

Supply-Side Triggers for Inflation in Austria

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The supply-side analysis of sectors that have determined price developments in Austria since fall 2007 strongly suggests a lack of competition in the following industries in the medium term: processing and wholesaling of dairy products, pasta production, electricity and gas supply, cement production, and pharmaceutical retailing. Signs of weak competition are less clear but apparent in the following industries: production of fats and oils, clothes retailing, production and wholesaling of pharmaceuticals, car parts trade, sewage disposal and garbage collection. There are few or no indications of a lack of competition in: baked goods production, grain wholesaling, food retailing, home centers, production and wholesaling of construction materials, gas stations and footwear retailing. In food retailing, legitimate business strategies may have contributed to price developments. Moreover, price increases may to some extent have been caused by data limitations (use of shelf inventory data rather than scanner data) and by second-round effects on the part of firms, which find it easier to raise prices in an environment of generally rising prices. Additional in-depth analyses are necessary for a wide range of industries. Economic policymakers may intensify competition in pharmaceutical retailing (by enforcing prescriptions of generic rather than brand-name drugs) and the garbage collection industry (by changing the fee system). Restricting the concentration of regional or local sales units and establishing an integrated European energy market would unlock a (limited) potential for reducing inflation in foods and energy. Policymakers should envisage implementing changes above all in the service sector, which determines inflationary trends in Austria in the medium term. Measures needed to enhance competition include improving data sources, monitoring competition based on economic data, strengthening the competition authority, reforming regulations to ease market entry and to strengthen competition, and increasing price transparency.

JEL classification: E31, L11

Keywords: competition, inflation

1 Introduction

This study, along with Fritzer et al. (2008) and Rumler and Valderrama (2008), was drawn up as part of a broad-based analysis of inflation in Austria by OeNB staff experts; it examines the aspect of supply-push inflation. Principally, developments on the production side of an economy may trigger short- and medium-term price bursts as a result of cost-push effects or as a result of suppliers exercising market power. Cost-push inflation occurs when rising costs of production factors such as work or commodities are passed on to consumers. Market power inflation occurs when enterprises exploit monopoly positions or a lack of market competition or when they collude with

competitors to improve profit margins by raising prices (profit-push inflation). When compounded with cost-push effects, profit-push effects will precipitate wage-price spiral inflation. The probability of a reciprocal escalation of prices and wages was examined in Fritzer et al. (2008) under the heading of second-round effects.

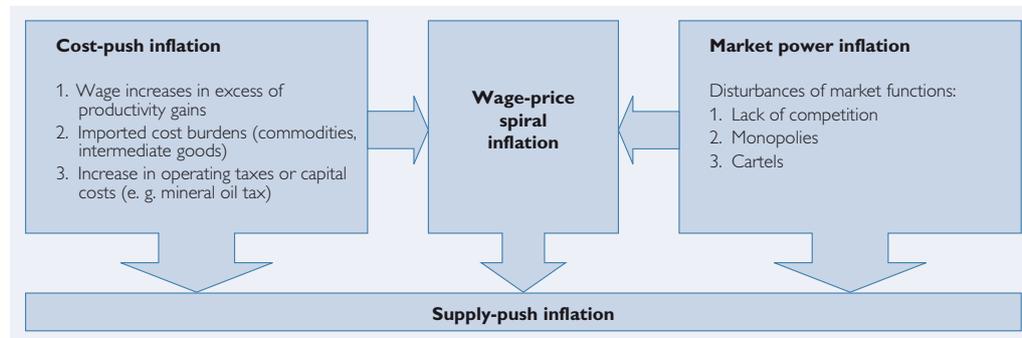
This study focuses on how much market power inflation or competition intensity may have contributed to the current inflationary peak. Data limitations restrict this exercise to an examination of market functions and an identification of areas of weak competition; identifying cartels or price collusion requires intense on-site research at enterprises, which is in fact the respon-

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Chart 1

Sources of Supply-Push Inflation



Source: Adapted from Pätzold (1998).

sibility of the Federal Competition Authority. This study is structured as follows: The link between competition and price developments is illustrated in section 2, and some indicators suited to determining competition flaws are presented in section 3. In section 4, these indicators are applied to the sectors identified as mainly responsible for the most recent price peaks in the recent literature (Fritzer et al., 2008; Salzburger Nachrichten, 2008). The indicators are complemented by a context analysis. Section 5 points out possible approaches to improving market function in the sectors identified.

2 How Does Stepped-Up Competition Affect Price Developments?

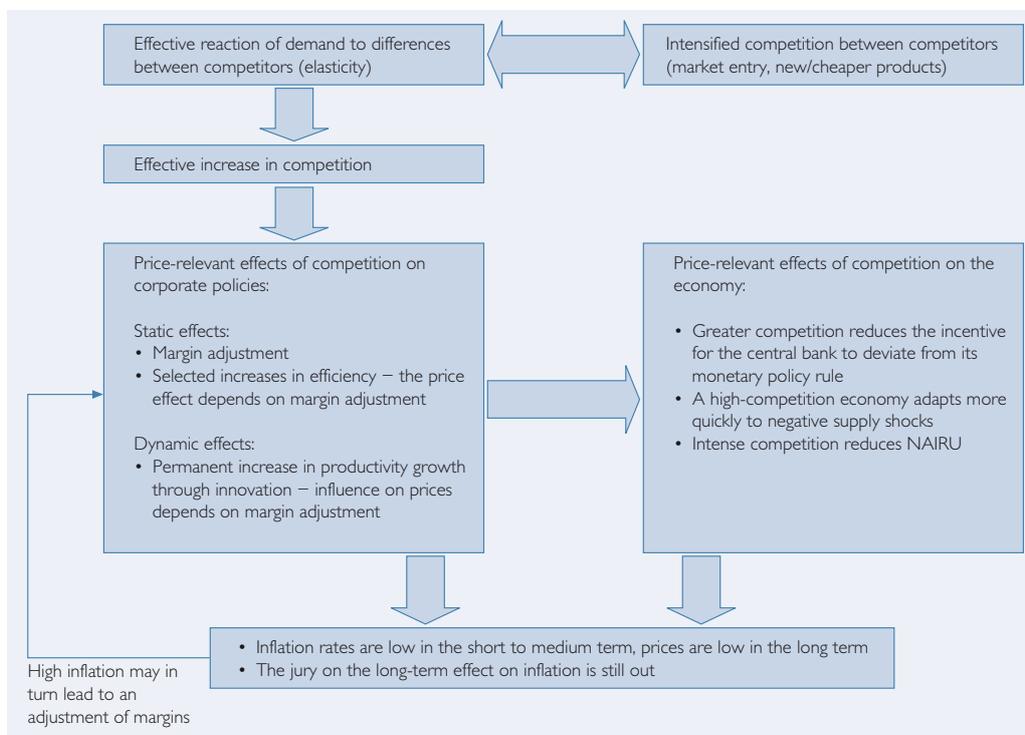
2.1 The Mechanism behind Greater Competition

More intense competition principally results in better price-quality combinations. Existing companies can supply their products to consumers at more favorable terms, they can improve quality without raising prices, or they can refrain from passing on the full extent of price rises; at the same time, the

range of supply may be broadened by new enterprises and foreign competitors joining the market. For the new price-quality combinations to actually have an effect on producers' decisions, consumers must effectively switch from existing to new goods or services. The degree to which consumers shift their demand is known as price or quality elasticity of demand and is a key prerequisite for a new good or service to actually intensify competition.

Two important determinants of demand elasticity are the cost of searching for a product and the cost of switching suppliers. The costs of switching suppliers comprise not just a monetary component, but also psychological phenomena such as brand loyalty, trust and the like. If search or switching costs are high, elasticity remains low and the level of competition is unchanged. However, if both costs are low, more intense competition will in itself increase demand elasticity. Empirically, higher demand elasticity is found in large markets (Sbordone, 2007), the reason being the greater choice and greater options for switching in these markets.

The Competition – Inflation Link



Source: OeNB.

2.2 Price Effects of Competition on Corporate Policies

In the textbook model of perfect competition, all companies are price takers – the product price equals marginal cost, meaning that the markup is zero. In reality, most companies are also price setters and maintain positive markups. Intensified competition can therefore influence the setting of product or service prices through several channels.

First, if consumers switch producers, the producer who loses out may react by reducing markups and thus forgo economic rents by cutting prices. Sec-

ond, if costs rise, a company's markup depends on that company's sensitivity to competitors' price-setting behavior. If rival firms adjust their prices less to higher costs, resulting in stepped-up competition, the price increases will be lower.² Enterprises can prevent these effects by colluding on prices or on market shares. Third, if margin adjustments are insufficient for a company to hold its own in competition, it will try to improve production efficiency. Rationalization, outsourcing and other measures may cut production costs and as a result product prices. The degree of price reduction depends on whether

² This applies to the practice in which prices are as a rule higher than marginal cost, thus allowing markups to be decreased in order to offset higher costs. In the theoretical model of perfect competition, the price is equal to marginal costs, which is why the complete pass-through of cost increases to the consumer is in theory an indicator of strong competition. A relevant case in practice is that of food discounters, whose margins are, however, so low that price increases as a rule fully reflect cost increases.

companies keep profit margins stable or decrease them as well.

These effects are static one-off effects. As reflected by measured inflation, such steps have a temporary impact on prices that tapers off during an adjustment period. An example will help indicate the relative importance of such effects in practice: Auer and Fischer (2008) estimate that a 1% market share gain of low-wage countries on the U.S. market triggers a 5% decline in producer prices. Half of this effect is caused by diminishing markups, the other half by productivity increases.

Fourth, stepped-up competition may also have dynamic effects if it creates incentives for the companies concerned to intensify their innovation efforts sustainably to raise product quality or even develop completely new products rather than merely cutting costs. In this environment, the productivity growth rate may be raised sustainably (Aghion et al., 2005).³ The impact on price developments may be permanent subject to the adjustment of profit margins and the development of other costs.

2.3 Price Effects of Competition on the Economy

The empirical literature consistently confirms that higher competition dampens measured inflation (Cavelaars, 2003) or lowers the price level (Przybyla and Roma, 2005) on a temporary basis. A lack of competition may thus be absolutely compatible with price stability, but at a higher price level. Some studies conclude that competition may impact on inflation also in the medium and long run. Various transmission channels are assumed: First, in an economy with imperfect

competition, economic performance falls short of the socially optimal level. This could be an incentive for the central bank to temporarily boost economic performance. A rise in competition would thus take the pressure off the central bank to permit inflation to be too high (Cavelaars, 2003; Rogoff, 2003).

Second, a more competitive – and hence more flexible – economy is able to absorb supply shocks faster and at lower inflationary costs (Eurosystem, 2006). Third, increased competition may reduce the unemployment rate compatible with price stability, the NAIRU (nonaccelerating inflation rate of unemployment). Stepped-up competition is considered to have an inflation-reducing effect in the medium term (Duca and VanHoose, 2001), in particular during long upswing periods such as that in the U.S.A. in the 1990s. However, the debate is still ongoing: the long-term link between competition and inflation grows weaker in a low-inflation environment (Cavelaars, 2003; Przybyla and Roma, 2005).

The causality may also be reversed: inflation influences markups in line with search costs. High search costs diminish demand elasticity and hamper competition. Therefore, the respective companies find it easier to raise their markups in an environment of higher inflation, which promotes second-round effects on the part of entrepreneurs (some companies' price increases trigger price increases by other firms). Conversely, if search and switching costs are low and demand elasticity is consequently high, stepped-up inflation entails reduced markups as a consequence of more intense competition (Gwin and Taylor, 2004).

³ Aghion et al. (2005) describe the link between competition and innovation as nonlinear and corresponding to an inverse U shape: In the case of low competition, additional competition also raises the innovation rate; in the case of high competition, additional competition lowers the innovation rate.

3 How Can Competition Problems and Suboptimal Market Functions Be Determined Empirically?

Competition arises whenever two or more parties strive for something that all cannot obtain (Stigler, 2008). Using economic analysis tools, the intensity or intensification of this rivalry among firms cannot be directly measured, but it may be assessed indirectly by approximation. If the suspicion arises that companies violate the competition law, they are obligated to provide information; their premises may also be searched. But even such information does not always provide conclusive evidence of competition intensity. The table below provides an overview of proxies, which are then discussed.

