different sections of the population* seem to have had *different reasons* for reducing consumption expenditures and/or increasing saving rates. This means that weak consumption is attributable to several concomitant developments which impact negatively on households' consumption expenditures.

Global political uncertainty (e.g. resulting from terrorist attacks or war) as well as the rise in public debt and the associated expectations of a higher tax burden in the future seem to have had no negative impact on con-

<sup>9</sup> According to OeNB calculations, roughly one-third of the rise in the saving rate between 2000 and 2003 is attributable to increased investment in private pension schemes.

Chart 5



sumption in Austria.<sup>10</sup> Wealth effects (high debts, lower assets, foreign currency loans) and liquidity constraints seem to have been equally insignificant for weak consumption growth.

### 3.4 Reasons for Increasing Consumption

We also explored the reasons why respondents increased consumption expenditures, even though this effect played only a minor role in the aggregate data, as only 12% of respondents stepped up consumption over the past 12 months. The related survey results are presented in chart 5. Respondents generally approved less of the 14 motives to explain the rise in consumption

expenditures than of the motives for reducing them – every single argument for increased consumption was more often rejected than supported. This may be attributable to the absence of relevant explanations in the questionnaire on the one hand, or to respondents' assessment that the increase in consumption expenditures was less significant on the other.

The arguments considered relevant by at least one-third of respondents who said they had increased consumption are listed above the broken line in chart 5. The motive of a scheduled big-ticket purchase received the largest share of approval. In addition, the fact that prices are quoted in euro (which

<sup>10</sup> This result is in line with Dirschmid and Glatzer's estimation on the basis of long-term developments (2004); see note in chart 2.

are lower than schilling prices in nominal terms) seems to have tempted respondents to spend more. 40% of respondents with higher consumption expenditures were able to expand consumption because their income had risen in the past 12 months. Finally, the trend toward smart shopping seems to have been relevant also for those who increased consumption expenditures. The most notable characteristics of consumers who spent more (as compared with those who cut spending) are their higher levels of income and education.

#### **4 Comparing Respondents' Replies With Economic Data**

Before we drew conclusions about the current economic situation from the survey results, we had to check the results against actual current economic data. This “reality check” produced the following results:

##### **4.1 Measured and Perceived Inflation Have Developed Differently**

In the period under investigation (September 2003 to August 2004), consumer price inflation was very low at 1.6%, as compared with both short-term and long-term data (1999 to 2003: 1.7%, 1955 to 2003: 3.5%). Thus, the view that consumers reduced consumption expenditures because of higher prices, which was supported by many respondents, is not substantiated by inflation data as measured by the Harmonized Index of Consumer Prices (HICP). However, according to the OeNB's indicator of perceived inflation, which is estimated on the basis of a consumer survey conducted by the European Commission, perceived inflation has been much higher in recent years than actual inflation as measured by the HICP. Today, perceived in-

flation is also much higher than in the 1990s. In their contribution to this issue, Fluch and Stix (2005) show that increases in perceived inflation are correlated with price increases of frequently bought goods, as consumers take note of such changes more easily. For the most part, these goods are food or sanitary products, i.e. necessary goods; contrary to luxury goods, their proportion decreases with rising incomes. This might explain why especially persons with a low income, whose consumption expenditures are primarily used for necessary goods, cite higher prices as the reason why they had to reduce consumption. Furthermore, low incomes have been sinking in the period under review: In 2003, nominal net incomes in the lowest wage quartile declined by 1.2% year on year according to Statistics Austria (2005). Thus, for consumers in the lowest wage quartile, the decline in nominal net income and perceived inflation in excess of HICP inflation (1.3%) added up to a loss in perceived income of more than 2.5% in real terms in this period. In 2002, nominal net incomes in the low-income segment slightly declined again (–0.3%), and perceived inflation was higher than actual inflation according to OeNB calculations. In 2001, nominal net incomes in the lowest wage quartile also decreased by –0.5%, whereas perceived inflation was lower than actual inflation. The difference between the two inflation figures may even have compensated the loss in nominal income.

