



***Synthesis report on liberalisation and privatisation processes
and forms of regulation***

***Varieties and Variations of Public-Service
Liberalisation and Privatisation in Europe***

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1. *VARIETIES AND VARIATIONS OF PUBLIC SERVICE LIBERALISATION AND PRIVATISATION – AN OVERVIEW*

1.1. *Introduction*

This report builds on 24 studies from four sectors – electricity, postal services, local public transport and health care – and six countries (Austria, Belgium, Germany, Sweden, Poland and the UK) completed in the first phase of the PIQUE project. The aim of this report is to compare the various developments in the different countries and sectors and develop a map of liberalisation and privatisation processes, which will help us to analyse and assess the results of the following work packages in the PIQUE project.¹

If we look at the four sectors under consideration there are certainly strong indicators for change and for convergence, but similarly striking are the continuous differences both in the structure as well as in the regulation of public services in the six countries included in our comparison. Differences already emerge if we look at the timeframe of the liberalisation and privatisation processes. In several sectors the timeframe reaches from the late 1980s to the present (an exception in this regard are postal services where liberalisation did not start before the early 1990s). In three out of the four sectors, the UK was the country where liberalisation started first, often coupled with privatisation. This may not surprise given the legacy of the Thatcher government, which profoundly changed Britain in the early 1980s. Interestingly, however, the UK was often followed by Sweden, where a conservative government ruling the country from 1991 to 1994 initiated a number of radical public-sector reforms. As a result, the UK and Sweden were typically ahead of the liberalisation time frame set by the respective European Directives (in those sectors where such Directives were adopted). Poland also experienced an early process of liberalisation due to political change in the late 1980s and the shift from a planned to a market economy. However, in Poland liberalisation and privatisation processes evolved rather slowly lagging behind rather than preceding the respective EU regulation.

In the remaining three countries – Austria, Belgium and Germany – liberalisation processes were mostly induced externally and followed more or less the time frame set by the European Union starting in the late 1990s, with reforms in electricity and postal services, with the important qualification that all three countries forged ahead in partly privatising their national postal companies after 2000. Interestingly, in the two sectors

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without an EU Directive establishing a common liberalisation roadmap, local public transport and health care, the situation was not so much different. Here, too, the UK and Sweden were running ahead of the other countries, although the reform of the Swedish health-care sector was much less radical than in the UK and Germany. In the remaining four countries, liberalisation and privatisation processes in local public transport and health care started comparably late and they are far from being completed. In the case of health care, furthermore, changes are better described as economisation, as in most countries there is hardly any competition between hospitals and only in one country was privatisation carried out systematically and at a substantial level.

1.2. Towards more competitive market structures?

Liberalisation aims at building competitive market structures, in which many providers compete with each other on an integrated and easily accessible market. Competitive market structures imply low levels of market concentration, since providers with large market shares have the possibility to build up entry barriers for new competitors by manipulating prices and the quality of services. Although in several sectors a formal liberalisation process has been initiated or completed, the evolution towards highly competitive market structures has not or only very partially been achieved in most sectors and countries studied.

1.2.1. Markets and competition

A common characteristic of public services before liberalisation was the lack of competition. Lack of competition can have many reasons. An obvious one is that the respective sector is nationalised and there is only one publicly owned provider. This, for example, was the case in three of the four sectors in Poland and the UK (in the remaining sector there were several providers but all were publicly owned) and in all six countries in postal services. Another reason is that there are a number of providers but they enjoy local or regional monopolies. This was the case in all six countries in local public transport, in Austria, Belgium, Germany and Sweden also in electricity as well as in Sweden in the hospital sector.² While bus companies in local public transport had exclusive rights to serve a particular route, in electricity it was the ownership of the regional and local distribution networks that gave companies exclusive access to customers. This is the reason why the electricity sector for many years was considered to constitute a 'natural monopoly'. In Germany, Austria and Sweden, the local monopolies in electricity markets were consolidated by voluntary or mandatory regulation. In the German case, for example, regional electricity companies were prohibited by law from expanding into each others markets. Hospitals, on the other hand, were planned to provide care for the population in a specific area and to allow

² The only exception is electricity generation in Belgium, where two companies competed for market share at national level. But here competition was heavily distorted by the fact that one of them owned more than 90 per cent of the market.

friends and relatives to visit patients during their stay in the hospital. A third reason is the prevalence of cooperation over competition.