The proxies are structured by four main categories: market structure, market conduct, market performance and economic policy influence.⁴

3.1 Market Structure Variables

3.1.1 Concentration of Market Shares

The market share concentration of a given industry's firm population is frequently used for economic analyses of sectors. It is measured with the concentration ratio, i.e. the market share total of the largest firms on the market (e.g. the sector's top three = CR3, or the top five = CR5); and the Herfindahl-Hirschman Index (HHI), which measures the sum of the squares of market shares of all companies in a market.⁵ Empirically, the link to higher markups is rarely unambiguous: A priori, concentration of course makes it easier for companies to collude on price setting, and thus enables them to have higher

markups. Concentration and thus larger company sizes also facilitate economies of scale and of scope as well as R&D activities – and in their wake lower costs and innovation. Moreover, concentration may be the result of innovation efforts of companies which deploy innovation to distinguish themselves from other companies (section 3.2.2). The effect of concentration efforts is tied to demand elasticity: if market demand is elastic, increases in concentration have very little impact on price-setting and markups. If demand is inelastic, though, stronger concentration may cause prices to rise sharply.

3.1.2 Integration and Market Size

Empirically, demand elasticity is found to be higher in larger markets. Many European industries still have a high potential to increase market integration by linking supply and demand across borders. Indicators of the degree of market integration include market depth, meaning the measured share of trade flows in total potential trade flows between two EU Member States; a given industry's import penetration, meaning the share of imported products in total product sales; and the coefficients of price variation between countries, which are particularly important for some service industries in view of the lack of relevant external data.

3.1.3 Market Entries and Exits

Empirically, a link between low entry rates and a lack of competition is assumed. Participants established in markets will protect these markets by stra-

⁴ A causal link between these variables known as the structure-conduct-performance paradigm was assumed to exist at one time.

⁵ Typical marginal values e.g. in Austrian or European antitrust or merger control are a concentration ratio of the top four companies of 80%, an HHI of 2,000 or an HHI change of more than 250 after a merger.

Table 1

Proxies to Assess a Sector's Competition Intensity

Variable	Definition	Empirical Indicator	Source	Explanatory Power ¹
Market structure				
Concentration	Concentration of market share in the relevant market	CR _x (concentration ratio – sum of the market shares of the x largest firms), HHI (Herfindahl-Hirschman index – sum of the squares of market shares)	Regulators, industry studies, etc.	Low
Integration	Market depth, import penetration	Market size, potential versus actual trade flow, market share of EU competitors	External statistics, company data bases	Moderate
Company demography	(Potential) number of firms entering or leaving an industry; ratio of growth of new entrants to existing firms	Share of firms entering and leaving an industry in the total firm population; ratio of new entrants' sales to existing companies' sales.	n.a.	Low
Market conduct				
Price increases, price level	International development of sectoral inflation rates and levels	HICP, price variation coefficients, product prices	Eurostat, Nielsen	Moderate to high
Markups	Difference between marginal prices at the product and sector level, Lerner Index	Ratio of value added to total wages; Roeger (1995); markup development at different stages of the value-added chain	Statistics Austria, STAN, EU Klems	High
Consumer behavior	Extent and determinants of switching behavior	Rate of switching, search costs, switching costs	Regulators, surveys, sectoral studies, etc.	High
Market performance				
Productivity	Development of labor productivity, total factor productivity	Value added per hour worked, total factor productivity	EU KLEMS	Moderate
Innovation and human capital	Innovation and human capital intensity	R&D expenditure, patents, employment structure	Statistics Austria	Moderate
Profit margins	Development of profit margins at the enterprise and sector level	EBIT (earnings before interest and taxes), share of gross operating surplus in value added	Statistics Austria, company data bases	High
Economic policy influence				
Competition policy	Effectiveness of competition policy	Surveys, indicator sets	OECD, Global Competition Review (GCR)	Moderate
Product market regulation	Extent of entry and conduct regulation	International indicator sets, legal research	OECD, Doing Business	Moderate

Sources: OeNB, Przybyla and Roma (2005), ECB (2004), European Commission (2007).

¹ Explanatory power is measured in terms of data availability, international comparability and unambiguity of the link to competition intensity.

tegic conduct, e.g. by ensuring high sunk costs, or they will undermine new entrants' efforts to gain a foothold in markets by aggressively slashing prices. Such conduct is difficult to prove because establishment or market entry

rates vary enormously among sectors, depending, e.g., on the size of fixed costs for market entry, and there is no reliable uniform basis for international comparisons. Moreover, noticeable competition effects are not felt until the

entrant has secured a relevant market share rather than immediately on market entry. Therefore the growth of new entrants is more important an indicator than the number of new entrants. Sometimes, the contestability of a market is sufficient to incite established firms to act competitively (Baumol et al., 1982).

3.2 Market Conduct Variables

3.2.1 Rates of Price Increase versus Price Levels

Drawing conclusions about competition problems on the basis of industry-specific inflation rates is generally inadmissible: inflation rate analyses do not provide conclusive evidence for distinguishing between industries with perfect competition and those with competition problems or even price collusion. Note that the final outcome of perfect competition – and of price cartels alike – is a uniform price. The analysis of internationally comparable price levels provides a far better point of departure to identify competition problems. However, price level data provided e.g. by Eurostat suffer from a lack of comparability because the degree of disaggregation is insufficient, national consumption preferences differ and because problems arise in calculating purchasing power parities broken down by industries or even smaller units.⁶

3.2.2 Markups

A markup is defined as the difference between the marginal cost of an item and its selling price. Under perfect competition, the price should be iden-

tical with marginal cost and thus produce a ratio of 1. In practice, though, the price is substantially higher than marginal cost. The extent of the difference between the selling price and marginal cost is an indicator of the divergence between reality and perfect competition, or of the extent of market power.⁷ In empirical research, markups have proven to be the best instrument with which to identify competition problems (e.g. Badinger, 2007; Badinger and Breuss, 2005; Cavelaars, 2003; Przybyla and Roma, 2005). Markups must be approximated on account of the lack of information about marginal cost; at the sectoral level, e.g. the ratio of gross value added to personnel expenditure is a suitable proxy. This method is very simple and has many restrictions (Przybyla and Roma, 2005).⁸

Markup developments must be interpreted with caution: They may rise even if competition surges, for example because costs drop more quickly than prices on account of productivity gains. Thus, a rise in markups need not necessarily be a sign of a dysfunctional market. If companies secure a temporary monopoly by launching new products, higher markups must also be seen as compensation for innovation and investment efforts. Finally, a low markup may also be attributable to the negotiation power of trade unions. If they succeed in securing a large portion of the economic rents, markups are low even if under weak competition.

Markups may be analyzed along the entire value added chain to examine competition intensity on the basis of

⁶ Price level comparisons in food retailing are possible at the product level using data provided by AC Nielsen. Here, too, internationally comparable products would have to be identified. Additionally, products cannot be classified by retail chains or brands on account of the confidentiality rules Nielsen has concluded with the sector.

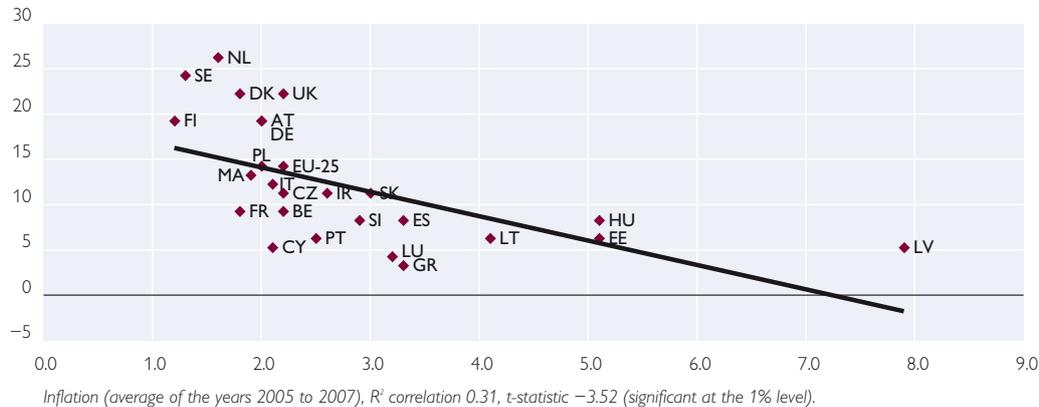
⁷ Markups are the basis of the frequently cited Lerner index ($L = (\text{price} - \text{marginal cost})/\text{price}$).

⁸ This study could not take into account the method proposed by Roeger (1995) because there was too little time to do so.

Chart 3

Inflation versus Consumer Complaints

Share of consumers who directed an official complaint to a firm in 2006



Source: OeNB, Eurostat, European Commission.

cost pass-through.⁹ However, such analyses require sufficient available data about prices at every level from international commodity markets to producer and wholesaler prices to consumer prices. Data are usually fully available only for products with a short value-added chain, i.e. products with fairly little processing or product change. Food production and retailing is such an example.

3.2.3 Consumer or Demand Elasticity

The switching rate denotes the share of consumers which change suppliers within an industry within a year. More data tend to be available for regulated sectors, such as network industries. Moreover, there are some studies on search costs (Gwin and Taylor, 2004)¹⁰ and survey results (e.g. European Commission, 2006).

The European Commission is devising a consumer barometer (European Commission, 2008a, 2008b) that collects data systematically and allows for comparisons between EU Member States. The first version has already produced interesting comparable data. Chart 3 shows a simple regression between the share of consumer complaints per country and average inflation over the past three years. The significantly negative link results partly from the omitted variable bias, but it does show the importance of consumer behavior for market function: Forbes (2008) for example establishes a link between the number of complaints and expected quality. Hence, country variations in quality expectations can influence market performance. The share of people who complain about a product or service they have purchased could also be a proxy for deeper structural differences between countries.

⁹ If markups are low, higher intermediate product prices will necessarily have an effect. Consequently rises in consumer prices will be most pronounced for cheap discount products; this phenomenon was in fact observed in Austria (Chamber of Labour, 2008).

¹⁰ However, the data are for wholesalers, not consumers.

3.3 Market Success Variables

3.3.1 Productivity

The productivity performance of countries, industries or enterprises is not directly linked to price developments, as markup developments must also be considered (section 3.2.2). It does, however, serve as an aid for interpretation: industries with strong productivity growth and rising markups are not likely to suffer from a lack of competition.

3.3.2 Innovation and Human Capital

Innovation and human capital indicators are productivity determinants at the preproduction stage; they provide additional insights into sectoral structures. Typical indicators for the manufacturing industries are the R&D intensity – R&D expenditures as a share of gross value added – or the number of patents. For the service industries, only the sectoral employment structure by education levels is generally available as an indicator.

3.3.3 Profit Margins at the Enterprise and Sector Level

Firm-specific profit margins may be calculated as sales profitability e.g. earnings before interest and taxes as a percentage of turnover (EBIT-margin) or as return on investment (ROI). Industry-specific margins can be represented as the share of gross operating surplus in gross value added. Profit margins are a further element suited to assessing the market – after all, rising markups may result either from falling costs or from increasing profit margins. As a rule, efficient firms are also profitable. Therefore, high profit margins do not signal weak competition in themselves. Studies show that profit margins in manufacturing are lower than those in services and exhibit a greater country dispersion (ECB, 2004). Their in-

ternational comparability is limited and partly suffers from the lack of enforcement of financial disclosure rules, especially in Austria.

3.4 Economic Policy Influence Variables

3.4.1 Competition Policy

Some empirical studies of markups use the effectiveness of competition policy and competition legislation as indicators of the size of markups. McCloughan et al. (2007) find a significant link between the effectiveness of competition policy and markups. The OECD draws up assessments of competition policy based on competition laws (Høj, 2007). Areas within the purview of competition policy, e.g. merger and acquisition control, are also linked to prices – a weak M&A policy entails higher prices (Ashenfelter and Hosken, 2008).

