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## „The Liberalization of Austria's Mail Market – Expectations and Suggestions"

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# I Abstract

After three EU directives aiming at full liberalization of the postal market, Austria finally had to give way to a liberal mail market. However, the paths to implementation of the prescribed changes are manifold. When faced with the decision between strong market regulation by governments or truly allowing free enterprise, most countries seem to opt for the former. The motives might be ethical, or maybe they aren't. In any case, economic science betrays the amassing of government powers over supposedly liberal markets by teaching us that highest efficiency and welfare come from minimalistic market intervention, as opposed to regulations about any number of topics with regard to the market's business. But since politicians will not extensively heed economic advice, it will be a long time until the market seizes to include one or a few firms with significant market power, whose strong positions inhibit the development of other companies and, therefore, get in the way of lower consumer prices.

Nach drei EU-Richtlinien zur Liberalisierung des Postmarktes, musste Österreich einen liberalen Briefmarkt zulassen. Die vorgeschriebenen Änderungen werden dabei jedoch auf verschiedenste Weise implementiert. Muss man sich zwischen starker staatlicher Marktregulierung und wirklichen Freiheiten für das Unternehmertum entscheiden, scheint vielen Ländern Erstgenanntes wichtiger zu sein. Die Motive dafür mögen ethisch sein, vielleicht sind sie es auch nicht. Die Wirtschaftswissenschaft lässt jedenfalls die Ansammlung staatlicher Macht über scheinbar freie Märkte erkennen, indem sie uns lehrt, dass höchste Ausmaße von Effizienz und Wohlstand aus minimalistischer Markteinmischung folgen, nicht aus Richtlinien zu zahlreichen Themen, die den Markt betreffen. Doch da Politiker ökonomischen Ratschlägen nur begrenzt Gehör schenken, ist es noch ein langer Weg bis der Markt nicht mehr von einer oder wenigen Firmen mit signifikanter Marktmacht dominiert wird, deren starke Position die Entwicklung anderer Unternehmen hemmt und dadurch einem Absinken des Endverbraucherpreisniveaus im Wege steht.

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# V Abbreviation Index

| **Abbreviation** | **Meaning** | **English translation or explanation** |
|---|---|---|
| AG | Aktiengesellschaft | incorporated company |
| B2B | business-to-business | |
| B2C | business-to-consumer | |
| CEP | Courier Express Parcels | |
| C2C | consumer-to-consumer | |
| D | date of deposit | |
| DPAG | Deutsche Post AG | German Postal Services Inc. |
| EBIT | earnings before interest and taxes | |
| EC | European Commission | |
| EDI | electronic data interchange | |
| EEA | European Economic Area | |
| e.g. | exempli gratia | for example |
| et al. | et alii/et aliae/et alia | and others (meaning additional authors to the one mentioned by name in a reference) |
| EU | European Union | |
| EUR | Euro | |
| f. | and the following page | |
| GewO | Gewerbeordnung | Austrian trade law |
| GmbH | Gesellschaft mit beschränkter Haftung | limited liability company |
| i.e. | id est | that is |
| LAK | Landabgabekästen | rural disposal boxes |
| MC | marginal cost | |
| MR | marginal revenue | |
| OECD | Organisation for Economic Co-operation and Development | |
| ÖPAG | Österreichische Post AG | Austrian Postal Services Inc. |
| P | Profit | |
| p. | Page | |
| PMG | Postmarktgesetz | Austrian postal market law |
| PostG | Postgesetz | Austria's expired postal law |
| pp. | Pages | |
| P-UDV | Post-Universaldienstverordnung | Austrian legal ordinance concerning universal postal services |

| | | |
|---|---|---|
| Q | Quantity | |
| ROI | return on investment | |
| RTR-GmbH | Rundfunk und Telekom Regulierungs GmbH | Austrian Regulatory Authority for Broadcasting and Telecommunications |
| SMS | Short Message Service | |
| T | date of completed transport to the domestic USP by foreign postal services | |
| TC | total cost | |
| TPA | third-party access | |
| TR | total revenue | |
| TV | Television | |
| UK | United Kingdom | |
| US | United States | |
| USO | universal service obligation | |
| USP | universal service provider | |
| VAT | value added tax | |
| vs. | Versus | |
| ZustG | Zustellgesetz | Austrian postal delivery law |
| Δ | change of | |
| § | Paragraph | Austrian equivalent to an article in international law |
| §§ | Paragraphs | see § |

# 1 Introduction

The EU's postal markets have been liberalized by January 1, 2011, with the exception of Greece, Luxembourg, and most new member states, who are going to follow on January 1, 2013. The countries that liberalized their postal systems prior to those dates are Finland, Sweden, United Kingdom, Germany, Estonia, and the Netherlands.

The thesis before you analyzes the Austrian postal market after liberalization of the mail segment. An observation of the mail market under strict exclusion of other postal market segments would not have been promising, since the necessary infrastructure of distinct parts within the postal market is congruent and redundant.[1]

This work consists of eight chapters. It is supposed to be understandable by readers without a university degree in economics or business, who at least have an idea of the fundamental structures of microeconomics. After the introduction, Chapter 2 explains the basics of monopolies. Chapter 3 deals with the topic of market liberalization and is followed by a chapter about the postal market's liberalization in particular. The fifth chapter delineates the legal situation, as prescribed by the EU Commission and the Austrian legislator. Chapter 6 characterizes the present situation of several liberalized postal markets in view of their youngest history. Thereby, it prepares the ground for Chapter 7, which, after commenting on the topic of abuse of dominant position, first depicts the probable and then the preferable future of Austria's market for postal services, under the supposition that the EU's directives are a given fact.[2] Finally, the conclusion wraps up the information of this thesis, to let the reader digest the key points learned before.

Keep in mind that this author does not examine the difference in effect between ex ante regulation and ex post surveillance and suggests to view both measures as distinct stages of market regulation, influencing markets in similar directions, yet not to the same extent.

You may also take notice, if you will, that no discrimination of any gender is intended if the word "he" should be encountered more often than the female counterpart "she" – or vice versa – in exemplary cases where both could have been used.

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[1] See Spulber and Yoo (2005), p. 1689.

[2] This shall not be misconstrued to mean a lack of room for criticism with regard to likely economic results of the EU's regulation. Rather it is supposed to be the Austrian legislator's view from a nonpolitical, purely economic perspective.

# 2 Theory of Monopoly

A monopoly can be defined as "*a firm that is the sole seller of a product without close substitutes*".[3] The fact that it has no competitors within its market, gives it a certain power to set prices. In a competitive market[4], when one firm raises the price of its product, it will lose customers to competitors with lower prices. A monopoly does not run into this problem. However, customers can choose to buy less or stop purchasing the product altogether. Thus, the often assumed unlimited ability of monopolies to charge outlandish prices is a myth.

## 2.1 Reasons for the Existence of Monopolies

Monopolies, per definition, can only exist if other firms are kept from entering the market. A monopoly that charges very high prices could be undercut by a new entrant to the market whose lower prices would win her the necessary customers to stay in business. However, there are three possible reasons why market entry does not occur in a steadily monopolized market:

- The monopoly owns all of a crucial resource.
- The monopoly is protected by politics.
- Natural monopoly.

### 2.1.1 Control over a Resource

Before internationalization it was easier for a single company to control whole markets. Authors of the finest textbooks have a hard time to come up with practical examples for a real monopoly of this kind. E.g., Mankiw (2001) and Varian (1999) mention DeBeers' control over diamond production,[5] even though the company is not a monopoly.

A theoretical example would be the only copper mine on an isolationist island.

[3] Mankiw (2001), p. 316.
[4] Competitive market: "*A market with many buyers and sellers trading identical products so that each buyer and seller is a price taker*" (Mankiw, 2001, p. 292).
[5] Mankiw (2001), pp. 317f.; Varian (1999), p. 429.

### 2.1.2 Governmental Protection

The standard case of monopolies is government protection. Politicians pass laws, banning competitors from entering a certain market. There are two reasons for this scenario. Either the monopoly is created and/or protected due to cronyism, or securing public welfare is the motive.[6]

A historical study of such cases is beyond the scope of this thesis, but governments have argued for centuries that postal services need to be procured by the state in order to avoid duplications of costs which arise because of the necessity to create an additional infrastructure for each company.[7] According to proponents of monopolies, such duplication would lead to high price levels. Nevertheless, the theory does not warrant governmental protection of a market. If it was true and the economy free, the market would be supplied by a natural monopoly (see Chapter 2.1.3), but competitors would retain the chance to enter, as long as they find a way to build their infrastructure efficiently and make profits. Conversely, though, governments often outlawed entry to the postal market as well as to markets of other public utilities.

### 2.1.3 Natural Monopoly

Economies of scale[8] are behind the formation of natural monopolies. This means that one large firm can produce at lower cost than several smaller firms. For this reason, monopolies' negative effects for society are also mitigated in case of a natural monopoly, because prices are kept low enough to discourage small firms' market entry. The large firm has lower cost per unit and can, therefore, make a profit at prices that would result in losses or much smaller gains for a small competitor. Many public utilities are suited as an example for this case. E.g., a community's water supply is, in most cases, best procured by a single firm, namely the first to build a network of pipes. A competitor would later have to expend the funds to build a separate network of pipes, unless an agreement can be arranged to share the existing one for a

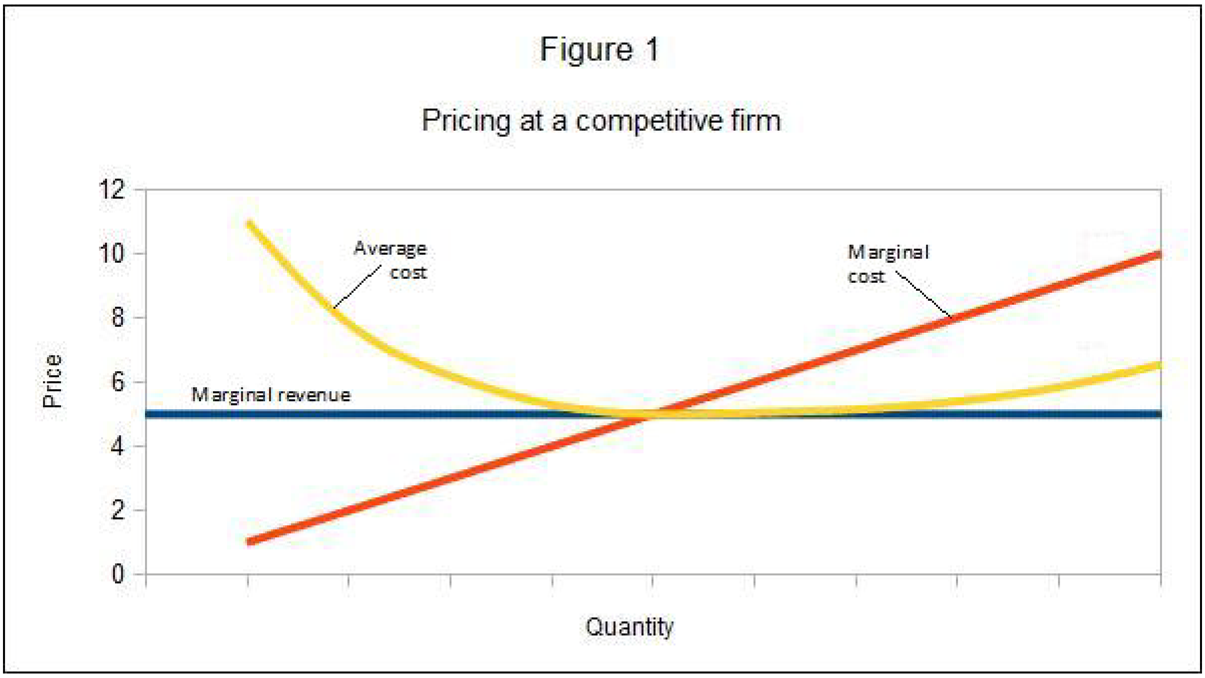
[6] Mankiw (2001), p. 318.
[7] Rasch (2009), p. 39f.
[8] Economies of scale: "*The property whereby long-run average total cost falls as the quantity of output increases*" (Mankiw, 2001, p. 284).

certain price.[9] However, without such an agreement and a lower market share than a monopolist's 100 percent, it becomes a lot harder to make the investment for the network pay off.

## 2.2 Pricing

To start with, we assume that firms in a market aim at maximizing profits. Competitive firms' approach to pricing is very different from monopolies'. The latter has market power[10] whereas the former does not.

### 2.2.1 Competitive Pricing




Resource: own illustration

Although almost perfectly competitive markets do exist (e.g., market for wheat), they are mainly a theoretical example. A competitive market is a market with many buyers and sellers where no single actor has market power. Therefore, no single actor can influence the price. Every firm has to adapt to the market level since selling at a higher price would mean the loss

[9] Cheaper solutions for a market entrant do occur in practice, but have their root in laws aimed at compelling the incumbent to share the existing network with competitors.
[10] Market power: "*The ability of a single economic actor (or small group of actors) to have a substantial influence on market prices*" (Mankiw, 2001, p. 11).

of all customers and selling at a lower price would lead to a situation where the firm produces at a negative profit.

However, what a competitive company can decide is the quantity of its output. Its demand curve is a horizontal line (identical with marginal revenue), as in Figure 1. Nothing will be demanded of its product if it raises the price above market level. Conversely, if it lowers its price, it will drop out of the market due to losses, since revenue will seize to cover cost. The market price is the price charged by all companies in the competitive market.

Notice these three equations (profit, marginal revenue, and marginal cost):[11]

$$P = TR - TC$$

$$MR = \Delta TR / \Delta Q$$

$$MC = \Delta TC / \Delta Q$$

With those equations in mind, we arrive at the conclusion that the theoretical perfectly competitive market yields no profits for the competing firms and that these firms' quantity supplied is determined by marginal revenue[12] and marginal cost[13]. This information can be gathered from Figure 1:

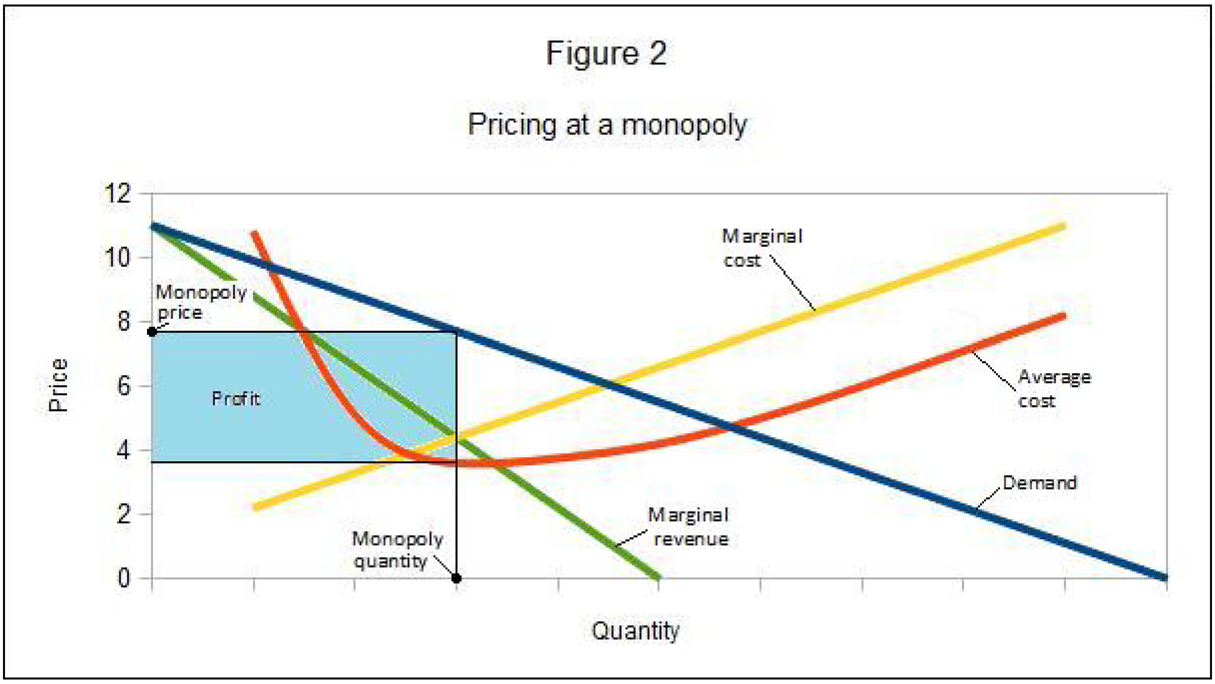
Note that firms are identical in a perfectly competitive market. We know that the horizontal demand curve depicts the price level at any given quantity sold. Since it is horizontal, it is identical with the marginal revenue curve. The marginal cost curve is the competitive firm's supply curve, because it depicts the quantity a company is willing to supply at any price.[14] Profit maximization takes place when marginal revenue equals marginal cost. In other words, if MR is smaller than MC, profit can be enhanced by producing a smaller quantity. If MR exceeds MC, profit can be increased by producing a greater quantity.