##### **4.2 Slower Income Growth and Higher Unemployment**

Real disposable income stagnated at the outset of the economic slowdown in 2001 and 2002 and grew by 1.7% in 2003 and 2004, respectively. The average growth rate between 2001

Chart 6

### HICP Inflation and Perceived Price Changes



Source: Statistics Austria, OeNB.

and 2004 was significantly lower at 0.9% than in the period from 1986 to 2004 (2.1%). What is remarkable about this stagnation compared with other periods of economic weakness is its long duration: While the sharp decline in disposable income in 1993 (−0.7%) was followed by a notable increase in 1994 (3%), disposable incomes have not returned to the long-term average growth levels since 2001.

Between its most recent low in April 2001 and August 2004, the unemployment rate (EU definition) climbed from 3.4% to 4.5%. This increase by around 1 percentage point is comparable to that between 1990 and 1993 (+0.9 percentage point). However, the level observed in August 2004 is quite high by historical standards in Austria and 0.5 percentage point higher than that observed in 1993. Austrians'

Chart 7

### Growth of Real Disposable Income



Source: Statistics Austria, OeNB (2004: forecast).

expectations about the development of their incomes and financial status over the next 12 months (based on the European Commission's consumer confidence indicator) have been low since 2003, but not as low as at times. In terms of being pessimistic about their economic outlook, Austrians ranked eighth of 38 in a global survey by AC Nielsen (2005a). 11% of Austrians claimed to be pessimistic about their chances in the labor market.

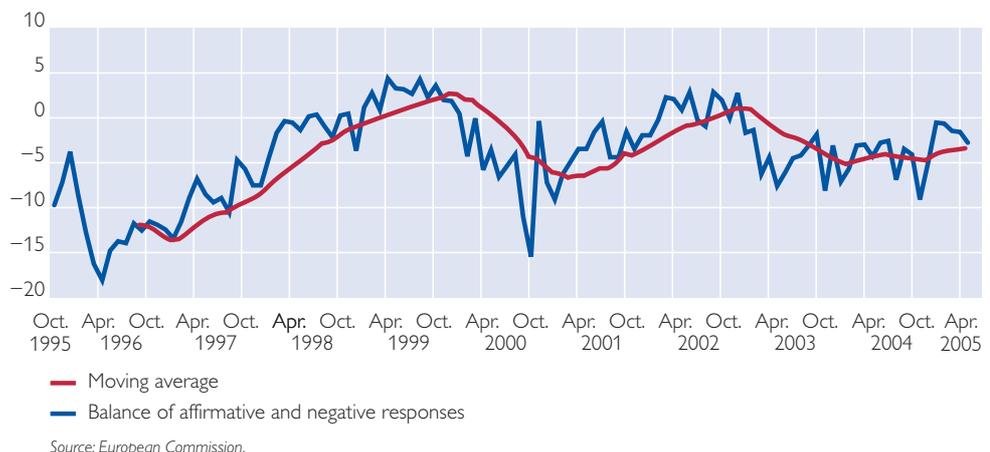
The trend toward increased price awareness manifests itself in various ways. According to an e-commerce survey (Statistics Austria, 2004), only 9% of Austrian enterprises in the surveyed business sectors sold goods and services via the Internet, with the respective transactions coming to 0.9% of total annual sales, and merely 36% of their customers were private con-

sumers. However, these figures do not include successful online sellers (such as Amazon and e-Bay) or online shopping price comparison services (e.g. the geizhals.at website registers almost 100,000 hits per day).

The (constantly growing) market share of discounters in food retailing is estimated at just under 30% in Austria, which is significantly higher than the European average of 16% (AC Nielsen, 2005b). Brand products are increasingly being replaced by private label and store brands in conventional supermarkets, too. Other sales channels, e.g. factory outlet stores, are also gaining in importance. The number of *smart shoppers*, i.e. customers who buy low-priced quality products without brand loyalty, is increasing (KMPG and EHI, 2004).