3.4.2 Product Market Regulation

Generally, there are regulations for product market entry and conduct. Regulation of market entry may refer to the regulation of new establishments, which have to fulfill legal requirements such as regulatory capital requirements or which must provide proof of qualification, or to the market entry of companies established abroad. The latter type of entry should be subject to freedom of establishment in EU Member States, but national provisions continue to determine the market entry of foreign firms, e.g. by requiring specific qualifications. The regulation of conduct creates a framework for established companies' conduct. Among other things, in retailing, for instance, special rules apply to stores of a particular size, or opening hours are subject to regulation. Empirical studies show product market regulation to be significant for productivity developments (Nicoletti and Scarpetta, 2003); its im-

Table 2

Competition Indicators to Identify Industries with a Low Competition Intensity

	Criterion	Weighting number
Public regulation	Is competition restricted through regulation; yes = 1, no = 0	3
Concentration	Sales share of the four biggest companies (CR4) > 80%	2
Concentration taking imports into account	CR4 share including imports >50%	1
Startup rate	Annual startup rate < 3% in manufacturing and < 8% in services	2
Market share variation	Less than 10% a year	2
Productivity fluctuation margin	Productivity fluctuation margin of 25% over national average	2
Wage level	Wage level 15% over that of the Danish furniture industry	1
Rate of return	Return is 50% over national average	2
Price level	Price index is 3 percentage points above the EU-9 average	3
Assessment by the competition authority	Specific assessment	–

Source: Janger (2006).

pact on price developments is indirect and is given through its influence on markups (Cavelaars, 2003).

Internationally comparable indicators are collected by the OECD. The 2006 data on product market regulation will not be updated before fall 2008; until then, only the 2003 data will be available (Conway et al., 2005). What is more, the indicators are usually only available for broadly aggregated sectors. Therefore, to analyze disaggregated sectors in detail, the economic assessment of national regulations is often the only option.

3.5 Summary

It is important for empirical studies to use not just one indicator, but to construct a broad overview that describes market structure, conduct and success. Markups, profit margins and productivity should be analyzed together. In any event, industries with a high price level, a high degree of concentration, high markups, high profit margins and low productivity growth deserve a

closer look. The need for data-based analysis is reduced in industries in which no competition is possible for legal reasons. The Danish competition authority with its proactive and investigative competition policy is a good example of an integrated sectoral approach. It uses the set of indicators outlined in table 2 to classify an industry.

The analysis below concentrates on those industries in which recent inflation statistics measured price peaks in Austria (Fritzer et al., 2008; Salzburger Nachrichten, 2008). In these industries, inflation has a specific, national component that is higher than the euro area average. This study does not seek to explain the price peaks since October 2007 (the competition authority and the Austrian Institute of Economic Research are researching this topic). Much rather, it takes a medium-term structural perspective that aims at pointing out optimization opportunities independently of the current price peaks. This approach is squarely in line with the Eurosystem's medium-term

inflation target and with the principle of identifying underlying structural causes of short-term developments that are difficult to control with economic policy measures.

4 Did National Structural Problems Contribute to Price Dynamics in Austria?

No doubt the international negative supply shocks to food commodities and to energy together with the long-term rise in demand in emerging economies are the key underlying factors of the current peaks in inflation in Austria. Looking into potential national causes that may have fueled inflation beyond international developments, recent surveys (Fritzer et al., 2008; Salzburger Nachrichten, 2008) have identified a number of high inflation industries (see table 3). The weight of these industries in the HICP comes to 40.8% according to the broad definition and to 21.8% in the narrow definition. Given those weights, price developments in those industries can significantly influence overall price developments. The statistical analysis covers not just retail industries but also manufacturing industries, which is useful for following effects across parts of the value added chain.¹¹ Public fees were added to the extent that they are charged for a value-added service such as garbage disposal, but pure administrative costs such as the motor vehicle tax were not included. In the energy sector, the data for mineral oil processing are confidential because there are only four companies in the field.

The factors influencing competition across sectors will be presented below.

The respective competition links were described in sector 3.2. Subsequently, the individual sectors will be briefly examined.

4.1 Cross-Sectoral Competition Factors

4.1.1 Promoting Competition through Competition Policy Measures

The OECD's competition law and policy indicator used to assess the degree of competition policy (Høj, 2007) ranks Austrian competition law and policy fourth-last among the countries examined in terms of favorability to competition (chart 4).¹² Austria's ranking reflects a legal framework considered to be relatively weak, the assumption of fairly far-reaching exceptions to competition law and above all a glaring lack of enforcement of competition policy: Austria scores especially badly on the resources available to the competition authority. The OECD survey data are from 2003, before Austria introduced its leniency program (in 2006);¹³ moreover, resources have been increased somewhat since then. Austria's position has improved since that assessment. Nevertheless, the resources available to the Federal Competition Authority remain small compared to those in other countries such as Denmark (the Austrian authority has only a quarter of the personnel of the Danish authority and only a third as much as the Finnish authority). The time-consuming nature of competition examinations – the preparation, conduct and completion of one on-site inspection requires one person-year – hampers the enforcement of competition law.

¹¹ Does not include manufacturing of clothing, shoes and gas, as these sectors are very small in Austria; automotive trade is not covered either.

¹² As the Austrian manufacturing sector is subject to a high degree of competition, this is likely to play an especially big role in service sectors with limited competition from abroad.

¹³ The design of the current leniency program, however, is still criticized (Öhlberger, 2006).

Table 3

Industries Reviewed

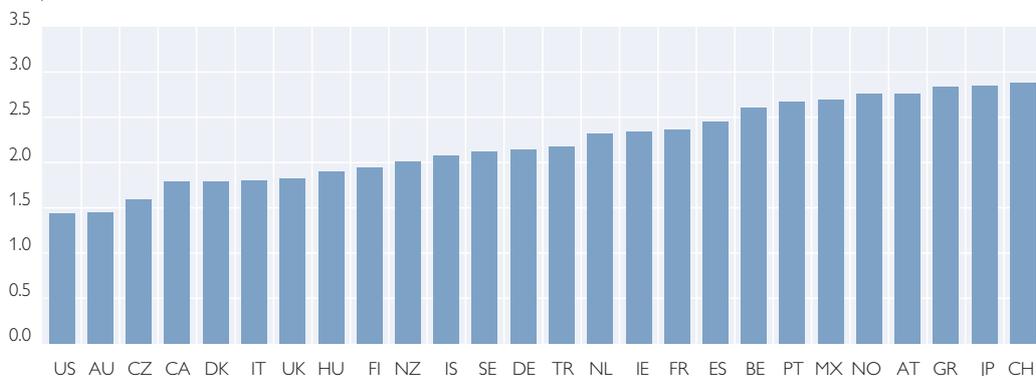
Industry or Product (HICP Weights in Parentheses)	Equivalent Statistical Sector (NACE Codes)	Large Firms (Incomplete List) ¹
Food (11.5%) – milk, cheese and eggs (2.1%), oils and fats (0.4%); bread and cereal products (2.3%)	<ul style="list-style-type: none"> Economic Accounts for Agriculture Production: 15.4 production of animal and vegetable oils and fats; 15.5 milk processing; 15.81 production of baked goods, 15.82 production of dry baked goods, 15.85 production of pasta Trade: 51.21 wholesaling of cereals; 51.3 food wholesaling, 51.33 wholesaling of milk, eggs, cooking oils; 51.39 wholesaling of general foods; 52.11 retailing mainly of foods; 52.2 specialty foods retailing, 52.24 baked goods retailing 	<ul style="list-style-type: none"> Production: 15.51 Berglandmilch, Nöm, Rupp 15.81 Anker, 15.85 Recheis Trade: 51.21 Raiffeisen cooperatives, 51.33 Tirolmilch, Kärntnermilch, Tonis Freilandeier, Danone, 51.39 Spar, 52.11 Billa, Merkur, Interspar, Hofer, Spar franchises
Energy and transportation – electricity (1.8%) and gas (0.7%); crude oil and fuels (4.5%)	<ul style="list-style-type: none"> Production: 40.11 production of electricity, 40.12 transmission of electricity Trade: 40.13 distribution of and trade with electricity; 40.22 distribution of and trade with gas; 50.5 gas stations 	<ul style="list-style-type: none"> Production: 40.11 EVN, TIWAG, KELAG, Verbund, 40.12 BELAG Trade: 40.13 Salzburg Energie, producers' network companies (e.g. Wien Energie electricity grid); 50.5 OMV Refining&Marketing, AGIP
Clothing (4.4%) and shoes (1.1%)	52.42 retailing of clothes, 53.43 retailing of shoes	52.42 H&M, Kleiderbauer, Zara, Schöps 53.43 Stiefelkönig, Deichmann, Reno, Vögele
Goods for housing maintenance and repair, such as building materials (1.4%)	<ul style="list-style-type: none"> Production: 25.23 production of construction materials made of plastic, 26.51 production of cement, 26.6 production of goods made of concrete, cement or plaster, 26.61 production of construction materials made of concrete Trade: 51.53 wholesaling of wood and construction materials; 51.54 wholesaling of construction elements made of metal and of plumbing materials; 52.46 retailing of metal goods and coating materials 	<ul style="list-style-type: none"> Production: 25.23 Internorm, 26.51 Lafarge Perlmooser, Wietersdorfer&Peggauer Trade: 51.53 some Raiffeisen warehouses, 52.46 Baumax, Obi, Hagebau/Öbau, RWA Raiffeisen Ware
Pharmaceutical products (1%)	<ul style="list-style-type: none"> Production: 24.4 production of pharmaceuticals Trade: 51.46 wholesaling of pharmaceutical products; 52.31 pharmacies 	<ul style="list-style-type: none"> Production: 24.4 Nycomed, Roche, Baxter, Lannacher Trade: 51.46 Boehringer-Ingelheim, Novartis, Sanofi-Aventis; 52.31 individual pharmacies
Automotive parts and equipment (1.5%)	Trade: 50 automotive trade, repairs; 50.3 automotive parts and equipment trade	50.3 Iveco, Euromaster, BMW, Bosch, General Motors
Public fees and administered prices (12.9% total; selection 0.6%)	90.01 sewage and waste water treatment, 90.02-01 garbage disposal	90.01 Energie AG Oberösterreich Wasser, Abwasserverband Grazerfeld; Hydro Ingenieure Umwelttechnik, 90.02 Umweltdienst Burgenland, Saubermacher, Öko Box Sammelgesellschaft, ASA

Source: OeNB.

¹ Bureau van Dijk Electronic Publishing Amadeus database 2008.

OECD Competition Law and Policy Assessment 2003

Composite Indicator, 0 to 6



Source: OECD.

4.1.2 Regulation of Startups and Enterprise Growth

The regulation of the establishment of companies was simplified for partnerships (Personengesellschaft; nonincorporated firm); the administrative burden and the regulatory capital requirement remain high for limited liability corporations (Gesellschaft mit beschränkter Haftung). In the International Financial Corporations 2007 Doing Business Report (IFC, 2007), Austria was 21st among 24 OECD countries. Costs in Austria are high above all for certifications by notary publics, a procedure not required in other countries. The great number of administrative steps is explained by the many registrations that are required – with eight contact points (not even including the bank): the economic chamber, the notary public, the commercial court, the district administrative authority, the tax authority, the health insurance administration body as well as the municipal authority of the region in which the company is established. Denmark, by contrast, operates a one-stop shop scheme. The main obstacle for startups, though, is likely to

be the high minimum capital requirement of EUR 35.000. In particular in the service sector, in which the establishment frequency is generally higher and a company often only needs computers, the high regulatory capital requirements may cause company founders to opt for partnerships as a legal form, a choice that may limit the company's growth prospects (Czarnitzki and Kraft, 2003). According to press reports, the Federal Ministry of Justice is working on a proposal to reduce minimum capital stock to EUR 10.000.

Further institutional market entry barriers in Austria are sector specific and take effect e.g. via qualification requirements for various professions (Trade Code) or indirectly via pension arrangements (e.g. for free professions).

Enterprise growth can be more important than market entry, as described in section 3.2. Austria currently has no adequate legal structures governing the activities of venture capital funds – hence Austria ranks among the EU-15 countries with the lowest venture capital intensity.