### 2.2.2 Monopoly Pricing

We have established that a competitive firm decides to produce a quantity at which marginal cost equals price, while the price is dictated by the market. Conversely, a monopoly can set the price due to its market power. It can charge a price above marginal cost. Even though

[11] E.g., Mankiw (2001), pp. 278, 295.
[12] A firm's marginal revenue: "*The change in its revenue from selling one more unit*" (Perloff, 2004, p. 352).
[13] Marginal cost: "*The increase in total cost that arises from an extra unit of production*" (Mankiw, 2001, p. 278).
[14] Mankiw (2001), p. 297.

consumers buy less at a price set by the monopolist, his profits are still higher than the competitive firm's (which are usually zero). At the corresponding quantity, marginal revenue also equals marginal cost, as in the case of a competitive firm. For a monopoly, however, the demand curve is above the marginal revenue curve. Therefore, a profit margin results at the monopoly price (see Figure 2).




Resource: own illustration, based on Mankiw (2001), Figure 15-5

A monopoly's demand curve is identical with its market's demand curve. Knowing that, the monopolist will choose a price at which profits are maximized and produce the quantity demanded at this price.

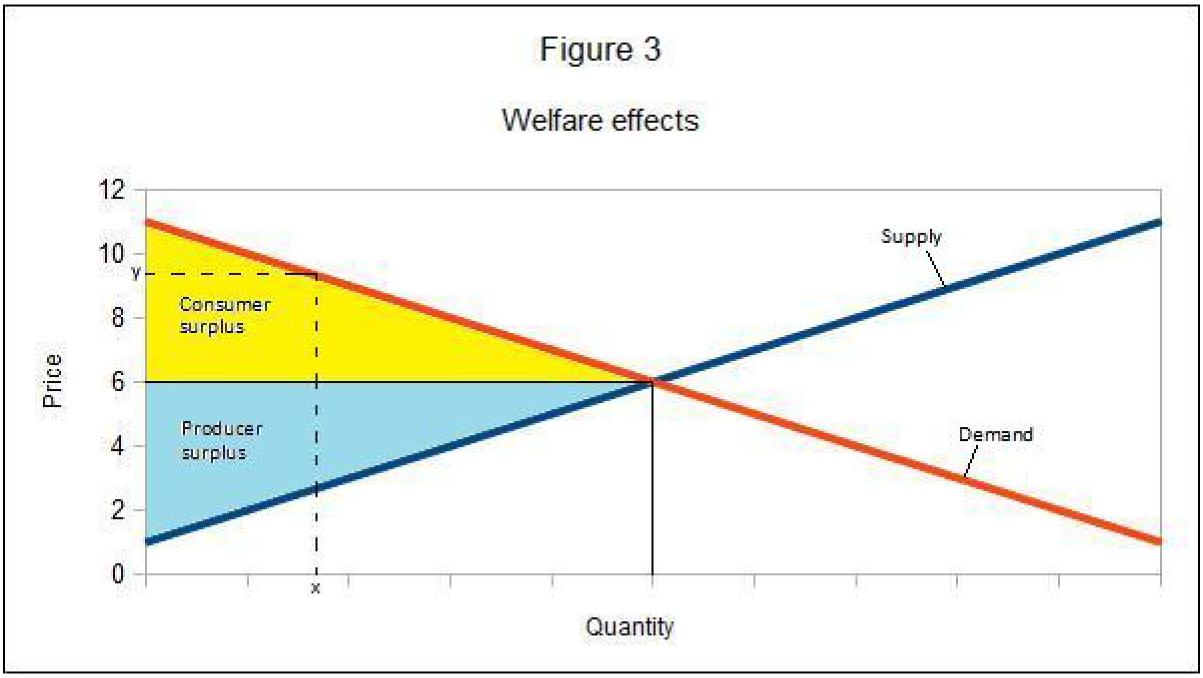
The optimal outcome for a monopoly is reached by raising the price when marginal revenue is below marginal cost, and by charging less when marginal revenue exceeds marginal cost. Thus, profit maximization again takes place when marginal revenue equals marginal cost.

# 3 Theory of Market Liberalization

Starting with a monopoly, what would society gain from market liberalization? In order to find that out, let's have a look at the microeconomic concept of measuring society's welfare or lack thereof.

## 3.1 Deadweight Loss

The perfect state of a market maximizes total welfare of actors within that market. Usually, this is the case when market forces are allowed to find the equilibrium without intervention.



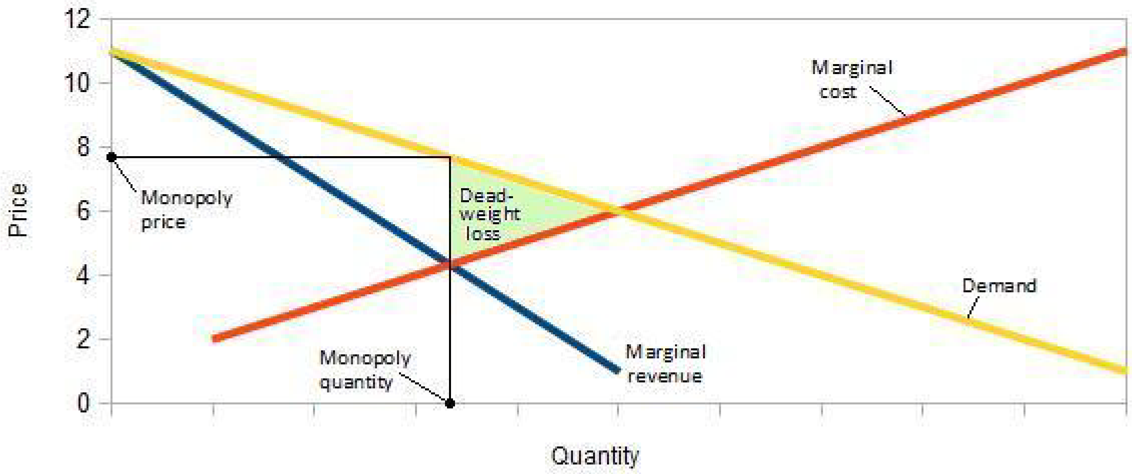

Resource: own illustration, based on Mankiw (2001), Figure 7-7

Figure 3 shows the textbook example which is normally ascribed to a competitive market. The demand curve depicts how many potential customers would actually buy the market's product at any given price. E.g., at a price of 6, those x people who would be willing to spend y or more on the good, each experience a welfare effect of y-6 by the transaction. The idea is that when you are able to obtain a good for 40, which you would be willing to pay 60 for, your welfare from the transaction would be 20. Conversely, sellers who would be able and willing to produce at a lower market price than the present one, experience a welfare effect accordingly.

However, when the market's natural equilibrium is changed, which is the case as soon as a higher price is charged than the one at the intersection of supply and demand, the combined welfare of buyers and/or sellers gets smaller. The amount of this mitigation is the market's deadweight loss.[15]

Figure 4

Deadweight loss



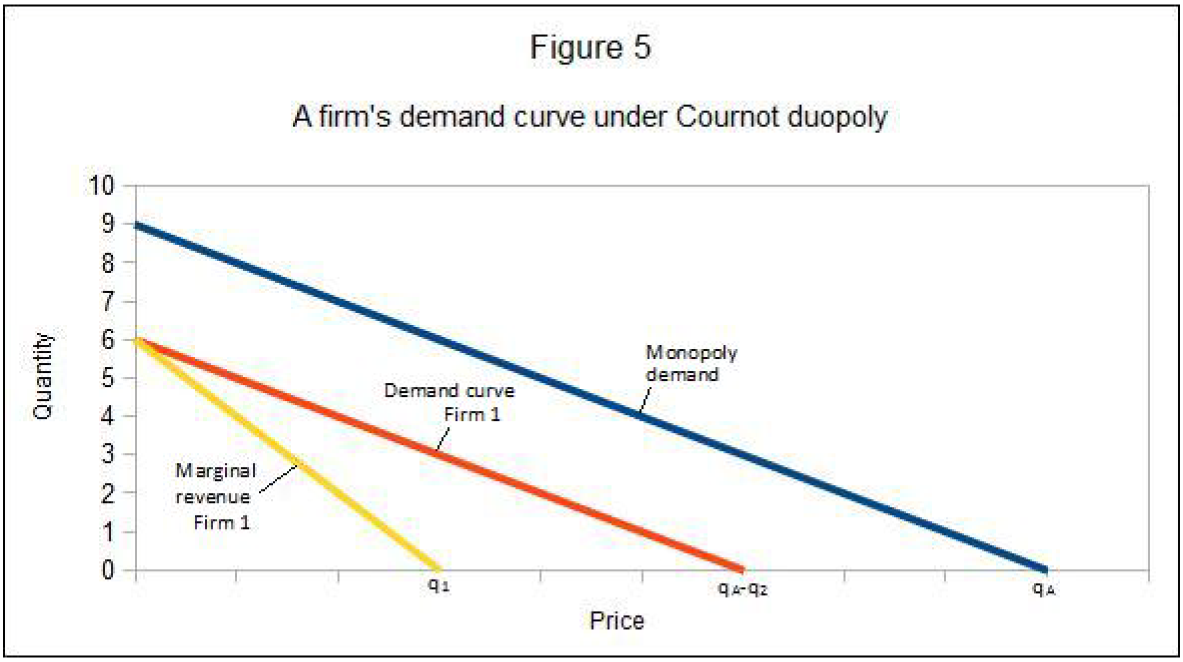

Resource: own illustration, based on Mankiw (2001), Figure 15-8

In a perfectly competitive market there is no deadweight loss. A monopoly usually causes one, as can be seen in Figure 4. The monopoly can charge a higher price than firms under competition. This leads to a lower quantity demanded and, therefore, part of the market's welfare is lost. Apart from this change, consumers lose and the producing monopolist wins welfare. The remaining consumer surplus[16] is the area below the demand curve and above monopoly price, whereas the new producer surplus[17] consists of the area above the marginal cost curve and below monopoly price (both limited by monopoly quantity on the right side of their areas in the graph). Thus, we see that the market's total welfare is lower in a monopolized market due to its deadweight loss. This does not answer the normative[18] question if a higher consumer surplus along with a lower producer surplus is better, but total welfare (both surpluses added) is regularly higher in a competitive market.

[15] Deadweight loss: "*The net reduction in welfare from a loss of surplus by one group that is not offset by a gain to another group from an action that alters a market equilibrium*" (Perloff, 2004, p. 282).
[16] Consumer surplus: "*A buyer's willingness to pay minus the amount the buyer actually pays*" (Mankiw, 2001, p. 143).
[17] Producer surplus: "*The amount a seller is paid for a good minus the seller's cost*" (Mankiw, 2001, p. 148).
[18] Normative statements: "*Claims that attempt to prescribe how the world should be*" (Mankiw, 2001, p. 29).

## 3.2 Oligopoly as Realistic Outcome

In reality, the outcome of a liberalized market is not perfect competition. Unless economies of scale prescribe a natural monopoly, monopolistic competition[19] or oligopoly[20] is the outcome. A perfectly competitive market, as stated above, is mostly a theoretical example, even though some markets for agricultural commodities and a few others come very close to being perfectly competitive.




Resource: own illustration, based on Lipsey and Chrystal (2007), Figure 9.1

The challenge for a firm in an oligopoly is to anticipate the actions and reactions of its competitors with regard to changes in price and quantity supplied. When examining such a market, the price each firm charges and the quantity each firm supplies, are of predominate interest. For simplicity's sake, let us have a look at the theoretical example of a market with two competitors. In 1838, the French mathematician Cournot[21] presented a model that would allow the economist to simulate changes in quantity supplied by two firms in an oligopoly (duopoly), under the premise that each firm expects to be able to change its quantity for profit-maximization, without inducing the competitor to do the same. Even though this

[19] Monopolistic competition: "*A market structure in which many firms sell products that are similar but not identical*" (Mankiw, 2001, p. 350).
[20] Oligopoly: "*A market structure in which only a few sellers offer similar or identical products*" (Mankiw, 2001, p. 350).
[21] Antoine Augustin Cournot (1801-1876).

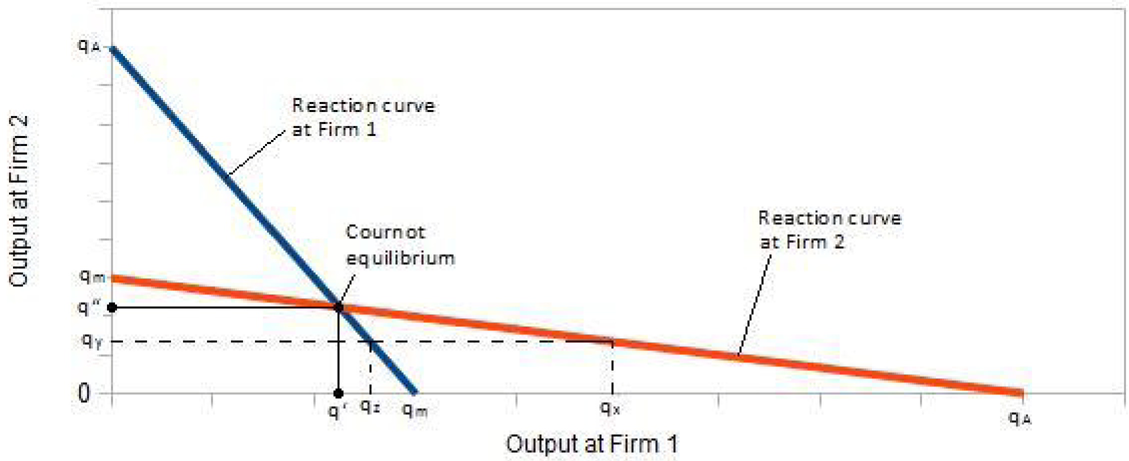
assumption turns out to be unrealistic (as long as the duopolists have not reached the Cournot equilibrium), the model proved very useful over generations and is still taught today. Further assumptions are that

- the two firms sell identical products, and that
- their marginal costs are zero.