Cooperation between different providers played a particularly important role in electricity. The best example is the Swedish ‘clubs’ in which the state-owned Vattenfallsverket cooperated with local private electricity companies. Besides these early forms of public-private partnerships, which also existed in electricity distribution and supply in Belgium and Germany, there were also public-public partnerships such as between the federally owned company responsible for generation and transmission in Austria and the regional companies operating the distribution networks and supplying end-consumers. Even after liberalisation, electricity supply is still largely based on several-year-long contracts between the different actors in the different supply-chain segments, whereas electricity spot markets play only a marginal role except for Sweden. Cooperation is also crucial in local public transport, where the various means of transport and the different providers are coordinated by local or regional transport authorities, and, of course, in the hospital sector where smaller clinics work closely together with larger general hospitals and pass on patients who need special treatment.

Linked to cooperation, a fourth reason is the need for macro-planning, which is not easily reconcilable with markets and competition. The emphasis on planning is not least the result of historic failures of ‘free’ markets and ‘free’ enterprises to provide public services at satisfactory quantities, qualities and prices. In addition, the solution promoted by markets and competition may not be sustainable or not the one which is politically desirable. The electricity sector is a case in point: The focus on one source of electricity may be efficient in terms of achieving the highest output with the lowest input, but it entails considerable risks for a country ending up being entirely dependent on one resource shipped from other and perhaps politically instable parts of the world. On the other hand, electricity generators that use renewable sources will be eliminated from the market as they cannot compete with electricity prices offered by operators of gas turbines or nuclear power plants. In fact, the contradiction between planning and market is a major challenge faced in contemporary public-service reform processes and the reason why in many cases reforms include the creation of ‘quasi-markets’ rather than real markets.

The major objective of liberalisation is indeed the establishment of markets with competition – i.e. markets where there are multiple providers competing for market shares. In electricity, the introduction of competitive markets entailed the transformation of regional markets, where local companies often held a monopoly, into national markets and in the long-run even into one integrated European-wide market. The key to creating national electricity markets was the formal break-up of the electricity supply chain and the adoption of regulation that makes sure that competing actors have access to the transmission and distribution networks (although transmission and distribution networks themselves were not exposed to competition). Yet despite the liberalisation of the electricity sector, regional boundaries continue to play a role as consumers have been reluctant to turn away from their local providers.

In contrast, postal markets have always been national. Only very recently have regional boundaries become more important as some of the new competitors offer their services only for specific regions and urban centres with a high population density (e.g. Berlin or Stockholm). On the other hand, the idea of a European-wide market for standard letters is partly contradicted by national obligations to guarantee all citizens access to postal services. This means that a European-wide provider would have to fulfil the public service obligation in all member states. In local public transport and health care, the very nature of the service precludes the establishment of national or European markets – which does not, however, exclude the emergence of European-wide providers. In both sectors there are multinational companies with growing shares in national markets. In health care, in addition, there are a small but growing number of patients who go to other countries for non-emergency treatment either because these treatments are not available at home or there are long waiting times.³ However, local public transport and health care will in one or the other way always be bound to local spaces.

While a common goal of liberalisation is to increase competition, competition can take different forms. The most widespread form is competition in the market, meaning that several providers are competing for customers. This, in turn, gives customers a choice to select between different providers which, in fact, was a major rationale behind the liberalisation of the electricity and postal sectors. In electricity and postal services, liberalisation entailed a stepwise introduction of choice as larger market segments were opened to more and more providers. In the case of electricity the largest consumers, that is the large corporations, could choose first while small businesses and households in Poland and other countries had to wait until July 2007 to switch their provider. Yet as mentioned before, the majority of private households in Europe have not switched suppliers. In postal services, in contrast, market opening was regulated by the price and weight of the consignments. Hence consumers could first choose providers if they were sending a parcel and later on heavy and therefore expensive letters. Letters weighing less than 50 grams are still exempt from competition in Austria, Belgium, Germany and Poland. While Germany is expected to lift any restrictions by 2008, the other three countries will follow by 2009 or 2011. However, in Sweden and the UK, where customers are in principle free to choose the company with which they want to send their mail, the choice is not exactly great if somebody wants to send a standard letter from Stockholm to some remote village in Lapland.⁴