4.2 Data Analysis of Sectors with Components Specific to Price Increases in Austria

Table 4 and charts 5 and 6 compare industries according to the competition indicators described above.¹⁴ The reviewed manufacturing industries (table 3) were compared with total manufacturing, the reviewed service sectors with total trade. The reference industries “total,” manufacturing and trade are shaded dark blue. Values indicating competitive market structures are shaded medium blue; values indicating problems are shaded light blue.

The data must be interpreted with caution. In particular markups were rudimentarily approximated, as described earlier.¹⁵ To sum it up, fairly clear signs of below-average competitive market structures were found in dairy processing and wholesaling, in

the production of pasta, in electricity and gas supply, in cement production and in the production of pharmaceuticals. The lack of competition is less clear in the following sectors: production of fats and oils, clothes retailing, production and wholesaling of pharmaceuticals, car parts trade, sewage disposal and garbage collection. The last two sectors were classified as unclear mainly because of the lack of data: Statistics Austria does not compile structural statistics for NACE sectors broken down further than the two-digit level after 74. But the profit measures are a cogent indicator. There are none to only few signs in baked goods production, grain wholesaling, food retailing, home centers, gas stations and footwear retailing as well as the production and wholesaling of construction materials (cement being the exception).

¹⁴ Full-time equivalents were not used to calculate labor productivity; this puts sectors with a high share of part-time labor (e.g. trade) at a disadvantage.

¹⁵ For the profit margins, the gross operating surplus unadjusted for income by self-employed was used as in Przybyla and Roma (2005).

Sector Analysis by Key Indicators

	Labor productivity, CAGR 1995–2005	Labor productivity, CAGR 2003–2005	Concentration	Definition of concentration	Markup 2005	Markup, average 2003–2005	EBIT-margin 2006/07, median	EBIT-margin 2006/07, upper quartile	Profit margin, 2005
	%	%	%		Index	Index	%	%	%
Total (NACE 10–74)	3.3	3.0			168	165.7			40.5
D manufacturing	4.6	5.2			163	158.4	1.1	9.6	38.5
G wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	2.2	3.1			151	149.6	0.6	6.9	34.0
51 Wholesale trade and commission trade, except of motor vehicles and motorcycles	4.1	4.0			167	163.9	1.5	8.4	40.1
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1.0	2.0			138	136.6	0.0	6.4	27.6
Food									
Agriculture									81.0
154 manufacture of vegetable and animal oils and fats	-2.3	10.2			183	158.2			45.4
155 manufacture of dairy products	9.8	2.1	34.0	CR4	179	176.3	0.0	7.0	44.2
1581 manufacture of bread; manufacture of fresh pastry goods and cakes	1.6	-0.3	low	expert	136	137.8	-2.0	3.7	26.5
1582 manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	0.5	4.1			146	139.7			31.3
1585 manufacture of macaroni, noodles, couscous and similar farinaceous products	-1.0	-4.1			175	187.4			42.9
5121 wholesale of grain, seeds and animal feeds	-1.2	-3.5			121	126.1	0.3	2.4	17.6
513 wholesale of food, beverages and tobacco	8.0	1.3			196	193.3	0.8	5.6	48.9
5133 wholesale of dairy produce, eggs and edible oils and fats	12.9	-8.9	34.0	CR4	189	204.2	0.5	3.9	47.2
5139 nonspecialized wholesale of food, beverages and tobacco	4.6	-5.4			143	146.2			30.2
5211 retail sale in nonspecialized stores with food, beverages or tobacco predominating	0.7	-1.1	77.0	CR3	127	131.1	-1.3	2.6	21.1
522 retail sale of food, beverages and tobacco in specialized stores	-0.2	-2.7			166	156.5	0.1	4.8	39.6
5224 retail sale of bread, cakes, flour confectionery and sugar confectionery	3.2	5.8			119	112.6	-0.2	5.6	15.9
Energy, Transport									
E Electricity, gas and water supply	3.3	0.8			225	242.2	-2.8	15.9	55.6
401 Production and distribution of electricity	2.8	2.1			204	221.8	-0.3	15.0	51.0
4011 production of electricity		21.9	>70.0	CR3	250	238.9	-4.5	17.7	60.1
4012 transmission of electricity		-26.2			120	235.2			17.0
4013 distribution and trade of electricity		6.8	65.0	CR3	198	201.2	0.5	12.9	49.4
4022 distribution and trade of gaseous fuels through mains		-3.9	94.0	CR3	357	367.4			72.0
505 retail sale of automotive fuel	-1.6	-1.8			120	120.3	0.0	4.2	16.5
Clothing and footwear									
5242 Retail sale of clothing	3.5	5.1	44.0	CR6	165	156.8	-2.0	5.5	39.4
5243 retail sale of footwear and leather goods	3.5	14.7	37.0	CR2	153	133.8	-4.1	4.6	34.4
Manufacture of materials for housing maintenance and repair, construction materials									
2523 manufacture of builders' ware of plastics	1.8	-1.3			136	139.5	1.2	8.6	26.4
2651 manufacture of cement	4.9	-5.5	77.0	CR4	185	200.3			45.9
266 manufacture of articles of concrete, plaster and cement	0.8	3.7			155	151.8	0.8	8.9	35.5
2661 manufacture of concrete products for construction purposes	-1.1	2.2			133	133.0	-0.5	10.7	25.0
5153 wholesale of wood, flat glass, construction materials and varnishes and sanitary equipment	1.8	7.8			150	144.9	1.1	5.3	33.5
5154 wholesale of hardware, plumbing and heating equipment and supplies	2.0	3.3			139	139.1			28.2
5246 retail sale of hardware, glass, paints and varnishes	-2.0	9.0			120	114.7	0.9	5.9	16.4
Pharmaceuticals									
244 manufacture of pharmaceuticals, medicinal chemicals and botanical products	5.5	5.9			232	209.0	3.5	19.1	57.0
5146 wholesale of pharmaceutical goods, orthopaedic appliances and medical and surgical equipment	7.3	5.9			150	146.6	3.0	8.4	33.5
5231 dispensing chemists	2.3	-1.5	low	expert	182	183.9	2.5	8.8	45.0
Parts and automotive equipment									
50 sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	1.3	2.2			139	139.5	0.1	3.9	27.9
503 sale of motor vehicle parts and accessories	1.5	3.2			162	157.1	0.5	6.2	38.1
Public fees									
90 sewage and refuse disposal, sanitation and similar activities						2.9	14.2		
9001 collection and treatment of sewage						4.1	18.0		
90.02-01 Collection and treatment of other waste						3.3	9.5		

AMADEUS, Statistics Austria, Nielsen, SynGroup, Internet-research, E-Control

Statistics Austria	Statistics Austria	Statistics Austria	Statistics Austria	KMU Forschung Austria	KMU Forschung Austria	Statistics Austria
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Source:

Table 4 – Continued

Sector Analysis by Key Indicators

	Profit margin, average 2003–2005	ROI, 2005, median	ROI, 2005, upper quartile	Gross value added, CAGR 2003–2005	R&D intensity, 2004	Gross value added 2005	Overlap real sector – statistics	Sign of a problem?
	%	%	%	%	%	%		
Total (NACE 10–74)	39.6			4.0	2.61	100.0		
D manufacturing	36.8	4.7	19.9	4.8	6.48	28.9		
G wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	33.1	4.3	20.4	4.0	0.34	17.9		
51 Wholesale trade and commission trade, except of motor vehicles and motorcycles	39.0	6.4	22.9	5.0		8.91		yes
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	26.8	2.8	20.7	2.4		6.42		no
Food								
Agriculture	81.0			9.7				
154 manufacture of vegetable and animal oils and fats	36.0			12.8		0.02	high	unclear
155 manufacture of dairy products	43.3	3.0	16.1	2.6	1.09	0.24	high	yes
1581 manufacture of bread; manufacture of fresh pastry goods and cakes	27.4	0.8	14.0	–1.4	0.50	0.66	high	no
1582 manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	28.3			9.0		0.06	high	no
1585 manufacture of macaroni, noodles, couscous and similar farinaceous products	46.4			1.9		0.02	high	yes
5121 wholesale of grain, seeds and animal feeds	20.5	4.1	13.5	–1.8	0.49	0.37	moderate	no
513 wholesale of food, beverages and tobacco	48.1	4.9	16.4	2.2	0.11	1.31	moderate	yes
5133 wholesale of dairy produce, eggs and edible oils and fats	50.9	3.9	11.6	–5.8		0.04	moderate	yes
5139 nonspecialized wholesale of food, beverages and tobacco	31.6	4.1	15.9	–7.5		0.35	moderate	no
5211 retail sale in nonspecialized stores with food, beverages or tobacco predominating	23.7	–0.8	14.8	1.7		1.65	high	no
522 retail sale of food, beverages and tobacco in specialized stores	35.9	4.0	32.3	–5.0		0.46	moderate	yes
5224 retail sale of bread, cakes, flour confectionery and sugar confectionery	11.0	2.4	18.5	20.9		0.05	high	no
Energy, Transport								
E Electricity, gas and water supply	58.6	3.3	13.7	0.3	0.15	3.70	high	yes
401 Production and distribution of electricity	54.8	3.8	13.7	0.8		2.82	high	yes
4011 production of electricity	58.0	3.8	12.7	15.1		0.92	high	yes
4012 transmission of electricity	49.1			–55.1		0.53	high	unclear
4013 distribution and trade of electricity	50.3	2.6	14.2	39.1		1.37	high	yes
4022 distribution and trade of gaseous fuels through mains	72.6			–0.5		0.41	high	yes
505 retail sale of automotive fuel	16.8	4.2	20.7	0.7		0.16	high	no
Clothing and footwear								
5242 Retail sale of clothing	36.2	0.9	17.9	4.2		0.78	high	unclear
5243 retail sale of footwear and leather goods	24.5	0.7	19.1	11.0		0.17	high	no
Manufacture of materials for housing maintenance and repair, construction materials								
2523 manufacture of builders' ware of plastics	28.3	6.5	17.7	0.3	4.73	0.18	high	no
2651 manufacture of cement	49.9			–4.4		0.12	high	yes
266 manufacture of articles of concrete, plaster and cement	34.1	5.0	19.8	2.5	0.90	0.58	moderate	no
2661 manufacture of concrete products for construction purposes	24.8	4.1	18.5	–0.4		0.22	high	no
5153 wholesale of wood, flat glass, construction materials and varnishes and sanitary equipment	30.9	5.2	18.2	8.9		0.56	moderate	no
5154 wholesale of hardware, plumbing and heating equipment and supplies	28.1	9.5	25.4	7.8		0.51	moderate	no
5246 retail sale of hardware, glass, paints and varnishes	12.4	4.3	20.4	8.8	0.02	0.44	high	no
Pharmaceuticals								
244 manufacture of pharmaceuticals, medicinal chemicals and botanical products	51.6	10.9	25.5	6.3	17.72	0.68	high	unclear
5146 wholesale of pharmaceutical goods, orthopaedic appliances and medical and surgical equipment	31.8	8.3	27.4	8.6	1.19	0.82	low	unclear
5231 dispensing chemists	45.6	11.7	31.7	1.5		0.44	high	yes
Parts and automotive equipment								
50 sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	28.3	3.6	15.9	4.3		2.56	low	no
503 sale of motor vehicle parts and accessories	36.3	4.9	20.3	7.6		0.38	low	unclear
Public fees								
90 sewage and refuse disposal, sanitation and similar activities			7.5	19.2				
9001 collection and treatment of sewage			9.4	30.0			moderate	unclear
90.02-01 Collection and treatment of other waste			7.3	17.5			moderate	unclear
	Statistics Austria	KMU Forschung Austria	KMU Forschung Austria	Statistics Austria	Statistics Austria	Statistics Austria		

Source:

A review of competition using sectoral data can provide evidence especially in sectors where the correlation between the NACE classification and real market participants is high. Correlation was examined in a rudimentary fashion using the AMADEUS database in which firms are classified at the NACE four-digit level. The correlation is low where companies with very disparate production and trade activities nevertheless have to be classified under one of two sectors for statistical purposes (NACE classification according to the predominant source of revenues from sales). Frequently, this is the case in wholesaling. The sectors 50.3 and 51.46 include the production divisions of BMW, General Motors, Boehringer Ingelheim etc. In manufacturing, margins and markups tend to be higher in manufacturing than in pure service sectors because temporary monopoly rents are easier to achieve through innovation.¹⁶ The high R&D intensity of manu-

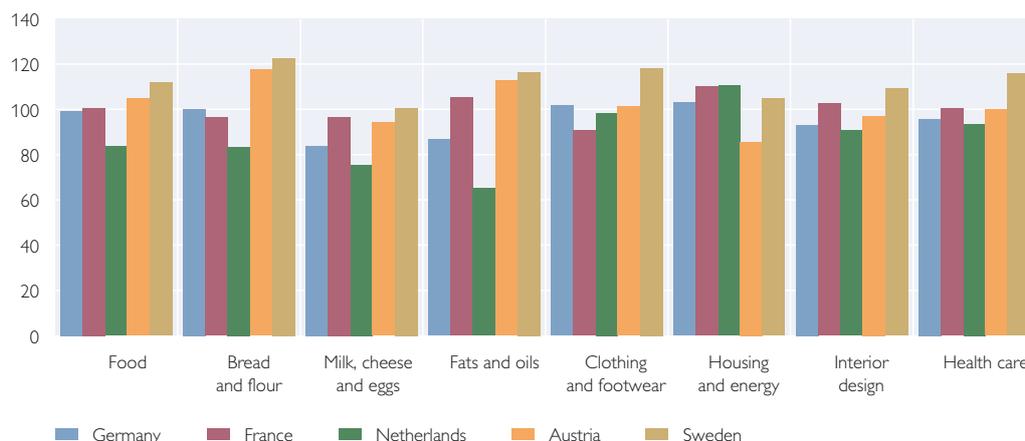
facturing sectors corroborates the above argument. In some sectors, the correlation is good enough to allow some economic assessments to be made. Cement production is a typical case. The formation of cartels in this sector was frequently discussed; from 1975 to 1993 a cartel was even officially permitted. The most recently available performance and structure statistics of Statistics Austria is dated 2005.¹⁷

Hence, no statements can be made e.g. on suspicions of price collusion on account of an unusual rise in profit margins. Only rough estimates of some sectors were made for the concentration statistics, as the required data are not available in most cases: not publishing financial and income statements is not a crime in Austria, unlike in other EU Member States. Nevertheless, an attempt to draw up concentration ratios was made by consulting the AMADEUS database to identify the largest firms and to calculate the sales share of

Chart 5

Comparison of 2006 Price Level Indexes

EU-15 = 100



Source: Eurostat.

¹⁶ The pure service sector “car parts wholesaling,” the six-digit NACE sector 50.30-01, was not taken into account for reasons of space, but its profit performance is above average. This is likely to be the sector that benefits from the protection of parts from original manufacturers and is a sector that the EU will open up by ending its design protection regime.

¹⁷ The data for 2007 were published on June 30, 2008.

Table 5

Development of Purchasing Power Relative to an Industrial Worker's Average Wage

	1980	2006	2007
1 machine-produced roll	1.2 minutes	1.3 minutes	1.4 minutes
1 liter whole milk	8.8 minutes	3.8 minutes	4.1 minutes
1 kilogram mixed-grain bread	9.8 minutes	11.2 minutes	11.4 minutes
1 kilogram extra fine granulated sugar	10.8 minutes	5.1 minutes	5 minutes
250 grams unsalted butter	17 minutes	6.3 minutes	6.8 minutes
250 grams coffee beans	31.1 minutes	8.6 minutes	8 minutes
2 liters white wine	33.4 minutes	12.3 minutes	12.1 minutes
1 kilogram pork	1 hour 32.7 minutes	41.1 minutes	40.3 minutes
1 kilogram beef	1 hour 48.9 minutes	1 hour 21.2 minutes	1 hour 22.1 minutes
1 liter regular gas	7.5 minutes	5.1 minutes	5.1 minutes
100 kilometers train fare, 2 nd class ticket	1 hour 14.9 minutes	1 hour 14.3 minutes	1 hour 14.7 minutes
1 hour's worth of wages for a plumber	6 hours 35.7 minutes	8 hours 26.9 minutes	8 hours 34.9 minutes
1 color TV	228 hours 55.4 minutes	48 hours 45 minutes	60 hours 23.3 minutes

Source: WIFO.

a sector in Statistics Austria's performance and structure statistics. Moreover, expert opinions were cited. The production sector data do not include imports; therefore, the concentration statistics would have to be adjusted for data from import penetration statistics.

To complete the picture, chart 5 shows an international comparison of price level indexes. For the sectors milk, cheese and eggs, housing and energy, and interior design, Austrian prices are below the EU-15 average, whereas they are perceptibly higher for bread and flour as well as fats and oils. However, the conclusiveness of this comparison is limited, as the comparison is not between identical products but rather between baskets of goods. Thus, national preferences strongly influence the result. For instance, specialty bread has the highest share (14%) in the Austrian basket. According to Statistics Austria, specialty breads such as pumpkin seed bread, whole grain bread and the like are far less important in other countries, such as France. Overall, the very low price level in the

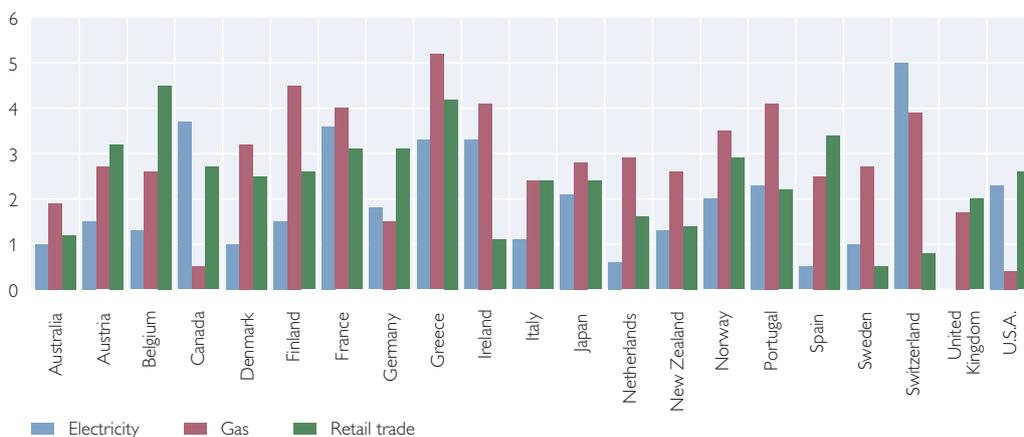
Netherlands, where inflation is currently very low, is striking.

Moreover, the development of purchasing power parities based on the price of some standard goods relative to an industry worker's average wage is noteworthy. Most of the sectors reviewed display strong price reductions. These are traceable to the high productivity rises in industry, which allow for higher wages, but also to the higher productivity in the manufacturing of the reviewed goods. Goods that have become more expensive indicate underlying problems. Bread falls into this category, whereas the price of milk has dropped sharply. Compared to the rise in industrial wages, the cost of plumbing services has increased sharply.

Finally, chart 6 provides an overview of the OECD's relevant sectoral regulation indicators. However, the data are fairly old; they will probably be updated in fall 2008. Moreover, the indicators are very broad-brush – for example, the OECD gives a bad value when shops above 800m² are regulated, without taking into account what kind of regulation is in fact involved. De

Product Market Regulation by Sectors, 2003

Composite indicator



Source: OECD.

facto, the competitive situation in Austria is the opposite of that described by the OECD's regulation indicators – retailing is competition intensive whereas competition clearly does not work in the electricity and gas sector.

We will present short descriptions of selected sectors – not all sectors – below to provide more detailed information about the competitive situation. The focus will be on food retailing.

4.3 Detailed Analysis of Selected Sectors

4.3.1 Processed Food

Three recent developments may have been implicated in weakening competition somewhat in food retailing. First, the two key food retail chains in Austria, Billa (REWE) and Spar, fought for

market share by aggressively slashing prices in 2004 and 2005 (–50%, –51%). This affected not just the retailers' profitability, but also that of their suppliers. Chart 7 presents an international comparison of EBIT margins¹⁸ that shows the Austrian retailers Spar, Interspar and ADEG to be in the lowest third.¹⁹

In 2005, a repositioning of the market leader Billa (REWE group) was initiated. The strong purchase-driven-department focus on prices was expanded to optimize the range of products. The breadth, quality and customer preferences in the respective product line were taken into account more.²⁰ Spar also welcomed the shift away from an aggressive pricing policy.²¹

¹⁸ The choice of firms is based on the reports *Food Retailing in Western Europe* (ODS, 2005). In most cases, the respective market leaders were chosen. By comparison, the cement producer Lafarge Perlmöser attains an EBIT margin of 22%, in Austria; this margin cannot be explained by a high R&D intensity.

¹⁹ Billa publishes only very little information about its group. While data are available from *Kreditschutzverband von 1870*, they are classified.

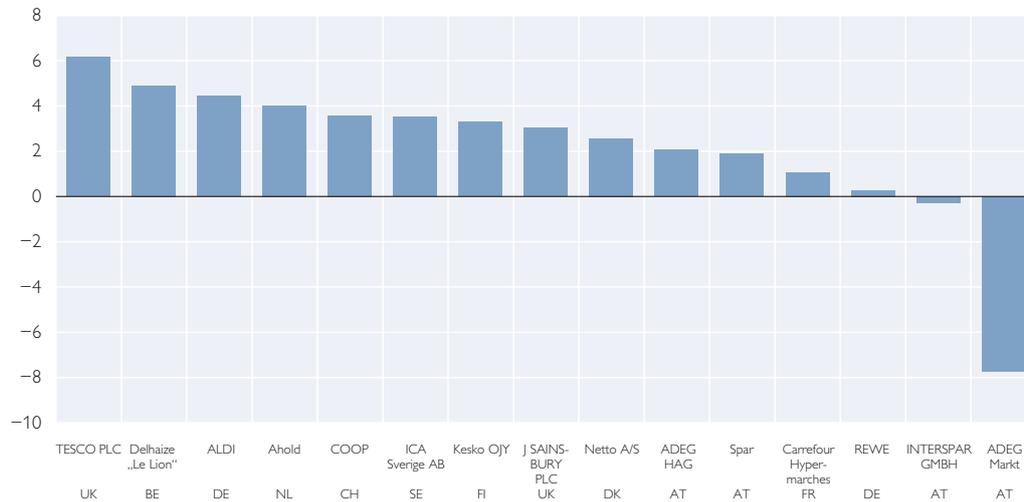
²⁰ "Gaining a market position on the basis of prices alone cannot be the only way for the sector to succeed ... Efforts must center on promoting product quality, a broad product range and a pleasant shopping experience." (Martin Lenz, head of REWE group in *Cash*, 2005b, p. 8); "The repositioning decidedly represents a lasting shift away from aggressive pricing." (Frank Hensel, head of REWE group in *Cash*, 2007a, p. 16).

²¹ Gerhard Drexel, head of Spar: "... it is absolutely clear that we will always be competitors. But there are price wars that never did and never will make any sense for the respective company and sector. ... We want to use the changes at REWE group as an opportunity to initiate a more reasonable approach in the sector, and we will set a good example." (*Cash*, 2006, p. 24).

Chart 7

EBIT Margins in an International Comparison, Last Available Years, 2004–2006

EBIT margin in % of sales



Source: Bureau van Dijk Electronic Publishing, Amadeus database 2008.

In terms of the price development measured, this meant that food inflation rates in Austria were below the European average prior to 2007,²² and when commodity prices rose in 2007, there was little room to offset higher costs by reducing margins. On the contrary, efforts to boost profitability once again and to attract customers with benefits other than low prices (non-price competition), incidentally by no means illegal,²³ could explain why prices rose faster than commodity costs.²⁴

The second development implicated in weakening competition is that food

retailers are no longer in a position to or no longer want to use their own buyer power to pressure producers: The strong demand power of the highly concentrated food retailing business has led food producers to keep very tight margins and to boost productivity. Under the high competition intensity described above, food retailers did not increase margins either and kept consumer prices low. Given their concentration of buyer power, retailers have a very important role as a competition multiplier. But their substantial buyer power has evoked allegations of having abused their market-dominating

²² From 2000 to 2006, the contribution of food inflation to total inflation came to 17.2%, which is the third-lowest euro area result following those of the Netherlands and Finland. The contribution rose to 26.7% in 2007, bringing Austria above the euro area average and into eighth place.