When market demand and output of Firm 2 are known, Firm 1 can derive its demand curve by subtraction. Remembering the assumption that marginal costs are zero, marginal revenue of Firm 1 can be determined by its demand curve (see Figure 5). When Firm 2 produces $q_2$, Firm 1 maximizes its profit at an output of $q_1$ (MR=MC=0).

Figure 6

Cournot equilibrium




Resource: own illustration, based on Lipsey and Chrystal (2007), Figure 9.2

Keep in mind that for any quantity expected to be supplied by Firm 2, Firm 1 has a different set of demand, marginal cost, and optimum output. The same is true on the other side. Firm 2 also expects Firm 1 to produce a certain quantity (keeping it fixed) and has its own set of demand, marginal cost, and optimum output. When the competitor changes its output, this set changes accordingly, once more expecting the other firm to keep it fixed. Figure 6 shows both duopolists' reaction curves. These curves depict a firm's profit-maximizing output for a given quantity produced by the other firm. $q_m$ is the output that would be supplied by a monopolist in the market, since it is the quantity that would be supplied if the competitor's output would be zero. $q_a$ equals market demand, as in Figure 5. Therefore, when one firm supplies this amount, the other one can sell nothing.

After introducing those extreme points, let us see how the equilibrium is reached in between. If Firm 1 produces $q_x$, Firm 2 changes its output to $q_y$, which in turn causes Firm 1 to adapt its quantity to $q_z$. This game of reactions continues until the quantity ends up at the Cournot equilibrium. At that point, given the other firm's output, no firm will further change its quantity produced. Thus, the assumption that the competitor will keep its output fixed, is true at the equilibrium only.

Oligopolistic pricing, as pricing under monopolistic competition, leads to prices that are above marginal cost, because firms in such markets do exert some market power, but lowering the price to the level of marginal cost in order to gain a larger share of the market, would decrease their profits. On the other hand, since their combined output is higher than the amount a monopolist would produce, the resulting prices are closer to competitive ones. Therefore, welfare is usually higher and deadweight loss smaller than under a monopoly.

# 4 Liberalization of the Postal Sector

Whenever a market is opened to competition, certain topics arise that dominate discussions about pros and cons.

## 4.1 Universal Service

Societal welfare is the argument when it comes to the assignment of a universal service provider (USP), which usually is the incumbent. This firm will then ensure the availability of the most common services, because the public wants to rest assured that basic postal services are available and affordable at all times, even in remote areas.

### 4.1.1 Assignment

There are several ways to assign a USP:

- The government can choose one or multiple companies and obligate them by law to provide universal services.
- Firms may have to tender for the role.
- A country might be able to rely on market forces. I.e., without putting certain obligations on firms, they could successfully keep up a satisfactory level of prices and services while competing with each other.

At the same time, the provision of universal services must be financed. Thus, the question of corresponding net costs needs to be resolved. If the USP faces a financial burden by its obligation, compensation by other players within the market will usually be discussed.

### 4.1.2 Scope

When laws are passed to ensure a market's universal service, the scope has to be defined. E.g., high-end services are unlikely to be part of the definition of basic services. Chapter 5 informs the reader about those legal definitions for the postal market in the cases of the EU and of Austria.

### 4.1.3 Pricing

A major issue of the institution of universal services is the question of prices. Most of the time, basic classes of letters or parcels are not only expected to be affordable, but also uniformly priced across the whole territory, even though delivery to remote areas is more costly than within cities.

### 4.1.4 Quality

When a universal postal service's quality is discussed, issues include (among others)

- street letterbox coverage,
- outlet coverage,
- delivery frequency, and
- clearance frequency.

The first two concern the density of access points. By regulating these, a government can control how far the average customer has to travel in order to utilize postal services. Additionally, the offices can be obligated to provide certain services of a predefined quality.

The latter two are supposed to guarantee equal treatment for urban and rural recipients of postal items. E.g., a USP may prefer to deliver five times per week to all urban addresses, while performing delivery to remote addresses only three times per week. By establishing a fixed number of delivery and clearance days, governments can aim at minimizing disadvantages of addressees who live far off.

Runtimes are another important quality indicator.

### 4.1.5 Profitability

As mentioned above, financing of the universal service is an issue. When the government assigns companies for the role of USP, they usually aim at averting financial losses that come from the assignment. Of course, a profitable universal service is more desirable. Profitability can be expected when market forces suffice to provide it and when firms tender for the role, because if it were not so, neither would firms fulfill the expectation by themselves, nor would anyone tender, except if he errs concerning expected profits.

## 4.2 Employment

In a democracy, no discussion about a market's liberalization is likely to ever take place without voiced concerns about the employment situation. Topics that must be dealt with during a postal transformation include

- wages (especially minimum wages),
- shifts from predominantly full-time jobs to part-time jobs and marginal employment, or vice versa,
- possible technological advancements within the market that may lead to a lower need for employees (e.g., automation), and
- substitution of postal services (e.g., by phone, fax, SMS, internet and e-mail).

## 4.3 Service Quality and Price Levels

Apart from a prescribed universal service quality, the overall service quality of the market could be enhanced or worsened after liberalization. The same is true for the price level. Services could become more expensive or the opposite might be the case. This is also a source of uncertainty.

## 4.4 Distortions of Competition

During a market's liberalization, the incumbent should operate under the same conditions as competitors. Otherwise, the opening of the market is, to a certain extent, just pro forma. I.e., unfair conditions that preserve an advantageous position of the incumbent distort competition and, therefore, discourage entry.

### 4.4.1 Denied Access to Infrastructure

Should a market entrant be allowed to use parts of the incumbent's infrastructure, and if so, should such a new firm assist in the construction of networks, build its own net, or be allowed to utilize most of the existing infrastructure? The postal standard case where this question is regularly discussed, is the question of house letterboxes in multi-party-houses. Usually, the incumbent, having financed the letterboxes, has access to these installations and new entrants do not. Is there a need to grant access to the competition? What about the former monopolist's property rights and his investment? Should he be compensated? Can competitors get along without letterboxes? These are some of the questions in connection with denied access to infrastructure.

### 4.4.2 VAT Exemption

Certain services provided by postal monopolists have traditionally been exempt from VAT (value added tax), as some governmental agencies and other parties have been.[22] This means that all customers who are not able to file for reimbursement of VAT in purchased products and services, are, ceteris paribus, better off when buying from a provider who is exempt from VAT. This is the case for consumers and for other VAT exempt bodies. Only firms without exemption and those that are zero-rated for VAT need not care so much about a higher price paid due to the tax, since they will be reimbursed after their tax adjustment. However, the first group constitutes a huge pie of the postal market. Thus, a VAT exemption for certain providers qualifies as a distortion of competition.

### 4.4.3 Cross-Subsidization and Predatory Pricing

Cross-subsidization takes place when profits of one or multiple parts of a company's operative business are used to subsidize other such parts. When these profits stem from a monopoly and/or from abroad and are used to subsidize operations under competition or in another country, the question arises if this constitutes an unfair distortion of competition. The situation with predatory pricing[23] is similar. It also is conducted in order to achieve greater market power. Both scenarios can only come up when competition does not force enough pressure on the firm that applies these strategies.

[22] Postconsulting.at (2009), p. 23.

[23] Predation: *"a situation in which a large, financially powerful firm [...] reduces the price of its product to less than its cost of production. [I]n order to remain competitive [...], all firms in the market begin selling [...] at a loss. Since the large firm has greater financial resources [...], it is simply a matter of time until the victim is driven to the wall"* (Koller, 1978, p. 4).

### 4.4.4 Cream Skimming

Small firms may choose to provide postal services only within urban areas where prices can be kept low due to inexpensive operation. The USP cannot revert to such tactics, since he must deliver everywhere on the nation's territory.

## 4.5 Reciprocity

When a country liberalizes its postal market, service providers from abroad are usually allowed to enter and start competing with domestic firms, even though their own markets might remain monopolized. Therefore, the question arises if this constitutes an unfair inequality or a disadvantage for domestic companies. The idea of reciprocity is to allow entry of foreign firms whose markets are also open to entry from abroad, while at the same time denying access to companies from monopolized markets.

## 4.6 Market Regulation

Liberalization[24] and deregulation[25] are two different concepts. A liberalized market can remain heavily regulated, or, as in the case of the EU, retain the potential for heavy regulation[26].

Is licensing necessary or should the postal business be open to anyone's entry? What are the overall implications of regulation? Should regulatory authorities have more power than they already do? These are topics coming up with regard to market regulation.

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[24] Liberalization: *"Abrogation of institutional barriers to market entry"* (Rasch, 2009, p. 41).

[25] Deregulation: *"Abolition or relaxation of regulatory rules that are imposed on market participants and market newcomers"* (Rasch, 2009, p. 41).

[26] Regulation: *"Governmental interference with the market process and with competition that curtails the freedom to transact and the freedom of contract beyond general norms of a market economy"* (Rasch, 2009, p. 41).

# 5 Legal Basis for Liberalization in Austria

The following pages will outline how the European Union prescribed the opening of mail markets to member states and how Austria's legislature implemented those directives. Austria's law regarding the liberalization follows three EU directives, which were enacted to carry the idea of a single European market into the traditionally monopolized postal sector.

## 5.1 EU Directives

Momentarily, the EU's lead to change postal markets is based on the directives 97/67/EC, 2002/39/EC, and 2008/06/EC. The latter two were both built upon the first one, whereas the third made the second obsolete.

### 5.1.1 First Postal Directive (97/67/EC)

When Finland (in 1991) and Sweden (in 1993) had already liberalized their postal markets, Directive 97/67/EC abolished postal monopolies within the EU. However, member states were still allowed to grant reserved services to their incumbents, namely clearance, sorting, transport and delivery of mail weighing up to 350 grams and costing less than 500 percent of the lightest category of fastest domestic standard letters (Article 7).

This happened to protect the area of the market that is by far the most profitable. The profits from it were supposed to be available in order to cross-subsidize universal services, which were at the center of the EU's plans. These plans for universal services guaranteed the right of every citizen to access postal services. Additionally, member states had the obligation to institute compensation funds for universal service providers, in the case that the universal service obligation (USO) placed an unfair financial burden on the USP (Article 9). As stated above, the reserved area was very profitable. Thus, even though tariffs had to be affordable and geared to costs (Article 12), providing universal services was and is still a highly profitable business.

### 5.1.2 Second Postal Directive (2002/39/EC)

By January 1, 2003, the EU shrank reserved services to clearance, sorting, transport and delivery of mail weighing up to 100 grams and costing less than three times the fee of the lightest category of fastest domestic standard letters. The same directive of 2002 already included the subsequent step of January 1, 2006, to further reduce the reserved area, regarding mail weighing up to 50 grams and costing up to 250 percent of the lightest category of fastest domestic standard letters. Back then, the elimination of reserved services was supposed to be realized by January 1, 2009. This was finally postponed by the third directive.

The second directive also discouraged cross-subsidization of universal services outside the reserved sector by profits from activities within that sector (Article 12).

### 5.1.3 Third Postal Directive (2008/06/EC)

Table 1, without displaying Directive 2008/06/EC exhaustively, shows its main design, most of which was already enacted by Directive 97/67/EC. It also shows the transformation of the directive into Austrian postal law (PMG[27]). An analysis of Table 1 brings to light where Austria barely complied with the EU Commission and where it did more than demanded. When circumstances suggest the latter and it has any notable effect on the workings of a free market, you find the according passage underlined in the table below. If an EU regulation has no counterpart within Austrian law, the according box of the third column remains empty, and vice versa.

The elimination of mail monopolies was delayed until January 1, 2011, for several countries and to January 1, 2013, for the new member states and those where difficult geographical circumstances abide.

[27] Postmarktgesetz = Austrian postal market law

| Topic and resources | EU | Austria |
|---|---|---|
| Reserved services: Article 7(1) and Annex II, Articles 2(1) and 3(1) 2008/06/EC; §64(1) PMG; | After December 31, 2010, reserved services were abolished for Austria, Belgium, Denmark, Finland, France, Germany, the Netherlands, Portugal, Spain, Sweden, and United Kingdom.[28] Cyprus, Czech Republic, Greece, Latvia, Lithuania, Luxembourg, Hungary, Malta, Poland, Romania, and Slovakia[29] have to comply with Directive 2008/06/EC after December 31, 2012. Earlier implementation is permitted. | Austrian law, in compliance with Directive 2008/06/EC, abolished reserved services by December 31, 2010. |
| Universal service guarantees: Article 3(1) 2008/06/EC; §6(1) and (5) PMG; | Right of citizens to permanently access postal services of specified quality at affordable prices, at all points of a country's territory. | Affordable universal service, permanently accessible at a specified quality for everyone on Austrian soil, as part of basic services to all users. |
| Assignment of USP (a): Article 4(2) 2008/06/EC; §12(1) PMG; | Member states can assign the role of USP to one or more companies. If there is more than one USP, the assigned companies may provide different elements of the USO and/or cover different parts of the territory. | The regulatory authority can assign the role of USP to one or more companies. If there is more than one USP, these will then provide different elements of the USO and/or cover different parts of the territory. |
| Assignment of USP (b): Article 7(2) 2008/06/EC; §12(1) PMG; | Member states ensure provision of universal service by letting companies tender for the role of USP, assigning a provider by law, or determining that postal service providers will fulfill the USO through the workings of a free | ÖPAG[30] is the assigned USP. |

[28] The postal markets of Finland, Sweden, United Kingdom, Germany, Estonia, and the Netherlands were already liberalized when the directive went into effect.
[29] These are countries that either have special circumstantial problems with the realization (e.g., due to many islands or low population), or joined the EU after Directive 2002/39/EC went into effect. Of the new member states, Estonia, Bulgaria, and Slovenia relinquished their right to postpone full liberalization.
[30] Österreichische Post AG = Austrian Postal Services Inc.

| | | |
|---|---|---|
| | market, without interference. | |
| Duration of USP-assignment:<br>Article 4(2) 2008/06/EC; §12(1) PMG; | Member states review the assigned USP regularly, but the period of assignment must allow assigned companies to realize ROI[31]. | Reviewing of USP-assignment after 5 years. If other companies are capable of fulfilling the USO by then, firms can tender for the role. |
| Scope of universal service (a):<br>Article 3(4) 2008/06/EC; §6(2) PMG; | Clearance, sorting, transport and distribution of postal items weighing up to two kilograms. | Clearance, sorting, transport and distribution of postal items weighing up to two kilograms. This includes newspapers and magazines. |
| Scope of universal service (b):<br>Article 3(4) and (5) 2008/06/EC;<br>§6(2) PMG; | Clearance, sorting, transport and distribution of postal parcels weighing up to ten kilograms (may be widened to a maximum of 20 kilograms by member state), and up to 20 kilograms if the parcels were sent from other member states. | Clearance, sorting, transport and distribution of postal parcels weighing up to ten kilograms. |
| Scope of universal service (c):<br>Article 3(4) 2008/06/EC; §§6(2) and 17(1) PMG; | Services for registered and insured items. | Services for registered and insured items. |
| Density of points of contact and of access points:<br>Article 3(2) 2008/06/EC; §§6(5), 7(1)-(3), and 9(1) PMG; | The density of points of contact and of access points[32] takes account of users' needs. | The density of points of contact and of access points takes account of users' needs. This requirement is satisfied by at least 1,650 postal outlets nationwide[33], whereas 90% of inhabitants of communities with a population of at least 10,000, must have an outlet within 2,000 meters of their premises. For all other regions 10,000 meters suffice.[34] The |

[31] return on investment

[32] Access points can be post offices (run by the USP), agencies (run by third parties, contracted by USP), alternative solutions (e.g., mobile post offices and rural deliverers), or street letterboxes.