An alternative form is competition for the market. Here companies compete for public contracts, which gives them an exclusive right to provide a service, although for a limited period of time. Competitive tendering or franchising, as this practice is also called, has become increasingly important in local public transport. Bus companies compete for contracts tendered by transport authorities to run bus services at particular

³ Several cases have been put forward to the European Court of Justice as the national health or insurance systems were not willing to pay for the treatment.

⁴ And even if the letter was posted with a competitor it may nevertheless be transported and delivered by the universal service provider, as competitors use the incumbent's country-wide delivery system to deliver mail to places outside their own delivery networks.

times on particular routes (whereas in the UK outside London bus companies run buses on the same routes at the same time chasing for passengers). A different form of tendering has been introduced in the British health-care system through the internal market programme, through which hospitals are forced to compete for contracts from health-care funding organisations, but health care providers are generally not disciplined by competition but by the introduction of 'global' and increasingly tight budgets and by more and more performance-based payment systems. Interestingly, competitive tendering is not applied in electricity and postal services although the operation of electricity networks could easily be tendered for in several-year-long contracts.⁵ Even power plants could be leased to private providers, as is in fact the case with nuclear power plants in Britain. Similarly, the public-service obligation in the postal sector, if the companies fulfilling the requirements received some form of compensation, could be put out to tender.

While competitive tendering has the disadvantage that it incurs high transaction costs, including costs of controlling, if contractors meet their obligations (especially since public funding organisations are forced to contract with the cheapest contractor, which is often not the most reliable one), the tendering organisation retains some ability to plan and develop supply. This is precisely why the European Commission calls it 'regulated competition'.⁶ Competition for the market also has the beneficial effect that it helps to avoid the waste of resources that accrues when different providers offer the same services (e.g. bus companies competing for passengers on highly frequented routes while stopping services on less profitable routes). This is particularly important when services are heavily subsidised, such as in local public transport or health care.

In theory, competition should enhance efficiency and service quality. Yet a specific characteristic of several public services, including postal services, local public transport and health care in our sample, is that they are labour intensive. Labour costs in these sectors make up for a large if not the major part of total production costs. In contrast to capital-intensive sectors such as electricity, the impact of new technology and organisational innovations on reducing costs is therefore limited and the reduction of labour costs instead is frequently the result of the reduction of staff numbers and cuts in wages and salaries.⁷

The result of more than a decade of liberalisation and privatisation is rarely the establishment of fully integrated and homogenous public-service markets. In addition to the aforementioned regional divisions, public-service markets are characterised by various segmentations. In the case of electricity, for example, there are four markets presenting the four value-chain segments: generation, transmission, distribution and

⁵ The Commission has recently proposed transferring network ownership to independent operators without business activities in generation and supply.

⁶ European Commission, Proposal for a Regulation of the European Parliament and of the Council on Public Passenger Transport by Rail and by Road. COM (2005) 319 final/2000/0212 (COD), Brussels 20.7.2005.

⁷ Another popular method is the streamlining of services including the sale or closing down of less profitable services, branches or outlets.

supply. The market structures differ significantly in the four market segments. There are more providers in supply than in generation while transmission and distribution networks are exclusively operated by one company (yet in several countries there are also large, integrated companies combining all three value-chain segments and thereby capturing a particular rewarding market position).

Postal services contain a market for letters (with the sub-divisions of regular mail, direct mail and newspaper delivery) and a separate one for parcels and express services.⁸ Here the division does not result from the organisation of the value chain but from the specific mode of liberalisation in which parcels and express mail were liberalised before letter markets. Hence segmentation is a result of liberalisation. A further segmentation in the postal market is created by the public-service obligation which requires one provider to make sure that all citizens have access to the postal network. It is, however, not clear yet what impact the public service obligation will have after the reserved areas will finally be lifted (in Sweden and the UK, where postal markets have been fully liberalised, there is only one company fulfilling the public service obligation which consequently has a special market position).