Chart 8

**Expectations about Households' Financial Situation over the Next 12 Months**



In a nutshell, disposable income growth has in fact slowed down, households' pessimistic income expectations are in line with other data (e.g. the rising unemployment rate), and the trend toward smart shopping is supported by altered retail trade structures. While

these facts are not unexpected in the current economic downturn, the growing propensity to save even though income growth has decelerated comes as somewhat of a surprise. In addition, there is a considerable gap between actual and perceived inflation.

## 5 Conclusions

### 5.1 Lower Lifetime Income and Increased Uncertainty

In conclusion, consumer restraint is attributable to the following main reasons: perceived inflation, weak income growth, more pessimistic income expectations and a trend toward smart shopping. These factors are primarily indicative of households' lower income expectations and uncertainty. Households' assessment of their real income and wealth is dampened by the high level of perceived inflation. People increase precautionary saving in response to pessimistic income expectations and to the fear of losing their job in this prolonged period of sluggish economic growth. Thus, households have changed the way in which they divide income between consumption and saving; this change may be a temporary reaction to uncertainty or indicate a permanent change of income expectations.

The discussion on cutbacks in public benefits, too cautious economic reforms, anticipated pension cuts and waiting for prices to drop seem to have played a minor role in shaping respondents' consumption decisions, even though these factors have been influential for certain population groups.

### 5.2 Different Factors Impact on Different Population Groups at the Same Time

Weak consumption growth is also attributable to the fact that certain population groups are affected by several negative developments at the same time. The consumption decisions of low-income households were primarily based on current incomes and price developments, while consumer restraint among persons aged 60+ resulted from pessimistic income expectations. The reason given most frequently by per-

sons with a higher income for having lowered consumption expenditures was a planned investment in private pension schemes; this could also be interpreted as meaning that persons with a lower income do not have the funds to make private pension provisions. Consumer spending was temporarily weakened further by the fact that the pension reform was implemented during an economic downturn.

Around 20% of those surveyed chose two explanations for why they had reduced consumption expenditures: possible future reforms which might lead to cutbacks of public benefits and at the same time too cautious reforms. Two factors may be responsible for this seeming inconsistency: first, respondents may have addressed different reforms (e.g. pension reform vs. research reform), as the reform itself was not specified in the questionnaire, and second, respondents' assessment of a reform project may depend on whether they themselves are affected by it or not.

### 5.3 Geopolitical Uncertainty and Non-Keynesian Effects of Fiscal Policy Considered Hardly Relevant, Low Impact of Wealth

There is little evidence of non-Keynesian effects of fiscal policy in the current situation in Austria, as 91% of those surveyed said the increase in public debt had not been relevant for their consumption decisions. Respondents also claimed that geopolitical developments (e.g. terrorist attacks or wars) had hardly impacted on their consumption decisions. The situation in Austria is different from that in other EU countries, e.g. the Netherlands or the United Kingdom, in that wealth plays only a subordinate role in this context.

The survey results suggest that consumer behavior will return to normal

in particular in response to a slowdown in perceived inflation and the prospect of a sustainable business cycle upturn. Accordingly, it might be sensible to place more emphasis on the correlation of macroeconomic development and structural reforms in the preparation of the national reform programs to implement the Lisbon strategy in

order to avoid implementing several measures with a dampening effect on consumption at the same time. The measures should be designed, sequenced and communicated in such a manner that they instill confidence in Austria as a business location and reinforce a dynamic and sustainable development of employment and income.

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## Annex

### Questionnaire

1. Shopping and consumption: In this questionnaire, consumption *includes* expenses for shopping, housing, health, transportation, education, etc., and *excludes* expenses for building loan contracts, securities and other investment vehicles.

Has your consumption level changed over the past 12 months?