[33] §7(2) PMG: 165 of those outlets may (plus any existing outlets exceeding the requirement of 1,650), if this was already the case before December 5, 2009, continue to be opened less than 20 hours/week and/or less than 5 days/week and/or refrain from offering all universal services.

[34] Haubenberger et al. (2010) argue (p. 26) that areas which did not fulfill this newly established requirement in the past, do not need an outlet to be opened within 10,000 meters of every citizen's reach. In these cases alternative solutions (e.g., mobile post offices or rural deliverers) will legally suffice.

| | | |
|---|---|---|
| | | USP may only close down a post office, if it can rule out to run it efficiently and universal service is secured by another of the USP's own offices. In urban areas, the maximum distance from an inhabitant's premises to the next street letterbox, shall be no more than 1,000 meters. |
| Opening hours of post offices: §8(1) PMG; | | At least 20 hours on 5 working days/week.[35] |
| Available services at post offices: §8(2) PMG; | | Post offices have to offer every product or service necessary to utilize universal services.[36] |
| Frequency of clearance: Article 3(3) 2008/06/EC; §9(2) PMG; | One clearance/working day, not less than five days/week. | Clearance at least once daily, from Monday to Friday. |
| Frequency of delivery: Article 3(3) 2008/06/EC; §10 PMG; | One delivery/working day, not less than five days/week; delivery can be conducted to appropriate installations if the recipient's premises exhibit a lack of ease concerning delivery, according to member state's regulatory authority. | Delivery at least once daily, from Monday to Friday. Newspapers must be delivered on Saturdays, too. Delivery can be conducted to Landabgabekästen (LAK)[37], as far as this was already the common procedure before January 1, 2011.[38] |
| Quality standards (a): Article 16 2008/06/EC; §11 PMG; | Member states (domestic quality) and European Parliament/Council (intra-community cross-border quality) set quality standards regarding routing times and | 95% of domestic mail has to be delivered D+1[39], 98% D+2, and 100% D+4. 90% of domestic parcel items have to be delivered D+2, 100% D+5. 90% of cross-border priority |

[35] Exceptions for community run post offices are possible.
[36] Exceptions are possible for points of contact that did not already fulfill the requirement before January 1, 2011.
[37] LAK are rural disposal boxes. They serve as multi-party letterboxes at rural junctions, where deliverers can leave postal items for inhabitants of remote addresses. The concept is similar to house letterboxes of urban multi-party-houses. Using or not using over 200,000 of those (Postconsulting.at, 2009, p. 51) on Austrian soil makes a definite difference in cost for service providers, and, therefore, in consumer prices.
[38] Exceptions are possible with recipients' consent, or if delivery constitutes an undue burden.
[39] D is the date of deposit, whereas n of the expression D+n is the number of days elapsing between D and delivery.

| | | |
|---|---|---|
| | regularity/reliability of service. | mail and postal parcels leaving the EU, has to be transported out of the domestic USP's responsibility D+3. 90% of incoming cross-border priority mail and postal parcels coming from outside the EU, have to be delivered T+3[40], 97% T+5. |
| Quality standards (b): Annex II, Article 1 2008/06/EC; §11(3) and (4) PMG; | 85% of intra-community cross-border mail has to be delivered D+3, 97% D+5. | 85% of intra-community cross-border priority mail and postal parcels have to be delivered D+3, 97% D+5.[41] |
| Financing universal service: Article 7(3) and (4) 2008/06/EC; §§13(1) and 14(1) and (2) PMG; | If the USO constitutes an unfair financial burden, the USP may be compensated via public funds or by sharing the net costs of the USO between service providers and/or users. | If net costs of the USO exceed 2% of the USP's total costs, the USP has a right to receive compensation from a fund. The compensation fund is financed by postal service providers, whose annual turnover exceeds EUR 1 million. Their share of payments is relative to their market share. |
| Tariffs within universal service: Articles 11 and 12 2008/06/EC; §21(1) PMG; | Affordable, geared to costs (yet be efficient for the USP), transparent, non-discriminatory. Member states may opt for a uniform national tariff. | Affordable, geared to costs, transparent, non-discriminatory. |
| Accounting: Article 14(2) and (8) 2008/06/EC; §23(1) PMG; | The USP must keep separate accounts for services within and outside of the universal service obligation, unless universal service is secured by market forces in an already liberalized market. | The USP has to keep separate accounts for services within and outside of the universal service obligation. |
| Special privileges of USP: §12(3) PMG; | | The USP may use public spaces of up to two square meters for purposes of aiding clearance, storing, transport, and distribution of postal items. |

[40] T is the date of completed transport to the domestic USP by foreign postal services.
[41] Items within the responsibility of customs are exempt.

| | | |
|---|---|---|
| Regulatory authority:<br>Article 22 (1) and (2) 2008/06/EC;<br>§37(2) and §39(2) PMG; | At least one regulatory authority per member state is necessary. It ensures compliance with EU directives and has to be independent from service providers. | Post-Control-Kommission and Rundfunk und Telekom Regulierungs-GmbH (RTR-GmbH) are Austria's regulatory authorities. RTR-GmbH is subordinate. |
| Licensing:<br>Article 9(1) and (2) 2008/06/EC;<br>§26(1) and (2) PMG; | A license may be required for offering postal services within the scope of the USO. | A license is required for entrants into the market of postal items weighing up to 50 grams. The USP does not need any license. |
| Complaint management:<br>Article 19 (1) and (2) 2008/06/EC;<br>§§53(1) and 54 PMG; | Member states ensure the opportunity of fair settlement of disputes between users and universal service providers (outside of the court system). | Regulatory authorities ensure the possibility of fair settlement of disputes between users and postal service providers (outside of the court system). |
| Net access:<br>Article 11a 2008/06/EC;<br>§§34, 35, and §36(1) PMG; | When necessary to protect the interest of users and/or to promote effective competition, member states have to allow access to zip code systems, address databases, post office boxes, delivery boxes, information about address changes, re-direction services, and return to sender services. | Recipients or house owners have to install usable house letterboxes, otherwise recipients are not entitled to receive postal items to their premises. Until December 31, 2012, the USP has to ensure that suitable house letterboxes are installed in all multi-party-houses. The USP may request compensation for the costs of such modifications. In summary, the USP has to grant other postal service providers access to zip code system, address database, and delivery boxes. |
| Reciprocity clause:<br>Annex II, Article 3(3) 2008/06/EC; | From January 1, 2011, to December 31, 2012, member states with liberalized markets may deny companies from member states whose postal markets are not opened yet, access to the areas still protected at these entrants' home countries. | |

Table 1: Austria's implementation of the EU directives

## 5.2 Austria's Postal Law

As mentioned above, Austria's postal law of 2008 (PMG) is based on Directive 2008/06/EC. It also builds on previous domestic postal laws (e.g., PostG[42], P-UDV[43]). In other words, the country revised its legal situation in order to conform to European requirements. The PMG fully went into effect on January 1, 2011.[44]

In the past, Austria followed the three directives that led to the disappearance of reserved services by the beginning of 2011. Nowadays, the incumbent still retains almost full control of the mail market and is the major player within the area of universal services. As mentioned in Chapter 5.1.1, this area constitutes by far the most profitable sector.

Not included in Table 1, which is concerned with laws regarding universal services, are the rules of §32 PMG. Whereas the EU only regulated requirements of USPs, Austria's legislature added this article that places, amongst others, the following obligations on every postal service provider:

- Identification of deliverers and of postal items (by uniforms and signs).
- Deposit of certain postal items at a venue where recipients can retrieve them after an attempt of delivery to their premises has failed. This venue must be within an adequate distance from recipients' premises.
- Postal outlets must be opened at least 20 hours/week on five days/week.
- The density of a postal service provider's post offices must take account of users' needs.
- Postal service providers must run a complaint management.
- 90% of domestic mail must be delivered D+2, 100% D+6.
- 85% of domestic parcels must be delivered D+3, 100% D+8.

Since customers in our society can freely choose among service providers, the necessity of such obligations is open to debate, because low quality of service will lead to a lack of customers for any given company.

[42] Postgesetz = Austria's expired postal law
[43] Post-Universaldienstverordnung = Austrian legal ordinance concerning universal postal services
[44] Several passages went into effect earlier (December 5, 2009). As Haubenberger et al. (2010) point out (p. 12), those are mainly the parts concerning density of points of contact and of access points, as well as prerequisites for closing down a post office (§7 PMG).

# 6 Status Quo in Austria and Abroad

Within the EU, most countries followed the three directives without doing more steps than necessary in the direction of liberalization. Yet, some countries were ahead of time. Table 2 lists selected countries and their regulatory barriers to entry, as well as their VAT exemptions, if any, which function as distortions of competition.[45] Next to Austria, Spain, which has liberalized intra-city-mail decades ago, and all countries that underwent full market opening before January 1, 2011, are listed.

| **Country** | **Date of full liberalization** | **VAT exemptions** | **Entry barrier through regulatory requirements** |
|---|---|---|---|
| Austria | January 1, 2011 | Universal services provided by incumbent. | medium |
| Estonia | April 1, 2009[46] | Universal services (legal situation with regard to direct mail is considered unclear). | high |
| Finland | June 1, 1991 | No | high |
| Germany | January 1, 2008 | Universal services (excluding business parcels). | low |
| The Netherlands | April 1, 2009 | Letters priced at the public tariff. | low |
| Spain | January 1, 2011 | No | medium |
| Sweden | January 1, 1993 | No | medium |
| United Kingdom | January 1, 2006 | Universal services provided by incumbent. | medium |

Table 2: Selected countries and barriers to entry

It must be clearly stated that competition within the postal market is all but vivid in the EU. The Netherlands, a country with low regulatory barriers, approximates a combined mail market share of competition of 15%.[47] Full liberalization came comparably late there. Finland, the early riser of the EU, saw its incumbent regain monopoly status due to restrictive regulatory barriers. The United Kingdom effectively prohibits end-to-end competition by

[45] Resources for Table 2: Winkelmann et al. (2009a); Postconsulting.at (2009), p. 33; Input-Consulting (2009), p. 15.
[46] Estonia's postal market had been fully liberalized before in 2001, but the step was taken back in 2006.
[47] Okholm et al. (2010), p. 185.

regulation. These examples hint at the fact that without deregulation, there is no real liberty in those nominally open markets.

Austria's mail market obstructs competition as well, partly due to the regulations mentioned in Table 2, but mainly because the incumbent has exclusive access to the letterboxes of over a million Austrian households. Therefore, competition in Austria's mail market is virtually non-existent. On the other hand, Spain, a country which opened its market as late as Austria, has an accumulated mail market share of competition of approximately 10%.[48] This is comparably high and comes from the historic liberalization of intra-city-mail, which began over 100 years ago.[49] Intra-city is the natural entry model for small business. Thus, such liberalization was, to some extent, truly conducive to a free market.

Overall, however, European politics seem to protect postal monopolies on all levels. At a time of high pressure for market openings, the legal monopoly is relinquished, but the dominant firm of each country is kept in a position to exert market power. Time will bring higher market shares for entrants to several of Europe's postal markets, but the political and regulatory barriers put a limit on this temporal effect, as the example of Finland illustrates, whose liberalization took place approximately two decades ago.

[48] Winkelmann et al. (2009a), p. 141.
[49] Postconsulting.at (2009), p. 47.

# 7 Future Prospects and Suggestions

This author does not expect any authority or legislator to heed his advice or the advice of authors suggesting similar solutions.[50] Thus, the reader will find a clear distinction between expectations (Chapter 7.2) and suggestions (Chapter 7.3). There is also a difference in topics expounded on in 7.2 and 7.3. Even though some of them, like employment or pricing, are congruent, using the same subchapters within 7.2 and 7.3 would have been unsuitable and obstructive to the train of thought.

Before delving into the actual expectations and suggestions for Austria's postal market, it should be stated that this work would remain incomplete without commenting on the issue of abuse of dominant position. While adherence to EU-legislation is advocated in this work, efficiency is a goal at the heart of the suggestions in Chapter 7.3. Therefore, certain premises of European politics may appear to be criticized within these pages, but that shall not be misconstrued as a suggestion to deny EU authorities the right to make binding decisions on legal grounds. After all, many regulations implemented by the EU are supposed to go against market failure.

Market failure is a *"term describing situations in which market outcomes are not Pareto efficient. Market failures provide a rationale for government intervention. There are a number of sources of market failure. For the purposes of competition policy, the most relevant of these is the existence of market power, or the absence of perfect competition."*[51]

This definition – and it does not stray decisively from many other accepted definitions – appears problematic, because it provides a rationale for government intervention in almost every market. Perfectly competitive markets are truly rare (see Chapter 2.2.1). Thus, companies face a lack of written legal security, because judges decide on a case to case basis by *"rule of reason"*[52]. This is, overall, an unsatisfactory condition which calls for a well-defined legal standard.

[50] In a general sense (not necessarily with an emphasis on postal markets), these would mainly be representatives of the Austrian School of economics.
[51] Khemani and Shapiro (1993), p. 55.
[52] Khemani and Shapiro (1993), p. 78.

## 7.1 Abuse of Dominant Position

The OECD (Organisation for Economic Co-operation and Development) published the following definition for abuse of dominant position: *"Anticompetitive business practices in which a dominant firm may engage in order to maintain or increase its position in the market."*[53] On the same page, the OECD document states that among the contested business practices have been

- *charging unreasonable or excess prices,*
- *price discrimination,*
- *predatory pricing,*
- *price squeezing by integrated firms,*
- *refusal to deal/sell,*
- *tied selling or product bundling and*
- *preemption of facilities.*

The EU's definition of abuse of dominant position (e.g., Article 102 of the Treaty on the Functioning of the European Union) is not as broad as the OECD's complaint list above. Thus, that list shall serve as a basis for discussion.

Before explaining those grounds for plaint systematically, let it be stated that as long as no barriers to entry block new firms from market entry, a temporal monopoly would, in the long term, be unlikely to harm consumers' welfare a lot more than the present system of most markets (oligopoly with considerable barriers to entry).

### 7.1.1 Charging Unreasonable or Excess Prices

This concept is self-explanatory. To find out what price is unreasonable can be really challenging, though, when even overpricing can have reasons that are rooted in economic concepts (e.g., snob effect[54]).

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[53] Khemani and Shapiro (1993), p. 9.
[54] "*A negative network externality that refers to the decrease in each consumer's demand as more consumers buy the good*" (Besanko and Braeutigam, 2010, p. 186).

### 7.1.2 Price Discrimination

According to the OECD, price discrimination *"occurs when customers in different market segments are charged different prices for the same good or service, for reasons unrelated to costs. Price discrimination is effective only if customers cannot profitably re-sell the goods or services to other customers."*[55]

The latter sentence of the definition shows that the market power behind price discrimination can be constrained. Price discrimination can also be based on sound economic principles, namely supply and demand (e.g., geographic price discrimination).

### 7.1.3 Predatory Pricing

As stated in Chapter 4.4.3, predatory pricing takes place when a dominant firm lowers the price of a market's product under the level of production costs. Smaller firms, lacking the dominant entity's economies of scale, then also have to sell at a loss until the situation is resolved by a reinstallation of higher prices. That reinstallation possibly takes place after forced market exit of one or several smaller companies.

### 7.1.4 Price Squeezing by Integrated Firms

*"A price squeeze occurs where a dominant and integrated firm sells key inputs that it controls to its upstream competitors at high prices, and to downstream consumers at low prices, such that the upstream competitors are effectively "squeezed" out of downstream market because the high prices charged for the input make it impossible to compete in the downstream market."*[56]

An example for this would be the integrated firm's sale of rubber to competing producers of tires at an increased price, while selling its own tires to consumers at decreased prices.