²³ In fact, such strategies appear to reflect customer preferences very well: According to a survey by Nielsen (Nielsen Shopper Trends 2006) about the factors that draw customers to a specific store, customers rank a good price-to-performance ratio 10th from among a list of various factors; low prices for most products is even rated a low 19th on the list. The list is topped by “finding products is quick and easy,” “one-stop shop,” and “has good-quality fresh produce.”

²⁴ In industrial economics, (illegal) cooperation in an oligopoly is facilitated enormously by external shocks that hits all parties equally. An argument against this hypothesis, though, is the time at which the strategy was changed – namely before food prices rose. Moreover, in 2008, for example, some retailers cut prices again (Hofer slashed milk prices, for instance); this fact contradicts the theory of successful cooperation as a result of shocks affecting all oligopolists equally.

position. Consequently, the competition authority (BWB, 2007) initiated a review that is said to have reduced the pressure on producers.²⁵

Moreover, in recent years, export promotion for food producers has been increased massively; in fact, it represents the key component of the Go International campaign. As a consequence, market shares abroad augmented sharply (Janger, 2007),²⁶ reducing the dependence of producers on retailers and at the same time increasing their awareness of international market developments and opportunities: Producers now frequently explain price increases with international developments. These price increases are likely to be a mixture of producers simply passing on cost increases²⁷ and of their efforts to increase profitability after several lean years: In an environment of generally rising prices, producers find it easier to justify price hikes to retailers.²⁸ Yet second-round effects – a higher incidence of price rises appearing justified against the background of generally rising prices – are dangerous, as rising prices are put forth as an argument for higher wages and for higher producer prices alike.

To sum it up, strangely enough, the actions of the competition authority, export promotion and in its wake the link to the international environment

of rising prices may have helped producers gain some scope to raise profit margins.

The third development is that while producers are becoming more internationally oriented, Austrian retailers are pursuing a regionalization strategy that is characterized by giving preference to Austrian products to set themselves apart from German discount chains and to meet consumer demand for higher quality, i.e. organic and local produce (that has shorter transport routes and is therefore fresher and less harmful to the environment).²⁹ As a result, retail prices are linked more tightly to Austrian production structures, preventing imports from stimulating competition. The highly segmented structures of dairy production and the like are fairly competitive (Sinabell and Schmid, 2008), but at the same time rather sensitive to increases in energy prices given cumbersome milk collection procedures, etc.³⁰ In recent years, Austrian milk prices have followed a somewhat different development than the EU average (Sinabell and Schmid, 2008).

Agriculture is likely to benefit most from the rise in commodity prices. Agricultural production values rose by 11.8% in 2007, partly because grain prices surged (as did the corresponding production volumes), and only marginally because of higher milk prices, as a

²⁵ According to the former head of the competition authority, Walter Barfuß, “There are clear signals ... that the food retailing business with its high buyer power is exercising more restraint and that its actions have become more moderate.” (Cash, 2005c, p. 6).

²⁶ Austria’s market share in the OECD 24 countries’ food exports expanded from 1% in 1996 to nearly 2.2% in 2005, surpassing the average share of Austrian goods exports.

²⁷ As bakery head Worenz says, “We have absorbed rising commodity costs for years, but now we will pass on higher costs directly.” (Cash, 2007b, p. 24).

²⁸ Spar management board head Drexel mentions that some industrial companies wish to simply palm price increases off to Spar (Cash, 2008a, p. 62).

²⁹ Frank Hensel, head of REWE group, says: “We at REWE group Austria [prefer] domestic suppliers and wherever possible avoid [buying] products from abroad, ... even though we could sometimes get them cheaper there. In this way, we [support] the Austrian agricultural microstructures.” (Cash, 2008b, p. 16).

³⁰ In Austria, nearly two-thirds of the milk delivered to dairies is produced in mountainous terrain, compared with only one-third in Switzerland (Sinabell and Schmid, 2008).

quota system substantially limits volume increases (Statistics Austria, 2008, Economic Accounts for Agriculture). The net entrepreneurial income in the agricultural sector augmented by 11.8% in 2007 despite a decline in subsidies. The income level is still below the 1995 level, though. Guaranteeing domestic production is a declared goal of policy initiatives (rural development program) and of trade strategies seeking to preserve high-quality local supply.³¹

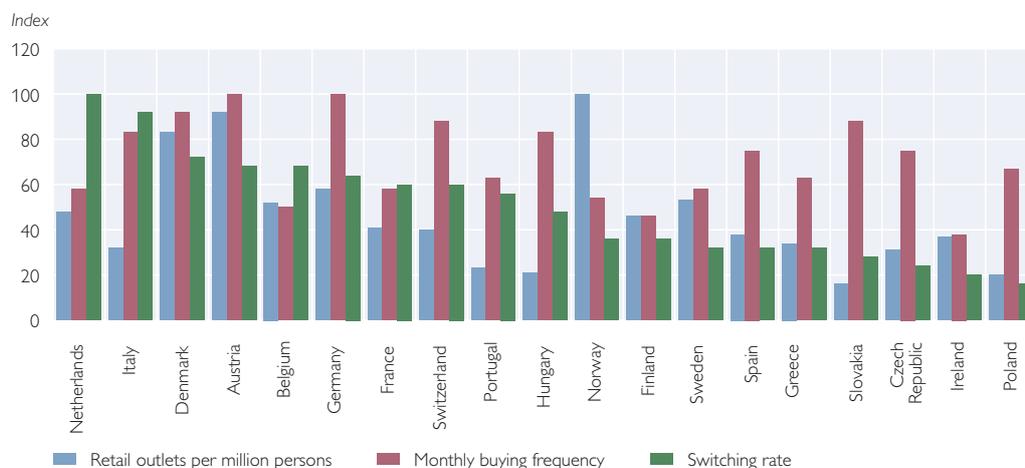
Consumers' search costs and switching options are largely determined by the retail store density within a reasonable shopping catchment area, as mail-order food shipments and complete price transparency on the Internet (an up-to-date price list for all products) are not (fully) available yet. After Norway, Austria boasts the highest supermarket density in Europe. Austrian consumers have the highest monthly buying frequency. On average, consumers go to the food store 18 times a month, so that there is ample potential for them to switch. 17% of all Aus-

trians in fact switch to another store if that store proves more convenient (providing a better choice, product range, bargains etc.). In the frequency of switching stores, Austria ranks fourth among European countries. Chart 8 shows the data normalized on an index base 100 for the country with the respectively highest value and sorted by the rate of switching. Consequently, the consumer side does not provide any indication of a possible restriction on competition in food retailing.

Overall, food price developments are not dramatically different from price developments in the EU (in its calculations, the European Commission concludes that commodity price hikes of 5% do not suffice to fully explain consumer price increases of 7%). In Austria, production structures and above all recent entrepreneurial decisions are likely to have limited the scope for offsetting high commodity prices by lowering margins but also led to the deliberate change in strategy to improve profitability, secure supplier loy-

Chart 8

Consumer Indicators in Food Retailing, 2006



Source: Nielsen.

³¹ As ham producer Rudolf Berger puts it, "Farmers finally need to be paid more." (Cash 2008a, p. 25); REWE group has a special program designed to guarantee that income generated from price increases is passed on to farmers.

ality and give preference to local produce. None of these activities violate the Competition Act. The fastest way to determine whether illegal pricing is involved is to use the same approach as the French competition authority (DGCCRF, 2008): The officials visited the largest food retail chains and asked to see the companies' calculations, that is, the calculation of the profit margins on various products. These examinations showed that French retailers "re-distribute" increases in buying costs: They reduced margins on products showing high price increases and offset this by raising margins on other products. Such a "mixed" calculation can be expected in Austria as well.³²

4.3.2 Electricity and Gas; Fuels

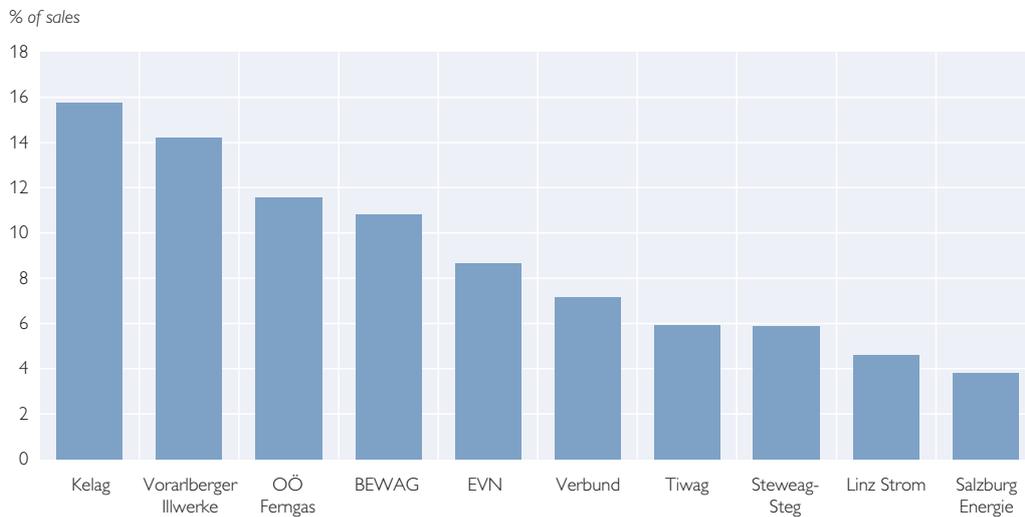
Unlike structural problems in food retailing, the Austrian and European electricity and gas markets' problems are relatively well documented (Böheim et al., 2006; E-Control, 2007; IEA, 2008). Although progress has been made, market integration remains incomplete between price regions (the Iberian, Northern European, Southern European and Continental European electricity exchanges) and within regions. In very simple terms, the basic problem is contradictory incentives in electricity transmission and in electricity production and sales. Most enterprises are vertically integrated and have little incentive to invest in an enlargement of their transmission capacities, as the consequence could be that purchases of cheaper electricity from other suppliers hurts own electricity sales.

One solution would be to follow the European Commission's proposal of unbundling ownership rights in the production, sales and network areas. However, many countries have put up resistance, as most energy suppliers are state owned and energy safety is seen as a task that is better tackled at the national level. Moreover, unbundling would require abandoning the policy of favoring "national champions."

Resistance against unbundling is also widespread in the Austrian domestic market. As a result, "conflicts of interest arise on account of the multiple role of the federal and regional governments as owners of energy suppliers, as legislators and as the bodies supervising the unbundling" (Böheim et al., 2006, p. 56). Gas and electricity are highly concentrated on account of the merged Energieallianz Austria (comprising five regional electricity suppliers for Vienna, Lower Austria, Upper Austria and Burgenland) and links between Energieallianz and OMV via the gas marketing company Econgaz. These mergers may be seen as the outcome of political efforts to establish national champions (Böheim et al, 2006). Such a strategy is risky as long as the European energy market has not yet been fully integrated. Once the market has been fully integrated and foreign competitors try to gain a foothold on the Austrian market, the problem of the high degree of concentration in Austria will diminish. The high level of EBIT margins also reflects insufficient competition (chart 9).

³² Industry insiders speak of retailers partly absorbing higher costs by adjusting margins for highly competitive products or key psychological prices (during the Austrian schilling era, one such price was ATS 10 for a 100 gram bar of chocolate); retailers offset these margin adjustments by increasing the prices of other goods (Cash, 2008a).

Chart 9

EBIT Margins of Selected Energy Suppliers, Last Available Years, 2004–2006

Source: Bureau van Dijk Electronic Publishing, AMADEUS database 2008.