Have you substantially reduced consumption

- (cut spending significantly) ..... 1  
 somewhat reduced consumption (cut spending to a certain extent) ..... 2  
 somewhat expanded consumption (increased expenses to a certain extent) ..... 3  
 significantly expanded consumption  
 (increased expenses substantially) ..... 4  
 not changed your consumption level at all ..... 5

2. To what extent do the following statements apply to your (or your household's) situation over the past 12 months?

	comple- tely appli- cable	appli- cable	not very appli- cable	comple- tely inappli- cable	don't know
A My (household) income situation has not improved or it has even deteriorated, so I have had to economize more and spend less.	1	2	3	4	5
B I fear that my future (household) income situation will only improve marginally, remain constant or even deteriorate (e.g. owing to retirement or possible job loss). This is why I spent less.	1	2	3	4	5
C My debts are high and/or I didn't obtain a loan, so I spent less.	1	2	3	4	5
D The geopolitical situation has become more uncertain in recent years (e.g. owing to terrorist attacks or war), so I have made provisions for the future by saving money.	1	2	3	4	5
E My expenses will be higher in the future (e.g. for a child) or I intend to purchase a big-ticket item (e.g. apartment, car). This is why I have saved more.	1	2	3	4	5
F I wish to leave more to my children and/or provide for their future, so I have saved (more) money.	1	2	3	4	5
G My (households) wealth situation has deteriorated owing to sinking security prices. This is why I have had to economize on consumption.	1	2	3	4	5
H Repaying my foreign-currency loan has become more expensive, so I have had to economize on consumption.	1	2	3	4	5
I I have spent less because I have been waiting for prices to drop (e.g. for a digital camera, computer).	1	2	3	4	5
J Prices have gone up, so I have been able to afford less than in the past.	1	2	3	4	5
K Since the introduction of the euro, I have bought less because I am still not entirely familiar with the new prices.	1	2	3	4	5
L I fear that my pension will be lower than I had expected and have therefore started to save more for retirement.	1	2	3	4	5
M I am saving more because I am afraid that reforms will lead to cutbacks in public benefits (for instance education and health care benefits) and that I will need to pay for such services myself.	1	2	3	4	5
N I am saving more because I expect taxes to go up owing to the rising level of public debt.	1	2	3	4	5
O I have spent less owing to the rather pessimistic outlook that I have because economic reforms in Austria are too cautious.	1	2	3	4	5

3. To what extent do the following statements apply to your (or your household's) situation over the past 12 months?

	completely applicable	applicable	not very applicable	completely inapplicable	don't know
A My (household) income has increased, so I have been able to spend more.	1	2	3	4	5
B My (household) income has become more secure (e.g. owing to a secure job or better chances in the labor market) or it will increase, so I have spent more.	1	2	3	4	5
C I spent more because I took out a loan.	1	2	3	4	5
D I made a large purchase I had been planning for a while.	1	2	3	4	5
E My household has expanded (e.g. children), so I have spent more.	1	2	3	4	5
F My (household) wealth has improved e.g. owing to an inheritance or a lucrative investment, so I have been able to spend more.	1	2	3	4	5
G Repaying my foreign-currency loan has become cheaper; so I have been able to spend more.	1	2	3	4	5
H To me, this year's products (e.g. technological innovations or fashions) were so attractive that I spent more.	1	2	3	4	5
I I prefer buying now to buying later when prices may have increased.	1	2	3	4	5
J As euro prices look lower than schilling prices, I have been tempted to spend more.	1	2	3	4	5
K I spent more because the government is planning to cut taxes next year.	1	2	3	4	5
L I have spent more owing to the rather optimistic outlook that I have because economic reforms in Austria are being tackled with determination.	1	2	3	4	5

4. Over the past 12 months, public debt has continued to rise in Austria. Are your consumption decisions in any way influenced by the issue of public debt?

- very much so 1  
to a certain extent 2  
not very much so 3  
not at all 4

5. Have your shopping patterns recently changed (e.g. shopping via Internet or wholesale shopping) so that you are able to satisfy your wishes without spending more? Are you in a position to save more now even though your standard of living is still as high as it used to be?

- completely applicable 1  
applicable 2  
not very applicable 3  
completely inapplicable 4