[55] Khemani and Shapiro (1993), p. 68.
[56] Jacobson and Rucker (2008), p. 2.

### 7.1.5 Refusal to Deal/Sell

This concept is also self-explanatory. According to judiciary systems based on Roman law (e.g., US, Austria), individual autonomy is a right and relevant in connection with contractual freedom.[57] This means that a person or legal entity can freely choose to enter into contract with another person or legal entity. She also can freely choose not to do so. This right, however, can be neutralized by law or verdict.

### 7.1.6 Tied Selling or Product Bundling

*"Refers to situations where the sale of one good is conditioned on the purchase of another good. One variant is full-line forcing in which a seller presses or forces a complete line of products on a buyer who is predominantly interested in only a specific product."*[58]

One prominent example of tying took place in connection with the EU's Microsoft case. Microsoft tied a media player to its operating system and was sued by competitors in the market for media players. In the end, Microsoft had to offer an unbundled version of its operating system.[59]

### 7.1.7 Preemption of Facilities

Preemption of facilities takes place when *"an incumbent over-invests in capacity in order to threaten a price war if entry occurs."*[60] This implies that would-be entrants possess a certain level of knowledge about structural conditions at the preempting firm, which seems to be a realistic presupposition for the majority of relevant situations.

[57] „Freedom, from which men are called free, is a man's natural power of doing what he pleases, so far as he is not prevented by force of law" (Iustinianus, 1911; 1, III, 1).
[58] Khemani and Shapiro (1993), p. 83.
[59] Commission Decision (2007).
[60] Khemani and Shapiro (1993), p. 13.

## 7.2 Expectations

Austria's mail market will undergo a number of changes over coming years, because new entrants will try to gain a market share. The incumbent is still in full control of the mail market. Competition is only functioning in other parts of the postal market (e.g., CEP[61]).

The following subchapters depict the development of Austria's market that may be realistically expected when it comes to competition, the regulatory authority, employment, the situation of postal outlets, cost of USO, profits, pricing, and substitution.

### 7.2.1 Development of Competition

Perfect competition is not what can be expected to develop, neither on the mail market nor on the overall postal market. Nevertheless, the incumbent's market power should shrink over time, turning the market into an oligopolistic one, where welfare is higher and deadweight loss smaller than under a monopoly. The CEP market appears to be functioning that way already, as well as early morning delivery of newspapers and parts of unaddressed mail. On the other hand, domestic mail, addressed advertising, delivery of newspapers and periodicals during the day, and parts of unaddressed mail are under almost total control of ÖPAG due to their monopolized access to many house letterboxes.

The EU's third postal directive demands that competitors gain access to zip code systems, address databases, post office boxes, delivery boxes, information about address changes, re-direction services, and return to sender services (Article 11a 2008/06/EC). Austria postponed a solution to the problem of monopolized access to house letterboxes to the end of 2012. By law at least we can expect that all of the issues above be resolved by January 1, 2013.

Rasch (2009) points out three relevant factors for ease of market entry:[62]

- *Population density and degree of urbanization: The more densely populated an area is and the more people live within densely populated areas (high urbanization), the lower new market entrants' diseconomies of scale for delivery, compared to the incumbent firm – and the higher the potential for competition.*

[61] Courier Express Parcels
[62] Rasch (2009), p. 180f.

- *Postal items per capita: High volumes of postal items facilitate market entry by new firms, because then strategies of providers with lower market share can be profitably realized.*
- *Price and quality level of the incumbent: High prices charged by the established company give new service providers the chance to undercut the incumbent. This is especially true if the established firm does not conduct regional price differentiation. A low quality level permits new providers to establish themselves as quality leader.*

Thus, we should foresee competitors working their way into the mail market via large cities. Most will first gain a foothold in Vienna or one of the provincial capitals, before expanding their operations to less populated areas. The second point is also favorable in Austria. With annually more than 300 domestic letter post items per capita, the country's volumes belong into the higher category of very developed countries. Thirdly, while ÖPAG stays away from regional price differentiation, its quality level is at a high standard. Therefore, the three factors mentioned above indicate a relative ease for the development of competition. Table 3 shows Austria's high ranking in the areas of mail items per capita and quality.[63] Thereby, notice that mail items per capita correlate well with a country's overall economic status,[64] whereas quality measurements do not, because most countries' laws traditionally guarantee a certain quality level of postal services to satisfy the majority of customers.

When looking at inhibitors of competition, reputation[65] and goodwill[66] come to mind. Because incumbents have a stronger reputation and more goodwill with customers than new entrants to the market, a lower price at the same level of quality is not always enough to entice a consumer away from the former monopolist. Rasch (2009) suspects that transaction costs of 1-2% of a year's postal charges, in case of a change from one to another provider, are a minor force working against the development of competition.[67]

[63] Resources for Table 3: Winkelmann et al. (2009a); Okholm et al. (2010).
[64] E.g., domestic letter post items per capita in the year 2007 amounted to 693 in the US (Winkelmann et al., 2009a, p. 156).
[65] Reputation: *„a mechanism for the assessment of quality on markets with information problems."* (Rasch, 2009, p. 105.)
[66] Goodwill: *„the phenomenon that consumers through experience or other kind of information form a good opinion about the quality of the product or products of a supplier."* (von Weizsäcker, 1980, p. 412.)
[67] Rasch (2009), pp. 152f.

| Country | Domestic letter post items per capita (2007 or year in brackets) | Percentage of domestic priority standard mail received next day (2009) |
|---|---|---|
| Finland | 396 | 85 |
| Norway | 362 | 85 |
| Sweden | 346 | 85 |
| Netherlands | 342 | 95 |
| Luxembourg | 327 | 95 |
| United Kingdom | 326 | 93 |
| **Austria** | **305 (2008)** | **95** |
| France | 289 | 84 |
| Denmark | 279 | 93 |
| Germany | 238 | >80 |
| Slovenia | 206 | 95 |
| Iceland | 200 (2005) | 85 |
| Ireland | 154 | 94 |
| Portugal (mainland) | 110 | 94.5 |
| Malta | 106 | 92 |
| Hungary | 98 | 85 |
| Italy | 97 | 89 |
| Estonia | 86 | 90 |
| Czech Republic | 84 | 91 |
| Cyprus | 58 | 90 |
| Greece | 56 | 87 |
| Latvia | 54 (2006) | 97 |
| Poland | 50 | 82 |
| Lithuania | 30 | 85 |
| Romania | 30 | 85 |
| Bulgaria | 23 | 80 |
| Slovakia | 20 | 96 |

Table 3: Selected countries' domestic letter post items per capita, with delivery time data as a quality indicator

The sources of these costs are pinpointed to

- the necessity of reprogramming postage meters at major customers,
- the search for other, more efficient providers (including negotiations), and
- negative opportunity costs in case of an intended change away from a provider who grants quantity discounts on the volumes of a whole year.

Although these assumptions were made for the German postal market, similar effects should be expected in Austria.

Rasch (2009) further calculates that a service provider's reputation is a decision criterion for 5.8% of customers.[68] This constitutes a small but real factor to slow down the development of competition within the postal market.

Economies of scale play a lesser role in urban areas than in rural ones. Competitors can, if regulation forbids price differentiation, switch to cost differentiation by differentiating with regard to delivery time.[69] This approach, however, is restricted by legally limited delivery times.

Bear in mind that an entrant does not have to follow the strategy of covering every sub-segment of the postal market, as the USP does. New companies may have a higher chance by concentrating on, e.g., sorting only, mass mailings only, or by covering certain areas exclusively. The latter case opens a window of opportunity for another type of service provider who connects those smaller, regionally limited firms, giving them the opportunity to accept mail to areas outside of their territory of activity.

In closing this topic, if no new protective laws are passed in favor of the former monopolist, Austria's competition can start to develop next to ÖPAG within an oligopoly as soon as monopolized access to house letterboxes is a thing of the past. However, it is unclear if the incumbent's position as market leader can be disputed in the long run. This mainly depends on the question whether its VAT exempt status in the area of universal service letters (Chapter 7.3.2) will eventually be abolished.

### 7.2.2 Strong Regulatory Authority

Rasch (2009) points out that market regulation is usually justified by the attempt to avert market failure (see Chapter 7.1), and he further states that authorities are obligated to come up with a very good reason when interfering with a market by regulation.[70] The latter part of the statement cannot be observed regularly in the real world of politics and economics. Especially when bearing in mind that many markets slowly emerge from a situation of rigid governmental controls, it stands to reason that the obligation to justify interference is not taken seriously by all sides.

[68] Rasch (2009), p. 154.
[69] Rasch (2009), p. 159.
[70] Rasch (2009), p. 47f.

According to positive theory of regulation, a surplus of regulation can be observed within most or all economies for several reasons:[71]

- Political actors decide on a rational basis and aim at maximizing personal utility, just like other actors within an economy. There also exists a market for regulatory intervention, consisting of supply and demand. Small, homogeneous lobbies can achieve their goals more successfully, because by helping them, politicians can usually maximize their increase in votes. This is the case because shifting small groups' costs to the public does not lead to remarkable public resistance due to their overall insignificance.
- Lack of knowledge with regard to lost efficiency due to regulation.
- Politicians' interest in gaining more regulatory powers and larger budgets for regulatory authorities.

Most authors writing within the field[72] demand a strong hand that tells postal service providers what to do, from pricing to employment issues and much further. Many of these same authors interestingly pretend to be in favor of open markets. Even supporters of liberal markets often argue in favor of a strong regulatory authority. Below, an exemplary catalogue of demands will be quoted:[73]

- *Equipping the postal regulatory authority with sufficient personnel and financial means.*
- *Additional competence of the postal regulatory authority to actively and independently investigate sector-specific matters of competition.*
- *Clear authorization of the postal regulatory authority to access market participants' information and key figures, accompanied by market participants' obligation to produce data on request.*
- *Application procedure for all postal service providers. Authorization of the regulatory authority to perform tests in order to ensure a minimum-quality of suppliers.*
- *Application entails duties (e.g., quality standards).*
- *The minister responsible for postal matters sets the quality standards required of the USP.*

[71] Rasch (2009), pp. 51-53.
[72] E.g., FFPI (2010), Geist et al. (2008), Postconsulting.at (2009), Winkelmann et al. (2009b), to name but a few.
[73] Postconsulting.at (2009), pp. 69-71.

- *Continuous quality tests (including random controls) of all postal market participants, controlled by the postal regulatory authority, in order to be able to ensure that no quality problems arise in connection with access to house letterboxes.*
- *Effective regulation of the distinct universal service fees by the postal regulatory authority.*
- *Fees must be examined annually by the postal regulatory authority.*
- *Fees and flexible price agreements for universal services by the USP, must be announced, examined, and published in an adequate way, in order to ensure the agreements' non-discriminatory application, as well as their orientation toward the concept of avoided costs. The postal regulatory authority can demand the adaptation of fees and individual price agreements to specified levels and forbid individual price agreements in case of a failure to adapt fees.*

When reading the list above, the attempt to understand how it could have been penned by supposed supporters of liberalized markets can be challenging. The likely future regulatory authority depicted therein at least appears rather incompatible with the idea of free markets (see Chapter 7.3.10). However, liberalization and deregulation are two different concepts. For this reason, the installation of such a body can be realistically expected, at least due to a lack of resistance. The effect will be a market that indeed becomes more liberal, but where liberalization can be cut off at any time by steadily increasing regulation.

### 7.2.3 Employment

While there is no clearly identifiable trend regarding headcounts of employed postal workers within liberalized markets,[74] the number of hours of employment regularly decreases after a country's liberalization.[75] This means that many full-time jobs are eliminated and substituted for different types of part-time jobs, while total employment in time units goes down. Overall, this means lower employment costs, which is an expectable economic result, because competition leads to lower producer surpluses (see Chapter 3.1). I.e., pressure is applied on the market's companies to cut costs and optimize efficiency, which is an incentive to keep the workforce small. Flecker and Hermann (2009) expound on this fact, but wrongly criticize these natural workings of the economy:

[74] Winkelmann et al. (2009a).
[75] Winkelmann et al. (2009b), pp. 86-90.

*"Instead of improving efficiency by expanding the amount of output with a constant labour force, public-service providers in liberalised markets cut back on their staff numbers."*[76]

As in typical modern-day media coverage, they seem to fail to realize two constraints:

1. It is not economical for a company to just produce more output in order to be able to offer enough work to all of its employees. The necessary demand has to exist. Otherwise, every producer who sells a certain good with a margin, would sell as much as he can produce, with only one constraint: input of work and materials. This model would immediately lead to an unemployment rate of zero. Unfortunately, it ignores many factors of the real world.
2. Companies cannot keep unnecessary workers employed, just to be social and to do something against unemployment. This is especially true under competitive pressure. Common opinion argues that the capital is greedy, and, therefore, does not employ more workers. However, a company has limited resources, which includes capital. This has led to bankruptcy of some that did try to afford a larger workforce than necessary.[77]

Austria should expect steadily diminishing employment (in time equivalents) within the postal market, as soon as access to house letterboxes is available to competition.

### 7.2.4 Postal Outlets

Of the pre-liberalized markets, only Sweden experienced a spark in the total number of outlets. All other countries saw either stagnation or a fall from 2003 to 2007. Also significant is the fact that liberalized markets have comparably low percentages of traditional post offices. Most of the outlets there are agencies run by third parties.[78]

Answering the new law (PMG) which requires a minimum of 1,650 post offices or agencies on Austrian soil, ÖPAG had announced that it would far exceed this number. However, by February 2010, the total number of postal outlets reached the prescribed minimum. While having a third party run an agency costs ÖPAG EUR 15,000 annually, the

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[76] Flecker and Hermann (2009), p. 5.
[77] Bear also in mind that losing a job is not the end of a person's story. Layoffs can induce the affected workers to find new and modernized ways of employment. Some of them would become entrepreneurs themselves and create new jobs in a field that is up to date.
[78] Postconsulting.at (2009), pp. 54, 59.

funds needed for a post office during the same period of time add up to between EUR 60,000 and 70,000. ÖPAG still ran 1,133 own post offices as of July 2010, while the number of agencies run by third parties had risen from six in 2001 to 415 in 2009.[79]

The legal situation in Austria bears an additional incentive for the development of a higher percentage of agencies. §34 GewO[80] disenthralls businesses from any additional prerequisites or obligations. Thus, no regulatory barrier to entry exists in this case.[81]

| Country | Percentage of incumbent's post offices among outlets (end of 2009) | Percentage of agencies run by third parties among outlets (end of 2009) |
|---|---|---|
| **Austria** | **73%** | **27%** |
| Finland | 17% | 83% |
| Germany | 3% | 97% |
| The Netherlands | 21% | 79% |
| Sweden | 10% | 90% |
| United Kingdom | 3% | 97% |

Table 4: Post offices vs. agencies run by third parties in Austria and in postal markets that were liberalized before 2011

Table 4 compares Austria's ratio of the number of the incumbent's own post offices vs. agencies run by third parties to those of five early risers of full postal liberalization.[82] There cannot be much doubt that the latter type will soon represent the majority of outlets in Austria too, while the number of post offices run by the USP can be expected to decline strongly. The total number of outlets, however, will remain stable around 1,650, since this is the mandatory minimum.