While the potential for competition is limited, customers have so far not even used the existing opportunities (E-Control, 2007): In 2006, only 0.9% of household customers chose another supplier, and only 5% have switched since the liberalization of the energy market in 2002. There are several reasons for this behavior: PR campaigns are typically geared at improving the image of suppliers rather than motivating consumers to switch; consumers expect to receive complex bills but to have little savings, they fear high switching costs, and they are afraid that the new supplier will be less reliable.³³

For the fuels sector, Arpa et al. (2006) showed that no economically significant asymmetries in the adjustment of prices at gas pumps to higher commodity prices can be found. Moreover, the study by WIFO (Salzburger Nachrichten, 2008) does not identify an above-average national contribution to inflation of fuels in Austria.

4.3.3 Other Sectors

Home center store density, like food retail store density, is among the highest worldwide in Austria. This has an impact on customer's options to switch and on competition intensity. The stepped-up market entry particularly of large German home center chains triggered cutthroat competition. In this sector, too, competition intensity has been flagging ever since the German store Praktiker, a subsidiary of Metro cash & carry wholesaler, withdrew from the Austrian market.

In terms of total sales, clothing and footwear retailing is far more fragmented than food retailing. In this sector, location is the most important factor in attracting walk-in customers. Anecdotal evidence gathered at Austrian shopping malls and districts indicate that the retailing mix is more or less the same all over. For example, in Vienna's Mariahilferstraße district shoppers will find as many as three sales

³³ These fears are unfounded: the network operator remains the same, and switching suppliers involves only few formalities – the new supplier handles nearly all formalities. Customers can expect potential savings of up to EUR 70 a year (E-Control, 2007).

outlets each of a large clothing store and of two shoe chains.

Consequently, it would be interesting to analyze the concentration of stores in top locations. The concentration of ownership of business rental space and the awarding of related rental contracts should be examined at the same time to determine whether competition is hampered by the lack of availability of suitable sales premises or the abuse of a market monopoly.

The higher charges for prescription medications play an instrumental role in the rise in the price of pharmaceuticals. Of course, the problems with the structure and regulation of the pharmacy sector in Austria are well known. In other countries, e.g. drugstores are licensed to offer for sale a larger range of medications over the counter than in Austria. Such stores promote generic drugs much more than Austrian pharmacies do. For example, pharmacies generally sell generic acetylsalicylic acid (ASS, the active ingredient in aspirin) only if customers explicitly request the generic drug rather than a brand-name drug. The price differences are large: generic aspirin costs EUR 1.25 for 20 tablets versus over EUR 5 for a brand-name drug.

In the case of sewage disposal and garbage collection, many sewage treatment plants and recycling facilities share the market with conventional utilities, so that the figures must be interpreted with caution. Nevertheless, the surge in prices for garbage collection (2007: garbage collection +6%, sewage fees +4.7%) is partly explained

by a clause in the 1993 Revenue Sharing Act, Article 5 paragraph (3) line 5,³⁴ which gives municipalities the right to levy a surcharge of up to 100% on the cost of municipal services. At the outset, these funds were used to offset cost coverage gaps. In the mid-1990s, however, efforts were made to reduce costs, e.g. by transferring public responsibilities for garbage collection and sewage disposal to supraregional associations. The cost advantages were not passed on, though; the surcharges are used to finance municipal needs. The average profit corresponds to an EBIT margin of 26% (KFP, 2007).

4.4 Price and Quality Competition Is Not Sufficiently Captured in Statistics

Distortions in price measurement may also show up as price increases. Quality improvements are not automatically taken into account in price observations. In the case of outlet bias, the rise in market share of stores with lower prices for a specific product than others is not adequately weighted.

Hausman (2003, p. 25) criticizes the construction of cost of living indexes based on prices only.³⁵ Modern cash registers with scanners allow for recording of both the price and the amount of goods purchased. This would make it possible to determine when low-price stores expand their market share. In the food sector, a point is made of adequately representing the leading retail chains in price indices according to Statistics Austria. In clothing retailing, however, it may well be

³⁴ "Fees for the use of municipal facilities and plants operated as public services ... up to an amount at which the probable annual profit from fees is no more than double the annual amount required to maintain and operate the facility or plant as well as the interest and principal payments on the facility construction costs, taking into account the service life for that type of facility or plant."

³⁵ "Sending price surveyors out to stores, which is the original approach used in England in the nineteenth century and is the main approach currently used by the [Bureau of Labor Statistics] BLS, will not get the job done in the twenty-first century."

that textile discount stores like Kik – which has grown to become the fifth-largest clothes retailer in Austria – are underrepresented in terms of their weight. Another problem in capturing prices via observations of shelf prices has become quite large in recent years: the volume of discounts deducted at the cash register in connection with established customer loyalty programs – generally through payment-enabled customer loyalty cards or debit cards – has risen enormously.

Statistics Austria takes quality changes into account through price corrections. Organic foods, for example, are rated more highly than other foods. Hence, the risen share of organic foods is not likely to have caused the surge in food prices in Austria.

5 Economic Policy Consequences

The price increases in Austria in 2007 and 2008 above all reflect the confluence of steadily rising demand on the part of emerging countries with commodity supply shocks especially of foods (crop failures in Australia, Ukraine) and energy (various factors) – in other words, of cost-push inflation. Every country differs in its adjustment to these shocks and trends. For Austria, an analysis of the sectors hit by above-average inflation compared with the euro area identified a mix of underlying factors ranging from problematic market structures to the influence of past and present corporate strategies. The low profitability in several sectors is also liable to have motivated entrepreneurs to raise prices in an environment of generally rising prices, thus producing second-round effects; in a climate of general price increases firms typically find it easier to strengthen

profitability after a period in which profitability considerations took a second seat, or simply to pass on higher costs directly. Thus, inflation developments in Austria are likely to be linked to the unfortunate simultaneous occurrence of international developments and legitimate market strategies of Austrian companies, but also with dysfunctional market structures, be they caused by regulation or market conditions. The present analysis allows the following conclusions to be drawn:

5.1 Intersectoral Measures

5.1.1 Better Data Sources for Competition Analyses

The following improvements are required to pave the way for more meaningful competition analyses:

- increased disclosure of corporate financial information; concentration statistics,
- structural data for ÖNACE sectors often the sector 74,
- full-time equivalents for the service sector,
- examination of a way to improve the statistical classification of goods-related and service-related activities at the sectoral level, and
- better use of scanner data³⁶ in retailing or market share-based representation of retail chains in store price indices.

5.1.2 Entry Barriers for New Competitors

Many general measures have been called for a long time (Aiginger et al., 2006), including:

- reform of the establishment regulation (of limited liability companies – GmbH) with a low minimum capital requirement,

³⁶ When this study was completed, a leading food retailer was just launching a new discount chain. Scanner data could be used to calculate its impact on the HICP fairly quickly.

- reform of the growth finance framework (an adequate legal structure for venture capital funds, fund of funds initiatives, etc.) and
- a further reduction of regulation of professions or a less detailed regulation, both for craftspeople and for freelance professionals.

5.1.3 Competition between Established Companies

WIFO (Böheim et al., 2006) makes numerous proposals on how to intensify competition between established firms by reforming competition policy, in particular by elaborating an overall competitive strategy and by improving the effectiveness of competition law. The cornerstones of these proposals are:

- institutional reform of the competition institutions – antitrust lawyers, the competition commission and the Federal Competition Authority,
- improvement of resources,³⁷
- proactive competition monitoring on the basis of quantitative economic data³⁸ much like that performed by the Danish (Janger, 2006) as well as the Belgian authority (economie, 2008).³⁹ The economic mandate to initiate a competition review should be clarified statutorily if necessary,
- strengthening of the independence of the head of the Federal Competi-

tion Authority by reforming the appointment procedure,

- the burden of evidence in cases of abuse of market-dominant positions should be reversed and should be on the respective enterprise.

5.2 Sector-Specific Conclusions for Retailing

When companies follow market strategies which do not break competition rules, competition policy is principally limited. Whether the proposed price monitoring is effective in exerting pressure on market participants to alter their strategies exclusively toward price minimization has yet to prove its mettle. The wide variety of products and the mixed calculation methods of traders make it easier to pursue a product-dependent price policy that is intransparent but in line with competition rules. Moreover, surveys have shown that most consumers do not base their decisions on prices alone. However, price monitoring could contribute to more intense scrutiny of producers' price policies to determine whether higher prices indeed reflect commodity price increases or attempts to boost profitability. This could reduce the incidence of second-round effects (which may also be observed on the production side).⁴⁰ Moreover, in a collusion-based market structure, greater price transparency makes it easier to monitor ob-

³⁷ WIFO talks of a doubling, but three times the current resources would not be disproportionate considering the resources available to comparable countries.

³⁸ The Federal Competition Authority's approach is currently quite often a purely legal approach, meaning that the authority seeks out breaches of competition law, but does not look for suboptimal economic results.

³⁹ "A proactive attitude, based on in-depth knowledge of the functioning of the markets, is imperative to foster (i) an appropriate regulatory/competition framework and (ii) to promote market efficiency." Often market probes are made if a company lodges a complaint. But in many cartels, there are no complaints, which is why a proactive approach is needed.

⁴⁰ Heinrich Frey, head of the section Taxis and Rental Cars of the Vienna Economic Chamber, states in an interview with "Wien heute": "After waiting for half a year, we finally need to increase prices, too. Just think of the Vienna municipal price increases for parking, public transport and the like. The city of Vienna started to raise prices long ago, and we now want a piece of the pie as well." (<http://wien.orf.at/stories/264564/>)

servance of price collusion by one's closest competitors and thus facilitates enforcement of such collusive arrangements (Albaek et al., 1997). Consequently, the implementation of price monitoring should itself be closely monitored.

To rapidly establish whether the suspicion of price collusion is founded, the Federal Competition Authority should follow the French example and monitor the profit margin development of selected key staple products at various stages of the value-added chain. To this end, the competition authority should avail itself of its legal powers (requests for information or house searches).

In this study, most sectors were analyzed at the national level. However, the market shares of chain stores vary substantially among regions and at the local level. In food retailing, e.g., the Billa chain predominates Eastern Austria, Spar Western Austria. There is too little analytical material on top location market shares in clothing and footwear retailing. The impact of gas stations' location on competition has been researched time and again (e.g. Pennerstorfer, 2008). Consumers' search and switching costs may be high at the regional or local level and thus competition could be reduced. After completing a two-year survey of British food retailing, the British competition authority will introduce a new competition test that retail chains will have to pass before opening a new store: They may be denied a building permit if the new store is only ten minutes by car away from another outlet of the same chain or if the additional store would raise the market share of the chain to more than 60% in the regions concerned.

The economic policy options available to influence pharmaceutical retail-

ing are more obvious. Either the sales permit for specified pharmaceutical products is expanded to include e.g. drugstores, or in a first step prescriptions are written for particular active ingredients (*aut idem*), as envisaged in the current health reform scheme.

5.3 Sector-Specific Conclusions for Producers and Wholesalers

More detailed analyses are required to show options for action on the part of producers and wholesalers. Their influence on pricing is partly much larger than that of retailers: For example, all considerations regarding competition in Austrian food retailing will be but a drop in the bucket for milk price developments, given the planned reform of the EU dairy market and the possible termination of the quota system (Sinabell and Schmid, 2008). Sinabell und Schmid (2008) propose various strategies to enable Austrian dairy farming to cope with the upcoming challenges (cooperation at the farm level, improvement of operational procedures in milk production and processing, product and process innovation in processing, improved support for farms that discontinue milk production).

While (dairy) producers implement these changes, Austrian and European economic policymakers are well advised to take appropriate measures if conflicting goals arise (section 5.4). The general goals of EU Common Agriculture Policy include enabling producers to have an adequate income and to keep prices low for consumers. National goals include preserving mountain farming, strengthening family farming businesses, and providing for ecology-minded production in an open cultivated landscape (Sinabell und Schmid, 2008). Quite obviously, if all these goals are pursued at the same

time, inherent conflicts will arise between the goals.

Furthermore, careful analysis of the impact of increased use of biogenic sources of energy is needed.