Additional segmentations in local public transport are imposed by the different means of transport. As a matter of fact, the strongest competitor for all providers in local public transport is the private automobile. The massive increase in private cars in the post-war decades is also responsible for the fact that local public transport in many countries is now a heavily subsidised service with the fares paid by passengers making up only for a smaller part of the total costs. Segmentations are furthermore the result of different regulations applying to different forms of transport. Railways, urban transport and small bus routes or small suppliers are exempt from the tendering obligation under certain circumstances. In hospital care, segmentations are also the result of different insurance providers as public insurance, which still makes up for the largest part of health insurances in Europe sometimes do not cover treatments in private for-profit hospitals. Conversely, some private insurance companies only pay for treatment conducted in their own private or in specially contracted hospitals.

Another form of segmentation is the creation of sub-markets through outsourcing. Of course, outsourcing is not confined to the public sector. Many companies have outsourced secondary services such as cleaning, security and IT maintenance. It is a different story, however, when essential services are contracted out to an external provider. This has increasingly been the case in local public transport where municipal transport companies have started to contract out individual routes to independent providers. Belgium stands out in this regard, as here outsourcing is applied systematically with regional bus companies themselves still enjoying regional monopolies outsourcing up to a third of their operations to independent bus companies. Outsourcing has also become an important instrument in the reorganisation of the hospital sector and now even includes diagnostic and clinical services.

⁸ Several companies have separated previously integrated letter and parcel services. Collecting, sorting and delivery are now handled by different departments and employees.

1.2.2. *Number of companies and market shares*

As a result of the existence of nationwide monopolies, Poland and the UK stand out as here there was only one national provider in electricity, postal services and hospitals. In local public transport, in contrast, there were different municipal and regional transport companies. In the remaining four countries there was also only one national provider of postal services, but in electricity, local public transport and hospitals there have always been a variety of suppliers, in many cases being regional or local monopolists. As liberalisation is intended to enhance competition, one might expect an increase in the number of providers in the newly liberalised public-service sectors. This is certainly the case in countries and sectors where there was only one provider before liberalisation. But experience shows that this is not necessarily the case, for in the other sectors liberalisation had mixed effects.

A decrease in the number of companies is particularly noticeable in sectors and countries in which regional or local monopolies were prevalent. In electricity generation, for example, the conversion of regional to national markets has led to a reduction of the number of suppliers in some countries as larger companies have bought up their smaller competitors (and the number can be expected to fall further if the objective of creating a European-wide market is ever to be met).⁹ In Germany there are now four instead of eight major generating companies. As a result of these concentration processes, the number of network transmission and distribution operators has also decreased. Even the number of companies active in supply has declined, as 200 municipal companies have disappeared from the market. In Belgium the country's largest electricity corporation also took over the retail business of some of the municipalities with which it previously had formed joint public-private companies. In Sweden, too, a number of local electricity companies, which had previously cooperated with Vattenfallsverket in the clubs, were taken over by large foreign-owned corporations, which entered the market after liberalisation.

In Sweden and the UK, furthermore, the number of bus companies providing local public transport has also decreased as a result of liberalisation, while in Austria and Germany the large number of companies in this sector is the result of the reluctance to increase competition. In fact, private Austrian bus companies fiercely oppose further liberalisation because they fear that they will then be taken over by the much larger foreign corporations. The hospital sector in several countries has also seen a significant reduction in the number of hospitals (in Belgium for as much as 70 per cent since 1981) but the closure of hospitals was the result of state-administered concentration processes and cost containment rather than of increased competition.