### 7.2.5 Compensation for USO

No fully liberalized postal market within the EU ever needed compensation payments to help the incumbent fulfill the USO. Instead, providing universal services was profitable.[83] However, this leaves open if each operational and every geographical part of the USO is

[79] Haubenberger et al. (2010), pp. 15, 17f., 26, 41.
[80] Gewerbeordnung = Austrian trade law
[81] *„If provided by businesses, no particular authorization is needed for the provision of services within the postal system, with the exception of monetary and payment transactions."* As Haubenberger et al. (2010) point out (pp. 43, 46), in practice, a business is also allowed to conduct money deposits and disbursements, as well as cash inflows and outflows for customers, without a bank concession.
[82] Haubenberger et al. (2010), p. 42.
[83] Postconsulting.at (2009), p. 60.

profitable. Under the current system of five delivery days per week, this is highly unlikely for the most remote delivery boxes, but currently the USO remains assigned to the incumbent as a profitable whole. ÖPAG profits by it and prefers to be Austria's legally assigned USP over not being the provider of universal services. The company will not complain about costs of remote delivery. Thus, no compensation will be paid to the USP.

### 7.2.6 Pricing

From 1998 to 2009, only Germany and Italy saw decreasing price levels (see Table 5)[84]. These cannot be ascribed to an advanced state of liberalization, though, because Estonia, Finland, Sweden, the Netherlands, and United Kingdom experienced a rise during the same time.[85]

| Country | 20g priority standard letter tariff in EUR (1998) | Changes in 20g priority standard letter tariff between 1998 and 2009 | Price trend |
|---|---|---|---|
| Austria | 0.51 | 2003: 0.55 | + |
| Belgium | 0.42 | 2003: 0.49; 2004: 0.50; 2006: 0.52; 2008: 0.54; 2009: 0.59 | + |
| Finland | 0.50 | 2000: 0.59; 2001: 0.61; 2002: 0.60; 2003: 0.65; 2007: 0.70; 2009: 0.80 | + |
| France | 0.46 | 2003: 0.50; 2005: 0.53; 2007: 0.54; 2008: 0.55; 2009: 0.56 | + |
| **Germany** | **0.56** | **2003: 0.55** | **-** |
| Ireland | 0.41 | 1999: 0.38; 2002: 0.41; 2003: 0.48; 2007: 0.55 | + |
| **Italy** | **0.62** | **2004: 0.60** | **-** |
| Luxembourg | 0.39 | 1999: 0.40; 2000: 0.45; 2003: 0.50 | + |
| The Netherlands | 0.36 | 2001: 0.39; 2007: 0.44 | + |
| Portugal | 0.40 | 2000: 0.42; 2002: 0.43; 2004: 0.45; 2009: 0.47 | + |

Table 5: Analysis of price trend in selected postal markets

Rasch (2009) examines price elasticity within postal markets and reaches the conclusion that the market as a whole is rather inelastic, but that a comparably high elasticity can be observed within the segment of advertisements. This segment can, therefore, be expected to lag behind with regard to rising future prices, since competition not only applies pressure from within the

[84] Resources for Table 5: Winkelmann et al. (2009a); Okholm et al. (2010).
[85] Winkelmann et al. (2009a); Okholm et al. (2010).

postal market, but also comes from suppliers of marketing via TV, radio, newspapers, billboards, phone, and other channels.[86]

Austria's incumbent raised its prices in May 2011 (after full liberalization) the last time. E.g., the tariff for standard letters of the lightest category was increased from 55 to 62 Cent. The time of further increases will almost exclusively depend on inflation, because regulation obligates the USP to set prices geared to costs (for products within the USO). Competitors will be heavily dependent on ÖPAG's prices then, because higher prices deter customers and lower prices are very hard to attain due to the incumbent's economies of scale.

### 7.2.7 Profitability

Total profits of incumbents in fully liberalized postal markets are lower than those of mail monopolies. This seems to be different when observing the mail segment only (see Table 6)[87]. Decreasing profits are indeed a natural result of markets with a high degree of liberalization (see Chapter 2.2). The higher profits of Germany and Finland within the mail segment can be ascribed to the fact that Germany was a mail monopoly at the time the numbers for the statistics were gathered (2007) and Finland had returned to being a de facto monopoly due to harsh regulation (see Chapter 6).

Centrum für Europäische Politik (2007) mentions supportive data for the point just made.[88] In 2006, 53% of DPAG[89] profits came from the mail market, even though it constituted only 21% of the total market. A profit margin of 15.4% within the mail segment, compared to margins of 1.9% for express and 3.4% for logistics, also affirms this author's interpretation. Bear in mind that the German mail market was monopolized up to an item-weight of 50 grams back then.

Therefore, profit margins within the Austrian mail market should be expected to decrease.

[86] Rasch (2009), p. 22f. He admits, though, that this information is based on an ex-post-observation of markets before liberalization and not applicable to individual liberalized markets.
[87] Postconsulting.at (2009), p. 62.
[88] Centrum für Europäische Politik (2007), p.5.
[89] Deutsche Post AG = German Postal Services Inc.

### 7.2.8 Electronic Substitution

Royal Mail, e.g., expects plummeting of letter volumes by more than 20% between its fiscal years 2010/11 and 2015/16 due to electronic substitution.[90]

The most likely ways of electronic substitution can be subsumed under three categories:[91]

- B2B: e.g., EDI (electronic data interchange);
- B2C: e.g., direct presentments on websites, direct marketing via e-mail or SMS;[92]
- C2C: e.g., e-mail, fax, SMS;

Additional ways of substitution which are already practiced, are virtual mailboxes, electronic billing, and e-government applications.[93]

Another form of substituted mail is hybrid mail. This is a mixture of electronically substituted and traditional mail items. Such letters are sent to a postal service provider in data form, containing the intended content and the recipient's name and address. The provider then prints it out close to the addressee, envelops it, and delivers it in physical form.[94] Due to the fact that such letters are cheaper than traditional ones, the size of the market would, ceteris paribus, shrink in case of substitution of large volumes.

It remains to be seen if volumes will actually decrease. Past projections of dramatic plummeting of total mail volumes turned out to be false. One effect even works in the opposite direction: Internet users in the US and the UK receive approximately two times as much mail items as persons without internet access.[95]

Overall, a small negative effect of electronic substitution on overall volumes and total market size should be expected.

[90] Hooper (2010), p. 20.
[91] Rasch (2009), p. 24.
[92] Substitution in the area of direct marketing does not necessarily lead to lower mail volumes. Additional marketing letters and high volumes of catalogues are often sent due to electronics-based marketing.
[93] Maegli et al. (2010), p. 7.
[94] E.g., Andersson (2006), p. 69.
[95] Rasch (2009), p. 25.

## 7.3 Suggestions

Postconsulting.at (2009) argues that the fact that almost all incumbents of liberalized markets continue to hold an addressed mail market share beyond 90% is due to economies of scale, which would make entry for small firms difficult.[96] Still, the fact that competition in CEP-markets and other segments works much better is an argument against that theory. Especially since technical prerequisites for different postal market segments are not very distinct. The stronger reason for lacking competition is the legal situation. In Austria, e.g., denied access to house letterboxes, the incumbent's VAT exemption, relatively strict market regulation and further noncash benefits, legally granted to ÖPAG (see Chapter 7.3.9), constitute very good reasons for their dominant and steady market position. Other countries face not identical, but similar situations. In one way or the other, each country's legal situation protects the former monopolist's dominance.

Table 6 further strengthens this author's position, even though once again a false conclusion was drawn from the data by Postconsulting.at (2009). It was assumed that EBIT[97] of the addressed mail segment is more telling than overall EBIT and, thus, stated that profits of liberalized markets do not drop.[98] The fact of the matter is that profits of de-monopolized markets do drop. They are supposed to, as this author argued in Chapter 7.2.7. The reason why EBIT of addressed mail is still so high, is that legal situations continue to grant incumbents market power. This leads to high margins, i.e., monopolistic or oligopolistic margins (softened by the potential appearance of new entrants despite high barriers to entry).

| Country | EBIT margin (postal market) | EBIT margin (mail segment) |
|---|---|---|
| Austria | 7.0% | 19.8% |
| The Netherlands | 10.8% | 17.5% |
| Germany | 5.0% | 16.0% |
| Denmark | 7.2% | 14.4% |
| Finland | 6.0% | 10.3% |
| France | 6.2% | 7.0% |
| Sweden | 5.1% | 5.3% |
| United Kingdom | 2.5% | 2.8% |
| Italy | 10.3% | 2.0% |

Table 6: Selected countries' EBIT margin of the postal market and of the mail segment

[96] Postconsulting.at (2009), p. 64.
[97] earnings before interest and taxes
[98] Postconsulting.at (2009), p.62f.

Regulation causes minor administrative costs and further costs in connection with the legislative process. The major part of direct costs then comes from the establishment and sustentation of the regulatory authority. Indirect costs arise from a disturbance of the free market. Based on this, Rasch (2009) lists the following inhibitors of competition:[99]

- Conditions to acquiring a license (overregulation).
- USO (obligating small companies to provide universal services).
- Fiscal discrimination (VAT exemption).
- Political interference (minimum wage).

He then goes on to name three factors which facilitate the development of competition (the higher the easier):

- *Population density and level of urbanization.*
- *Absolute mail volumes and volume per capita.*
- *Level of prices and quality at the incumbent.*

Each suggestion, and the problems pointed out in the remainder of this chapter, will be connected to at least one of these points.

### 7.3.1 Access to Infrastructure

Third Party Access (TPA) is the input of postal items into the network of the established company at a point that is closer to the recipient than the point of handover by the sender.[100]

In Germany and the United Kingdom, the incumbents are obligated by law to grant competing firms and customers access to their infrastructure at a reduced fee.[101] Thus, small companies who lack a network that covers the whole German territory (or UK territory, respectively), can accept postal items to every destination. However, enforced access infringes upon property rights. Such regulation requires a good justification in a free economy. Rasch (2009) argues that TPA is justified whenever networks or parts of networks are absolutely necessary in order to reach recipients, and when these parts of networks cannot be created by competitors with adequate means.[102]

But under perfect conditions in a free market, access conditions should be freely negotiable by market participants. Perfect conditions would indicate that there is no

[99] Rasch (2009), pp. 112, 176-181.
[100] Rasch (2009), p. 78.
[101] Postconsulting.at (2009), pp. 37-41.
[102] Rasch (2009), p. 47f., 77f.

bottleneck resource under the control of one single firm. According to Knieps (2008), a monopolistic bottleneck is[103]

- indispensable for reaching customers, as far as no comparable resources exist, and
- non-duplicable by realistic investments.

Chapter 3 demonstrates how competition leads to lower market prices. Not only active competition can drive monopoly prices down. This is also true for potential competition. Bottlenecks can only exist if there is neither active nor potential competition. When there is more than one infrastructure that a service provider can choose amongst, then no bottleneck is in existence, even if the infrastructures are technologically uneven.[104]

Rasch (2009) concludes in his dissertation about TPA that postal networks do not consist of bottlenecks, that net access should not be enforced by governments, but that market participants should enjoy freedom to negotiate conditions by themselves.[105]

Although no bottleneck (because duplicability is given), a very crucial resource for postal service providers are multi-party-house letterboxes. The letterboxes of more than one million households, especially in urban areas, are not accessible by competitors of Austria's incumbent. The same problem concerns 300,000 more people in connection with rural disposal boxes (LAK).[106] As long as no solution to this disparity is realized, ÖPAG keeps a de facto monopoly on addressed mail (domestic mail, addressed advertising, delivery of newspapers and periodicals during the day) and huge parts of unaddressed mail. As mentioned above, the Austrian legislator allows a time window until the end of 2012 to eliminate the obstacle. By then, competitors' access to these letterboxes must be granted. Forced access to the incumbent's infrastructure appears to be an infringement of property rights on first glance. But this is not the case, because a solution where each competitor installs his own set of letterboxes in a multi-party-home is not in the interest of residents, and since the boxes are not ÖPAG property but belong to house owners or residents, it is understandable to see shared access as the best and most fair solution (Directive 2008/06/EC, Article 11a).

There is overall agreement in economic literature that the question whether a network resource should be made accessible to competitors by an incumbent is the question whether

[103] Knieps (2008), p. 103.
[104] Rasch (2009), p. 114.
[105] Rasch (2009), pp. 267-268, 270. Maegli et al. (2010), p. 10, point out that the road system is the only bottleneck in connection with postal services. Due to the fact that at the time of this writing, no discriminatory prohibition of road use can be anticipated, no need for regulation arises with regard to roads.
[106] Postconsulting.at (2009), p. 74.

the network resource constitutes a bottleneck.[107] After all, regulated access to the incumbent's infrastructure interferes with the market's free workings, but since the infrastructure in question is property of house owners, access to delivery boxes is properly justified. Austrian law also follows the EU's directive and grants competitors access to zip code systems and address databases. The questions whether this measure is properly justified and if there can be a more efficient alternative to sharing that data (e.g., compensating the incumbent for sharing these systems), remain open to debate.

### 7.3.2 VAT Exemption

VAT exemptions qualify as a distortion of competition (see Chapter 4.4.2). Austrian banks and governmental institutions are also VAT exempt and constitute the biggest business customers of postal services, especially of mail services. Consumers who cannot be reimbursed for VAT, also have an advantage in choosing the VAT exempt ÖPAG as their service provider. Due to a tax of 20%, these parties would encounter a disadvantage when choosing another company. This advantage of the USP concerns more than half of all postal items. Significantly, a cross-border letter handed in to the incumbent and transferred to the responsibilities of a foreign service provider, is VAT exempt, whereas the same letter handed in directly to an Austrian outlet of that foreign provider and delivered abroad would be subject to 20% Austrian VAT.[108] We see, therefore, that a de facto protection of the former monopolist still takes place here.

Another effect functions in the opposite direction: the incumbent cannot deduct input tax, which works in favor of its competitors. But this effect is much smaller than the effect of VAT on prices.

This author suggests an end to ÖPAG's VAT exempt status in order to facilitate the forming of a competitive Austrian postal market.

[107] E.g., Zenhäusern and Vaterlaus (2007), p.2, or Rasch (2009), p. 1.
[108] Postconsulting.at (2009), p. 75.

### 7.3.3 Scope of Universal Services

Austria voluntarily widened its scope of universal services to express letters, newspapers and periodicals, and mass mailings.[109] These should be excluded from the scope and the EU's legal obligation should only be fulfilled to a bare minimum. Without rules for universal service quality, functioning competition would, in the long run, propel firms to provide a service quality above the required minimum. Additional regulatory oversight of quality standards in the areas mentioned above is not necessary for the time period until functioning competition is established, because services outside of the USO are also subject to quality requirements (§32 PMG).

### 7.3.4 Assignment of USP

In Germany, no company is assigned as USP. Market forces suffice to ensure postal coverage of the whole territory and prices went down in this situation of competition, but pressure does exist for DPAG to fulfill a quasi-USO.[110] If it would not do it, another company would fill the gap. In such a situation, Germany's postal law would obligate other service providers to financially aid a company that fills the service gap. Most of that aid would have to come from the incumbent due to its high market share.

In Austria, laws would have to be changed if the USP would be disestablished (e.g., ZustG[111]). §2 ZustG rules that authorities' mail has to be delivered by the USP. More than 85% of ÖPAG profits come from universal services.[112] This shows that the USO entails a highly profitable business. A profitable business would be pursued by firms on their own in a free market. Thus, the long term goal for the Austrian postal market should be a situation where universal services are sufficiently provided by the market without an assigned USP. However, the USO's overall profitability does not ensure that all areas of the country would be sufficiently covered without such an assignment. In case of insufficient coverage, a minimum of regulation could, therefore, be applied as long as problems remain unresolved. If they turn out to remain unresolved, tendering for the USO would be the way to go (see Chapter 7.3.13).