In the area of municipal services, the Revenue Sharing Act should be amended to counteract incentives to raise fees that arise not from the rise in the price of services but from public budget constraints. To secure funding for municipalities strapped for finance, other, less economically distorting measures should be discussed.

5.4 Electricity and Gas Sector

More competition in the electricity and gas sector would contribute to more efficient operation of power plants and to lower margins on prices for customers (E-Control, 2007). Measures to intensify competition are being emphatically called for (Böheim et al., 2006; IEA, 2008; Boltz, 2008). The two key components are a true commitment to establishing a uniform European energy market, also by Austria's EU representatives, and stepped-up competition in the Austrian market. The conflicts of interest which arise because the federal and provincial governments occupy the tripartite role of being the owner of public utilities, the legislative authority and the supervisory authority should be resolved. The unbundling of ownership rights should be considered. Some countries, such as Germany (Brunekreeft, 2008) have their doubts about the economic usefulness of ownership unbundling, whereas E-Control (2008) principally welcomes it, though it criticizes the proposal of network operator self-regulation: It would take too long for this method to produce success.

Moreover, the reduction of the weight of energy in the commodity basket could exert a dampening effect on

inflation, e.g. by reducing energy consumption as a consequence of the widespread thermal insulation installed during renovation of old buildings and bringing forward the requirement that new buildings conform to low energy standards.

5.5 Outlook: Low Potential for Price Cuts in Food and Energy Retailing

Overall, the outlook for dampening price increases of the sectors exerting the greatest upward pressure on prices – food and energy – is to be viewed as subdued in the medium term, both on account of economic policy considerations and on account of prospective market developments:

Most food prices fell for decades. On the supply side, the advantages of a more market-based production – postulated for years, finally implemented step by step – will of course come with disadvantages, such as a stronger fluctuation of prices (Sinabell and Schmid, 2008). Crop failures are likely to become more common. On the demand side, demand by large emerging countries will increase further, especially for milk products and meat, and indirectly for more plant products (the production of 1 kg of beef requires 8 kg grain). Together with German consumers, Austrians report the lowest share of food expenditure in household budgets (European Commission, 2008c). Therefore, it is unlikely that a reduction in the weight of foods in the commodity baskets will dampen inflation.

In its World Energy Outlook 2008, the International Energy Agency (IEA) for the first time weighs the possibility of a supply crisis and escalating prices (Internationale Politik, 2008). Even if international prices stabilize, Austria would have to in fact raise its mineral oil tax to contain a run on Austrian gas

stations by German consumers, which enlarges Austria's carbon footprint. Prices for electricity and gas should not be too low, otherwise efforts to develop and use alternative energy sources might flag. Thus it is likely that any producer price reductions of these utilities will be offset by rising fees. This strategy would be consistent with the shift in the Austrian tax system called for: reducing the burden on labor income and increasing the burden on activities with negative externalities (Aiginger et al., 2006; OECD, 2007a).

5.6 Measures in Other Sectors to Offset Price Increases

As options to counteract price increases directly in the respective sector are limited, structural measures can be taken in sectors that contributed less to the current price rise but that had consistently contributed most to inflation for decades, and that certainly have scope to reduce prices: many services qualify here.⁴¹ The trend contribution of the service sector to inflation is 2%, and it is likely to be unchanged in 2008. Even if the effect on inflation is temporary rather than permanent, structural measures in the service sector would limit inflation dynamics and would dampen the adjustment to higher price levels of foods and energy. It would also be important to stabilize inflation for several years to prevent undermining a key component of the economic success of the past 15 years, namely the manufacturing sector's competitiveness. The European Commission (2007b) and the OECD (2007a) regularly call for greater competition in the Austrian service sector. In the U.S.A., the service sector has become the driving force of

productivity (Jorgenson et al., 2005) whereas the manufacturing sector still plays this role in Austria; in the medium term, Austrian services exert upward pressure on inflation (Fritzer et al., 2008).

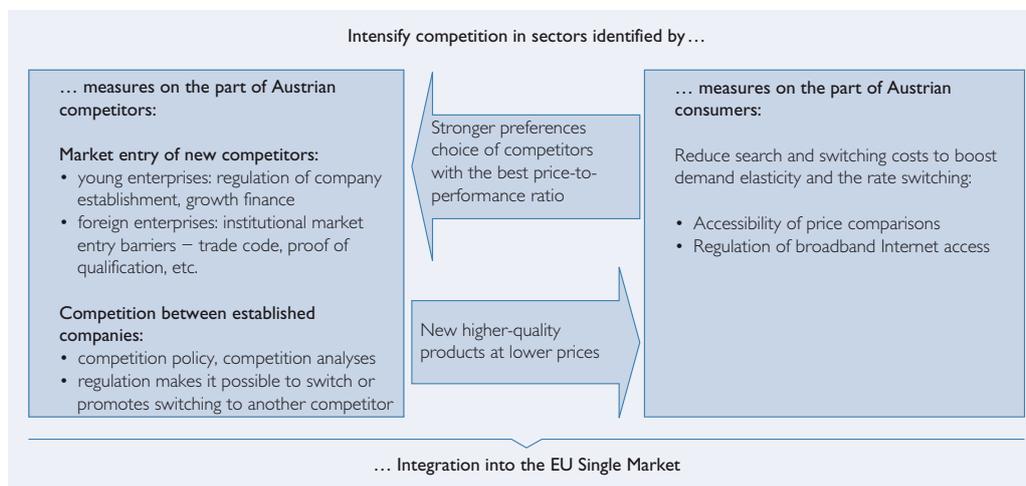
To identify the service sectors with a lack of competition, large sectoral reviews much like those being performed in other countries (Belgium, France, etc.) could be drawn up in cooperation with the European Commission, for example by the Federal Competition Authority and commissioned by the Federal Ministry of Economics and Labour.⁴² Moreover, Austria could benefit from international experience by participating in the OECD's regulatory review, a step that the WIFO has called for (Böheim et al., 2006), or by the use of the OECD's Competition Assessment Toolkit (OECD, 2007b).

Competitors, consumers and the European dimension should be the respective focus of the studies. At the producer level, it would be interesting to find out whether switching providers is a) principally possible, and b) if so, whether switching is difficult owing to market entry barriers or a lack of competition between existing firms. For example, currently consumers who pay a real estate agent for his services cannot switch between agents. However, if landlords paid for agents' services, switching and price competition would be possible. Ways to reduce search and switching costs should be identified on the demand side to increase demand elasticity or the rate of change. The integration of the respective sectors into the European market could be analyzed. An important consideration for the elaboration of reform

⁴¹ Trade, of course, is also to be ranked among services, but what we mean here is companies that sell services to consumers.

⁴² The new strategy for completion of the Single Market focuses on economic monitoring (Dierx et al., 2007).

Levers to Intensify Competition



Source: OeNB.

proposals is that frequently not large reforms in one sector but rather many small changes in many subsectors will produce overall success.

As price comparisons drawn up by the Chamber of Labour show, there would be much potential to intensify competition through switching to other providers, e.g. other insurance companies, banks (personal accounts, savings accounts, loans, investment products), energy providers, Internet providers and phone companies, rent (indirectly: operational costs). The same holds true for the costs of other services, such as the cost of the driver's license for automobiles or car repair costs. Many of these services are also included in the commodity basket – a price reduction would thus have a direct impact on the HICP. Table 6 shows price fluctuation margins for some goods and services. The extent of fluctuations for very similar services is a further indication of how much potential for improving

competitive intensity exists in those categories.

Consumers would take advantage of these fluctuations more if the search costs were lower, i.e. if price transparency were higher. The Chamber of Labour often publishes the above-mentioned prices online, which has the advantage that the prices can be updated quickly and that users can use templates to set up their own profiles. To improve access to such comparisons and to general price comparison services, further expanding broadband Internet access in Austria would be desirable,⁴³ as it is below the EU-15 average (20.8 connections per 100 inhabitants) at 18.4 connections per 100 inhabitants compared to 28 in Denmark and 37 in the Netherlands. The same two countries also used Internet search machines most often (79% to 84%), whereas the frequency of use is 61% in Austria (European Commission, 2008a). Cost is a factor. The cheapest Internet access in

⁴³ Theoretically, higher price transparency could facilitate price collusion. Given the strong price fluctuations shown in table 6, however, such a danger appears unlikely. Also, price monitoring would allow for quick determination of any uniform upward adjustment of prices.

Table 6

Price Differences of Selected Services

Services ¹	Fluctuation margin	Maximum potential annual savings in euro	HICP weight
	EUR	EUR	%
Personal account fee (per annum)	1.68 to 170	168.32	0.26
Interest on overnight deposits	0.125% to 4.33%	n.a.	n.a.
Interest burden for a five-year consumer credit of EUR 20,000	2,397 to 4,937	2,540	n.a.
Driver's license for automobiles at a driving school	1,200 to 1,850	650	0.16
Home insurance policy for 90m ² floor space, no deductible	145 to 239	94	0.13
Legal protection insurance	82 to 294	212	0.16
Car repairs			1.02
Painting	108 to 131	23	
Auto body repairs	94 to 127	33	
Mechanic work	71 to 181	110	
Annual auto inspection	29.90 to 78	48	n.a.

Source: Chamber of Labour, as at end-April 2008.

¹ Applies to standardized services; see <http://wien.arbeiterkammer.at/www-513.html> ("Konsument").

France is available for EUR 14.85 a month for a transfer rate of 16.6 Mbyte – in Austria, the same rate applies to a transfer rate of only 1 Mbyte. This corresponds to a quality-adjusted sixteen-fold price difference.⁴⁴ The traditional media could also be used to compare service prices, though. Overall, the goal could be to make price comparisons between services an automatic part of every buying decision, much as is often already the case for goods (see e.g. comparisons on www.geizhals.at). But further analysis of the determinants of consumer behavior is required. It would be important to find out e.g. whether the typical features of Dutch, Danish and Swedish consumers – frequent complaints (see above), high switching rates, frequent use of search machines and the like – are coincidental or whether there are in fact underlying reasons.

5.6 A List of Conclusions

1. Cross-sectoral measures to intensify competition
 - 1.1 Improvement of data sources (corporate and industry data, use of scanner data)
 - 1.2 Intensification of competition: strengthening of the Federal Competition Authority, reform of market entry regulations, facilitation of competition
2. Retail trade
 - 2.1 Price monitoring taking into account possible counterproductive effects (facilitation of price collusion)
 - 2.2 Monitoring of profit margin developments by the Federal Competition Authority (requests for information, housesearches)
 - 2.3 Analysis of the concentration of stores in top locations (clothing and shoe stores)

⁴⁴ Source: www.ariase.com/fr and Austrian Chamber of Labour; data were current at end-April 2008.

- 2.4 Prevention of local and regional concentrations through application of a new competition test: new outlets will only receive a license if they do not give a chain a market-dominant position.
- 2.5 Prescriptions for particular active ingredients in pharmacies or expansion of prescription drug sales e.g. to drugstores
- 3. Manufacturers and wholesalers
 - 3.1 Further analysis required (e.g. in the cement manufacturing industry)
 - 3.2 Push for termination of the milk quota system at the EU level and at the same time support for strategies to enable dairy farmers to adjust
 - 3.3 Keep an eye on inherent conflicts between goals, analysis of the impact of the increased use of biogenic energy sources
 - 3.4 Amendment of the legal basis for the levying of fees on garbage collection and sewage disposal with an eye to determining alternative sources of finance for municipal needs
- 4. Electricity and gas sector
 - 4.1 Support for an integrated European energy market
 - 4.2 Resolution of the conflicts of interest resulting from the tripartite role of the federal and provincial governments as owners (receivers of dividends), legislative authorities and supervisory authorities; consideration of unbundling of ownership
 - 4.3 Stepped-up thermal insulation work on old buildings and bringing forward of the requirement that new buildings conform to low energy standards
- 5. Greater focus on the service sector
 - 5.1 Sector surveys (competition monitoring on the basis of economic data) to identify sectors with a lack of competition (in cooperation with the European Commission), elaboration of reform proposals
 - 5.2 Enhancement of price transparency of services (fostering access to comparisons available on the Internet by promoting broadband Internet access)

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