[109] Postconsulting.at (2009), p. 52.
[110] Postconsulting.at (2009), p. 83.
[111] Zustellgesetz = Austrian postal delivery law
[112] Postconsulting.at (2009), p. 67.

### 7.3.5 Density of Access Points

Access points can be

- post offices run by the USP,
- agencies (postal outlets run by third parties), and
- street letterboxes.

The EU does not prescribe a certain density. It lets member states decide on the amount of necessary access points. This situation should be embraced. The directive demands a density in accordance to users' needs. What does that mean? This author strongly supports the idea that it should, in the long run, mean the density which would be the outcome of market forces. The Austrian legislator should, advised by the regulatory authority, remove expectations with regard to numbers and quality requirements (e.g., maximum distance to access points) and let the market rule to determine density of access points. Italy, Spain, and Sweden demonstrate that the market functions without prescribing a certain density or quality standards.[113] As in those countries, the regulatory authority must observe the market and enforce the EU's directives by preventing situations, in which inhabitants get cut off from postal services.

Closing down post offices should be allowed under the same regulatory prerequisites. An adaptation of postal law is, therefore, necessary. §3 P-UDV, which puts restrictions on plans to close down postal outlets, should be transformed into a new liberal law. Rules about opening hours and products should not be imposed on the USP. A free market can find solutions for actual demand that might remain unsatisfied (not necessarily the same demand that authorities anticipate). In addition to new solutions which arise from innovative activity, possible remedies are rural deliverers, mobile post offices, postal service points[114], or hybrid mail solutions (see Chapter 7.3.12).

In summary, density requirements should be removed in such a manner that enough time is available for new innovations to take root and for alternative solutions to postal access points to be established. The constraint is to refrain from cutting off inhabitants from postal services and comparable solutions. This warrants a certain extent of regulatory activity.

[113] Postconsulting.at (2009), p. 53.
[114] Haubenberger et al. (2010), p. 11.

### 7.3.6 Pricing

When it comes to pricing, the Austrian legislator turned the EU-directive into law, without further regulations. It calls for “affordable” prices of universal services. But as Stratil (2010) affirms, at the moment that wording effectively means whichever price the universal service provider chooses to charge.[115]

Postconsulting.at (2009) mentions that ÖPAG was able to lower costs in the area of addressed mail but did not turn these savings into lower prices. As a reason, the lack of price regulation by authorities is offered.[116] In the long run, however, functioning competition should solve the problem, as pointed out in Chapter 3.1. Under the workings of a free market, an entrant could use the incumbent’s high prices to acquire customers from him through lower prices. But momentarily, ÖPAG still has unchallenged market power, inherently granted to it by the legislator. Therefore, it is not easily feasible for a competitor to undercut the former monopolist’s price under the burden of lacking access to many customers’ letterboxes, relatively heavy regulation and the obligation to charge VAT, as opposed to ÖPAG’s VAT exempt status.

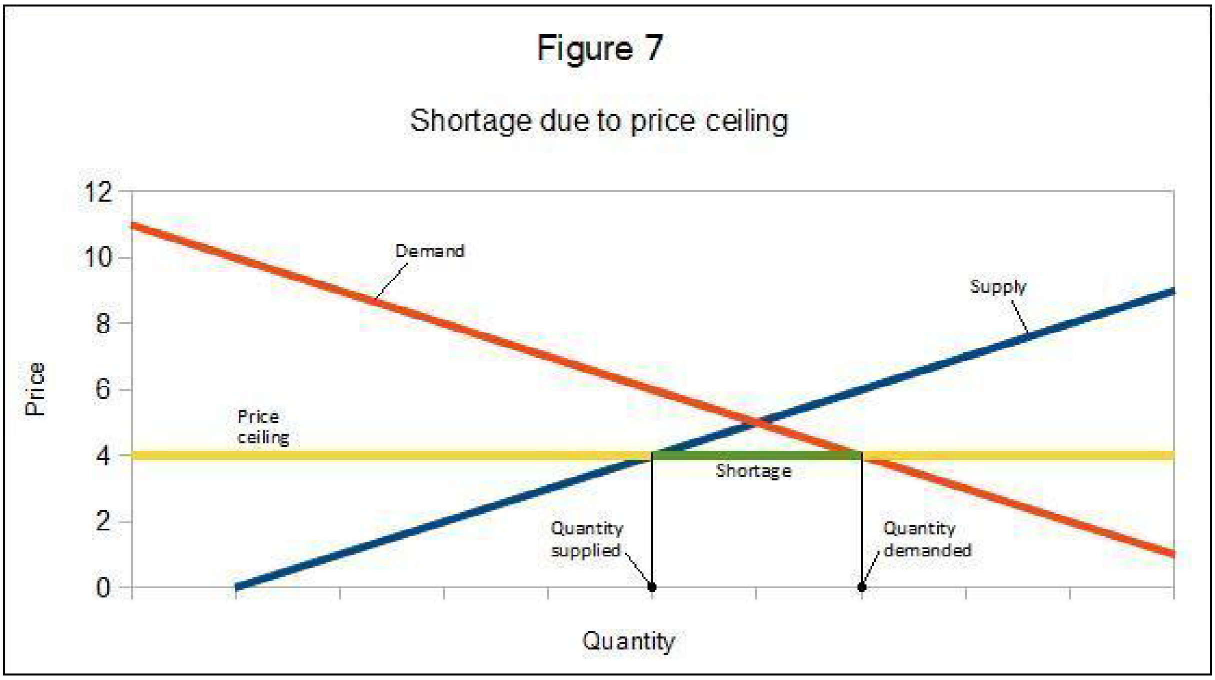
To make the market more economically sound, prices could be discriminated between urban and rural addressees. This would mean that letters sent from cities to remote locations would usually be more expensive than those staying within urban areas, simply because their delivery incurs higher costs. As unfair as that may seem at first glance, postal fees are carried by senders, and statistically, rural households receive more letters than they send, while the majority of senders of high volumes have their premises within cities.[117] Notice also that such price discrimination would not be entailed by the definition of abuse of a dominant position, since it is related to costs (see Chapter 7.1.2).

Supply and demand would also cause geographical and temporal price differences, as is the case with gasoline prices. Regulating against such fluctuations appears harmful to the overall economy. When put into practice, it regularly changes the price at which free market forces end up and causes a deadweight loss. E.g., a price ceiling would lead to a shortage in the supply of services (see Figure 7), as soon as it becomes binding, i.e., the equilibrium price

[115] Stratil (2010), p. 12.
[116] Postconsulting.at (2009), p. 67.
[117] Rasch (2009), p. 62.

lies above the maximum price. The merely theoretical event of a binding price floor would lead to a surplus, where not enough demand for the services offered in the market is available.

Nevertheless, the regulatory authority should oversee prices in the short run in order to prevent abuse of the incumbent's dominant position. Charging of unreasonable or excess prices (see Chapter 7.1.1) could take place otherwise, while monopolized access to letterboxes and VAT exempt status are still given. ÖPAG could see a motivation to prepare for a less profitable future by such an abuse.



Resource: own illustration, based on Mankiw (2001), Figure 6-3

Additionally, cream skimming and regional price differentiation should be accepted as realities of a free market. This would lead to lower prices within regions of high population density and higher prices where low population density abides.[118] Even though a natural allocation by market forces would lead to a higher total welfare, the topic remains hard to politicize.

Do rural inhabitants have a right to get financial aid from urban citizens in order to encounter the same price level? Do not have urban citizens the right to consume services at the lower prices of natural market allocation and do not have people the right to found firms that operate within a limited area by choice, in order to have a better chance of establishing themselves on the market (cream skimming)? An answer to these questions is beyond the scope of this thesis.

[118] Economies of density (Rasch, 2009, p. 190).

In closing, the suggestions for pricing within Austria's postal market were

- to conduct slightly intensified regulatory oversight of universal services' prices (which have to be geared to cost) in the short run, in order to prevent abuse of the incumbent's dominant position,
- to leave the term "affordable" from the EU's directive unspecific (i.e., as a long run goal: no price regulation apart from universal services that, according to the EU's directives, have to be geared to cost) and
- to allow cream skimming (entry opportunity for small business) and price differentiation.

### 7.3.7 Quality

The EU prescribes nationwide delivery of postal items. However, if market forces suffice to make this a reality, no single firm has to be obligated to take responsibility for territorial coverage. Additionally, expensive delivery causes upward pressure on price levels. Therefore, the opportunity to keep delivery costs low should be given to service providers by allowing them to utilize rural disposal boxes (LAK).

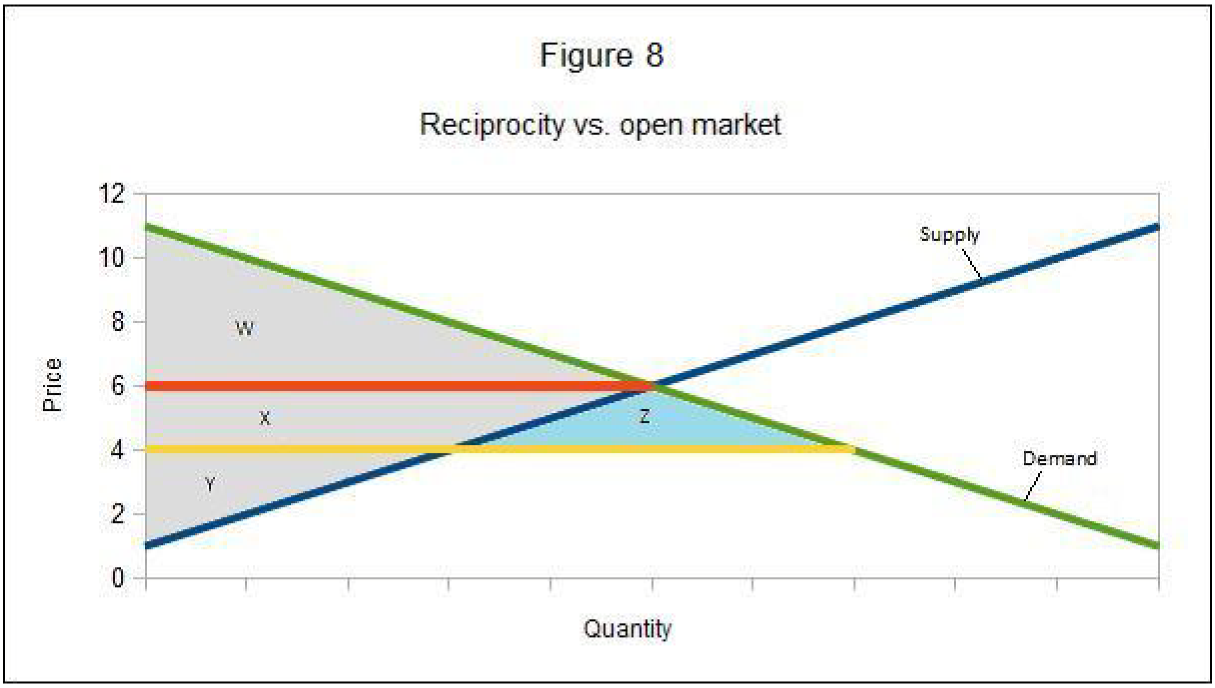
With the goal of maximum welfare, the national regulatory authority should, since the EU grants it the power, allow the USP to apply alternative solutions when it comes to delivery to areas where difficult circumstances abide (e.g., less delivery days and/or hybrid mail solutions). It should also grant delivery to LAK without much complication, whenever efficiency of service providers is at stake.

Overall, the market should be allowed to freely determine range of products and services offered at outlets, their opening hours, and delivery times. However, the regulatory authority should, as long as ÖPAG (or another company) has a dominant position in the market, remain focused on possible abuse of that dominant position, most likely in the form of refusals to deal (Chapter 7.1.5) or cases of tying (Chapter 7.1.6).

### 7.3.8 Reciprocity

Reciprocity is a concept that is easy to politicize. It appears fair to prohibit market entry of foreign firms, as long as domestic firms are kept from entering their markets. However, reciprocity decreases total welfare.

Figure 8 shows a simplified version of the issue. At a price of 6, total welfare is W+X+Y, with W being consumer surplus and X+Y being producer surplus. If entrants were able to lower the price to 4, total surplus would rise to W+X+Y+Z, whereas consumer surplus would then be W+X+Z, and producer surplus Y.



Resource: own illustration, based on Mankiw (2001), Figure 9-5

If, on the other hand, the theoretical case would come true, in which potential competitors from abroad were unable to keep up with comparably low domestic prices, they would be deterred from entering and the domestic market would remain unaffected. Therefore, opening the market leads to equal or higher total welfare and should be conducted.

### 7.3.9 Non-Discrimination

In order to enjoy the benefits of a truly free market in Austria, unfair inequalities should be removed.[119] ÖPAG is still privileged in several areas. Among them are

- VAT (see Chapter 7.3.2),
- automobile liability insurance,
- license plate registration,
- the privilege to deliver authorities‘ mail (as mentioned in Chapter 7.3.4), and
- permissions for operational facilities[120].

On the other hand, ÖPAG is subject to a disadvantageous minimum wage. This inequality should also be removed in the long run, along with those mentioned above. The question whether the minimum wage should be abolished or introduced to other market participants also, is open to debate (see Chapter 7.3.11).

### 7.3.10 Licensing

The recipient of a license for the provision of postal services will have to spend a minor amount of money to acquire the license and she will also be subject to certain duties of a license holder. Even though the effect of both is negligible in Austria, they constitute a matter of governmental interference. Such regulation needs to be justified, e.g., by being necessary to avoid market failure.[121]

§32 PMG does not contain harsh obstacles for Austrian license holders, but, e.g., Finland, the country that liberalized its market before all other European ones in 1991, lost all competition in the area of addressed mail due to strict market regulation. The reason can be found in the legal situation, which puts the USO or an alternative compensation fee upon each and every market entrant.[122] Comparably small firms, however, cannot fulfill that obligation and apart from other countries' incumbents, only comparably small firms are the potential

[119] Postconsulting.at (2009), p. 68f.
[120] An example for this type of privilege is the USP's free use of up to two square meters of public space, granted through §12(3) PMG.
[121] Rasch (2009), p. 48.
[122] This situation was changed by the EU's third postal directive. It does not allow to force the USO on every active market participant.

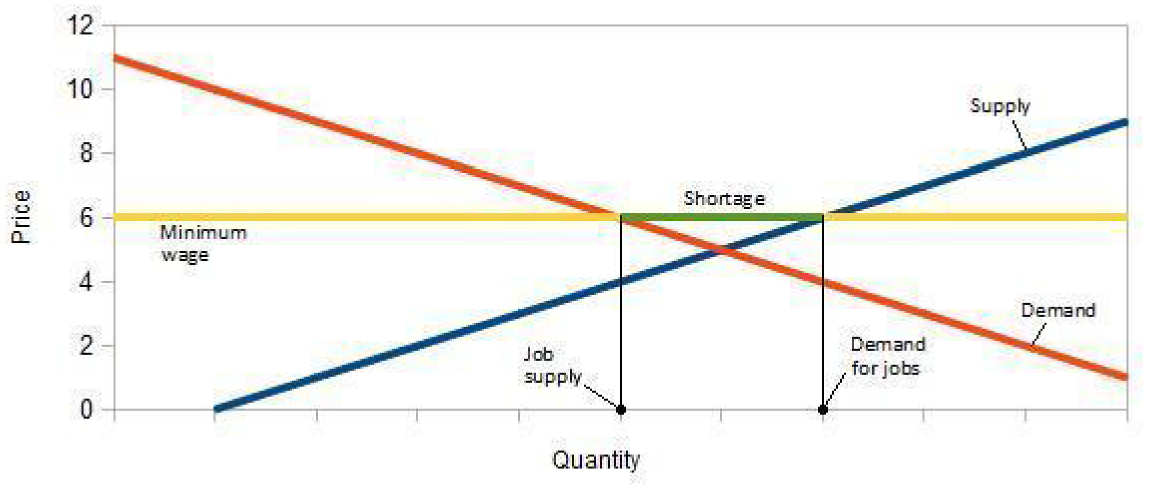
market entrants. Thus, Itella occupied 100% of the market for addressed mail again, forming a de facto monopoly, protected by the state.

This author concludes that unnecessary regulation hurts the development of competition and decreases total economic welfare. When it comes to such regulation, not only a high amount of wrong is wrong, as in Finland, but also a little wrong is wrong, as in Austria. The cost of running regulatory activities must be paid by someone. It does not matter whether the according tax burden is on taxpayers as a whole, or on postal service providers. Either way, it represents a distortion of free market forces and reduces societal welfare. At the same time, no threat of market failure seems to arise from an alleviation of licensing, because EU-requirements with regard to the USO remain intact. Therefore, licenses should not be necessary for entry into Austria's postal market.

### 7.3.11 Employment

Figure 9

Job shortage under minimum wage




Resource: own illustration, based on Mankiw (2001), Figure 6-5

A minimum wage for deliverers keeps the market from establishing a wage in line with market forces. This leads to higher consumer prices and less jobs within the postal sector. Figure 9 shows a job shortage caused by the hypothetical minimum wage of 6 within the labor market. Keep in mind that the market for work is subject to very similar forces as markets for products and services. Therefore, abolishing the minimum wage would lead to higher employment rates. However, the least searched for employees would earn less than under a minimum wage, but employees who provide better work than the average would be paid above average wages, according to their performance. Workers' negotiating skills would also be part of the equation.

Bear in mind that ÖPAG is bound to collective contracts, whereas quasi-freelancers can be employed by competitors without such contracts.[123] This is an advantage for market entrants, but ÖPAG can do the same at its daughter-companies, e.g., Feibra. Nevertheless, discriminatory legal situations should be eliminated altogether. Therefore, the question comes up whether any minimum wage should, in the long run, be removed in order to create more jobs, or if competitors should also become subject to a minimum wage. When it comes to unskilled workers, who are the main beneficiaries of minimum wages, employers do exert market power on the market for work. They are able to dictate details of labor contracts since every applicant can be quickly replaced by another person who is searching for a job and willing to accept what employers expect from the contract.

In summary, this author refrains from any specific recommendation on the policy on employment for Austria's postal market. Competitors could either become subject to the same minimum wage as is ÖPAG, or the market's minimum wages could be removed altogether. This depends on whether the legislator aims at higher employment numbers or at counteracting employers' market power on the labor market.

### 7.3.12 Number of Clearance and Delivery Days

Five days of clearance and delivery per week are the legal minimum requirement by EU directive. However, since Estonia, Spain, Italy, Montenegro, Latvia, and Lithuania offer six weekly clearance days (some of them each week, others during some weeks) without a legal obligation to do so[124], it stands to reason that this enhanced service could pay off for a postal provider. Nevertheless, the efficiency of the matter is individual for each country, and finding out whether six days of clearance or delivery would be profitable in Austria is beyond the scope of this thesis.

On the flipside, the problem of expensive last mile delivery to remote addressees can be bypassed. Hybrid solutions are already underway in Switzerland and Finland: Physical mail is delivered only twice a week at the Finnish version of the project, but on every workday,

[123] Postconsulting.at (2009), p. 81.
[124] Postconsulting.at (2009), p. 50.

recipients are notified by SMS whenever a letter arrives. The letter is then scanned immediately and the according file transmitted to them electronically. Austria and again Switzerland offer a last mile solution for receivers of parcels, too. The Austrian version gives customers the chance to assign a shop of their choice as delivery address for their parcels. All they have to do is to pick their postal items up at that shop.[125]

Therefore, in the long run, conditions around addresses that cannot be efficiently served five times per week should get defined as "circumstances or geographical conditions deemed exceptional" under Directive 2008/06/EC, Article 3 (3), in order to give firms the freedom to conduct delivery and clearance less frequently and/or to partly switch to hybrid mail and alternative last mile solutions. In the short run, however, regulatory care must be taken that inhabitants neither find themselves temporally cut off from postal services, nor feel forced to consume alternative services (e.g., hybrid mail) when they have privacy concerns or other reservations.

### 7.3.13 In Case of Market Failure

If the legislator would opt for the solution of leaving the USO to market forces, an alternative plan would be necessary to ensure universal services in case of market failure. The next alternative would be to let companies tender for the role of USP. In that case, no compensation would be necessary, because tendering firms regularly calculate the risks involved in taking over the role, but then need to fulfill the obligation, even under financial hardships. Overall, though, the USO is known to be highly profitable. So far, the early mover markets of liberalization, Finland, Sweden, United Kingdom, and Germany, also have not run into the problem of necessary compensation for any firm providing universal services. The Netherlands, the country with the most functional competition on the European market, has a ROI (before tax) of 20.3% in connection with the USO. On the other hand, Spain's USP gets subsidies of 41% of universal service costs. Italy has the only active and functioning compensation fund.[126] Such a fund is a worse solution than tendering, because it is a de facto tax on postal services.[127]

[125] Maegli et al. (2010), p. 7.
[126] Postconsulting.at (2009), p. 56.
[127] Rasch (2009), p. 61.

If a country sees no other choice but to regulate market participants' activities, at least the integrity of a market should remain untouched, instead of establishing government run companies, or even turning the market into a protected monopoly again. Brunetti and Michal (2007)[128] conclude that in case of market failure, regulation of private firms is more efficient than governmental monopolies stepping into the breach.

Overall, knowing that the free market solution is likely to leave remote regions undersupplied with regard to conventional postal services, this author believes that, in the long run, alternative solutions and new innovations by free market participants would keep remote addressees from getting cut off from services. In the actual event of market failure, tendering for the role of USP in accordance to §12(1) PMG is the recommendation for postal legislation.

[128] Brunetti and Michal (2007), p. 5.

# 8 Conclusion

This thesis explained the economic theory of monopolies and competitive markets. It clearly delineated that efficiency, as well as total societal welfare, are higher under free market competition than under government regulated monopolies. Contrary to popular belief, such welfare does not mean a shift of wealth from consumers to producers. The opposite is the case, whereas monopolies can amass financial surpluses by charging consumers higher prices than they could under competition.

From there, light was shed upon the issues of liberalizing postal markets, whereby the full liberalization of mail markets is usually the last step. The EU's and Austria's own regulatory framework for the postal liberalization were another key point of the analysis, as well as a short outline of the present situation of the markets of several countries with an advanced status of liberalization, and of Austria.

These were steps leading up to the main chapter of this work – the previous one – which expounded on the possibility of a market participant's abuse of its dominant position, on expectations concerning the Austrian mail market, and on suggestions that an economist could give to the Austrian legislator, under the assumption that the EU's directives are a given and cannot be changed through the political process. Table 7 shall serve as a short representation of the results. The analysis behind it can be found within the chapters above, especially Chapter 7.

These results cannot hide the fact that this author favors small government when it comes to healthy economics. Other schools of thought (e.g., Keynesianism) would reach different conclusions).

A recurring theme during the creation of this thesis was the scarcity of comparable data. Research yields a number of topical works about slim elements of one part of one country's market and a few consulting firms have done a good job – partly on behalf of the EU Commission – in compiling data sets of several countries, especially EU members. However, the political arena of Europe is still very scattered. Legal frameworks differ strongly from country to country and, therefore, a cause-and-effect chain identified in one country, cannot be readily applied to another one.

The same lack of comparability holds true for incumbent companies and market entrants. This offers large room for future empirical work, which could be greatly facilitated when Europe's legal situation becomes more standardized.

| Topic | Expectations (medium to long run) |
|---|---|
| Development of competition | Decreasing incumbent market share / Oligopoly |
| Powers of regulatory authority | Steady increase |
| Employment | Steady decrease |
| Number of postal outlets | Relatively stable / Less post offices, more agencies run by third parties |
| Compensation for USO | None |
| Prices | Dependent on costs |
| Profits | Decrease |
| Electronic substitution | Wider range of hybrid services / leading to slight decrease of mail volumes |
| | |
| **Topic** | **Suggestions (long run)** |
| Access to infrastructure | Grant access obeying Directive 2008/06/EC; enforced access to house letterboxes and LAK is economically sound |
| Incumbent's VAT exempt status | Abolish |
| Scope of universal services | Decrease to minimum prescribed by Directive 2008/06/EC |
| Assignment of USP | No assignment |
| Density of access points | Unregulated |
| Pricing | Unregulated / Universal services geared to cost |
| Quality | Unregulated as long as market provides minimum prescribed by Directive 2008/06/EC; regulate against abuse of dominant position |
| Reciprocity | No |
| Non-discrimination | Abolish inequalities between ÖPAG and competitors |
| Licensing | No license requirement |
| Employment | Dependent on policy: either uniform minimum wage or unregulated (no minimum wage) |
| Minimum number of clearance and delivery days | 5, according to Directive 2008/06/EC / Let market bypass regulation through alternative solutions |
| In case of market failure | Tendering for USO |

Table 7: Expectations and suggestions for Austria's postal market

# A Bibliography

Andersson, Peter (2006), *The liberalisation of postal services in Sweden – goals, results and lessons for other countries*, in: Services Liberalization in Europe: Case Studies (Vol. 1), Eidgenössisches Volkswirtschaftsdepartement EVD, Berne.

Besanko, David, Ronald R. Braeutigam (2010), *Microeconomics*, John Wiley & Sons, Inc., Hoboken, New Jersey.

Brunetti, Aymo, Sven Michal (2007), *Services Liberalization in Europe: Case Studies (Volume 1)*, Eidgenössisches Volkswirtschaftsdepartement EVD, Berne.

Centrum für Europäische Politik (2007), *Gutachten zur Aufhebung des Briefmonopols der Deutsche Post AG zum 1. Januar 2008 des Centrums für Europäische Politik*, Freiburg.

Flecker, Jörg, Christoph Hermann (2009), *How Companies React to the Liberalisation and Privatisation of Public Services*, FORBA – Working Life Research Centre, Vienna.

FFPI (2010), *White Paper on Postal Liberalisation*, The Free and Fair Post Initiative, Brussels.

Geist, Alexander, Korbinian von Blanckenburg, Andreas Hadamitzky (2008), *Die Legitimation des Briefmonopols zur Finanzierung des Universaldienstes im Briefverkehr*, Institut für Finanzwissenshaft der Universität Münster, Münster.

Haubenberger, Bernhard, Hannes Mraz, Winfried Pöcherstorfer, Martin Rosenbichler, Torsten Marx (2010), *Von der Postliberalisierung zur Post-Geschäftsstelle*, Post-Geschäftsstellenbeirat, Wien.

Hooper, Richard (2010), *Saving the Royal Mail's universal postal service in the digital age – An update of the 2008 Independent Review of the Postal Services Sector*, TSO information & publishing solutions, London.

Input-Consulting (2009), *Liberalisierung, Regulierung, Beschäftigung – Weichenstellungen im Europäischen Postsektor*, Vereinte Dienstleistungsgewerkschaft, Stuttgart.

Iustinianus, Flavius Petrus Sabbatius Augustus (1911), *Justinian, Institutes*, translated by J.B. Moyle, Oxford.

Jacobson, Jonathan M., Valentina Rucker (2008), *Whither Price Squeeze Antitrust?*, GCP – The Online Magazine for Global Competition Policy, Boston.

Khemani, R.S., D.M. Shapiro (1993), *Glossary of Industrial Organisation Economics and Competition Law*, Directorate for Financial, Fiscal and Enterprise Affairs, OECD, Paris.

Knieps, Günter (2008), *Wettbewerbsökonomie – Regulierungstheorie, Industrieökonomie, Wettbewerbspolitik*, Springer-Verlag, Berlin.

Koller, Roland H. (1978), *Predatory pricing in a market economy*, Arno Press Inc., New York.

Lipsey, Richard G., K. Alec Chrystal (2007), *Economics 11e*, Oxford University Press, Oxford.

Maegli, Martin, Christian Jaag, Martin Koller, Urs Trinkner (2010), *Postal Markets and Electronic Substitution: What is the Impact of Intermodal Competition on Regulatory Practices and Institutions?*, Swiss Economics SE AG, Zurich.

Mankiw, N. Gregory (2001), *Principles of Microeconomics*, Harcourt College Publishers, Fort Worth.

Okholm, Henrik Ballebye, Marcin Winiarczyk, Anna Möller, Claus Kastberg Nielsen (2010), *Main Developments in the Postal Sector (2008-2010) – Part B: Country Fiche Appendix*, Copenhagen Economics, Copenhagen.

Perloff, Jeffrey M. (2004), *Microeconomics*, Pearson Education, Boston.

Postconsulting.at (2009), *Post-Marktöffnung 2011 – Hintergrundinformationen & Szenarien*, Management Club Österreich, Wien.

Rasch, Benjamin (2009), *Wettbewerb durch Netzzugang? – Eine ökonomische Analyse am Beispiel des deutschen Briefmarktes*, Gabler Research, Wiesbaden.

Spulber, Daniel F., Christopher S. Yoo (2005), *On the Regulation of Networks as Complex Systems: A Graph Theory Approach*, in: Northwestern University Law Review, Vol. 99, pp. 1687-1722, Northwestern University Law School, Chicago.

Stratil, Alfred (2010), *PMG – Postmarktgesetz*, Manzsche Verlags- und Universitätsbuchhandlung, Wien.

Varian, Hal R. (1999), *Intermediate Microeconomics – A Modern Approach*, W. W. Norton & Company, New York.

von Weizsäcker, C. C. (1980), *A Welfare Analysis of Barriers to Entry*, in: The Bell Journal of Economics, Vol. 11 (No. 2), The RAND Corporation, Santa Monica, pp. 399-420.

Winkelmann, Mark, Torben Schönershoven, Eva Lauerbach, Olivia Dihel, Tim Ulrich, Antonia Niederprüm, Alex Dieke, Petra Junk (2009a), *The Evolution of the European Postal Market since 1997: Annex Country Fiches*, European Commission, Brussels.

Winkelmann, Mark, Torben Schönershoven, Eva Lauerbach, Olivia Dihel, Tim Ulrich, Antonia Niederprüm, Alex Dieke, Petra Junk (2009b), *The Evolution of the European Postal Market since 1997: Final Report*, European Commission, Brussels.

Zenhäusern, Patrick, Stephan Vaterlaus (2007), *Opening postal markets in Switzerland: Monopolistic bottlenecks, technical co-ordination, and social regulations*, in: Services Liberalization in Europe: Case Studies (Vol. 1), Eidgenössisches Volkswirtschaftsdepartement EVD, Berne.

# Law Resources

**EU:**

Commission Decision of 24 May 2004 relating to a proceeding pursuant to Article 82 of the EC Treaty and Article 54 of the EEA Agreement against Microsoft Corporation (Case COMP/C-3/37.792 – Microsoft), 2007.

Consolidated Version of the Treaty on the Functioning of the European Union, 2008.

Directive 97/67/EC of the European Parliament and of the Council, 1997.

Directive 2002/39/EC of the European Parliament and of the Council, 2002.

Directive 2008/6/EC of the European Parliament and of the Council, 2008.

**Austria:**

Gewerbeordnung (GewO), 1994.

Postmarktgesetz (PMG), 2009.

Post-Universaldienstverordnung (P-UDV), 2002.

Zustellgesetz (ZustG), 1982.

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