In other sectors and market segments, liberalisation led to an increase in the number of providers. As mentioned above, in Poland and the UK this was not difficult given the fact that there was only one provider before liberalisation. But Poland stands out as it

⁹ For some countries, statistics may show an increase in the number of generating companies but this is mainly the result of an increase in small eco-electricity producers. As these can only survive due to heavy subsidies they are not considered here as relevant competitors.

has an unusual large number of suppliers in electricity generation and several hundred independent companies have obtained a licence for electricity trading (yet there are signs that Poland is in the middle of a consolidation process which will end with a significantly reduced number of providers). Since liberalisation, there are also large numbers of providers in parcels and express services although it is sometimes not clear if they are independent companies or self-employed deliverers. The number of companies in the letter market has also increased, mostly in the sub-markets, direct mail and newspaper delivery, but to a much lesser extent than in the parcels and express mail market. In fact, so far only a few meaningful competitors have emerged to challenge the position of the former monopoly suppliers.

Even in those sectors where the number of providers has grown, this has not automatically resulted in strongly competitive market structures. Instead, in several cases although the total number of companies has increased the largest companies were at the same time able to expand their market shares in the newly liberalised markets. This was the case in electricity in Germany and Sweden, while in Austria and Belgium there were already high degrees of market concentration before liberalisation. Even in Poland and the UK, market concentration in the electricity industry is considerable. Out of the 70 British companies in the supply segment, six have a market share of more than five per cent and the three largest firms supply almost 65 per cent of electricity consumed in the UK. In the letter market, concentration has decreased but only for a few per cent. The new competitors account for between seven per cent of the market in Sweden and Germany, four per cent in the UK, two per cent in Austria and Belgium and only one per cent in Poland. Even in package and express services, the number of companies with significant market shares is limited. Instead, many of the new companies are national branches of large international express mail services. Sweden and the UK have experienced strong concentration processes in local public transport. In Sweden there are nine major bus companies left, while in Britain there are five, with three of them controlling more than 50 per cent of the market (whereas in Germany there are more than 2,000 and in Austria more than 500 independent providers in local public transport).

An interesting finding in this connection is also that the number of companies may first increase as a result of liberalisation, but with the growth of competition smaller companies are taken over by larger ones. This is precisely the experience in local public transport in Sweden. On a much smaller scale, concentration processes can also be seen in local public transport in Germany and Poland, whereas in Austria and Belgium concentration in regional transport has always been rather high. As mentioned before, concentration processes in the hospital sector were mostly administered by federal or regional governments, but countries with a rising share or role of private providers, including Germany and the UK, have also experienced mergers and acquisitions among private hospital companies. In the last decade the UK has also experienced an increase in the number of hospitals, including privately run clinics, but this was mainly due to the wave of hospital closures in the 1980s which had led to a situation of under-supply and to increasingly long waiting lists for operations.

Table 1: Evolution of market concentration

		Postal Services	Electricity	Local Public Transport
Austria	Before	Monopoly	Monopoly	Relatively high
	After	Very high	<i>Relatively high</i>	Relatively high
Belgium	Before	Monopoly	Relatively high	Monopoly
	After	Very high	Relatively high	Monopoly
Germany	Before	Monopoly	Monopoly	Relatively low
	After	<i>Relatively high</i>	Very high	Relatively low
Poland	Before	Monopoly	Monopoly	Monopoly
	After	<i>Relatively high</i>	Relatively low	Relatively low
Sweden	Before	Monopoly	Monopoly	Relatively low
	After	<i>Relatively high</i>	Very high	Relatively high
UK	Before	Monopoly	Monopoly	Monopoly
	After	<i>Relatively high</i>	Relatively low	Relatively high

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

In sum, even if liberalisation has led to the abolition of national or regional monopolies – the exception is local public transport in Belgium where there are still regional monopolies – the resulting market structures are typically characterised by very high or rather high degrees of market concentration. Hence what often happened was a shift from regional monopolies to national oligopolies. As can be seen in table 1, only in two cases in our sample did the changes actually lead to the emergence of relatively low levels of market concentration. However, in one sector liberalisation had the opposite effect, causing a shift from relatively low to relatively high levels of market concentration. A high level of market concentration, however, does not prevent there being fierce competition between several providers in certain sectors and submarkets such as in the delivery of unaddressed mail.

1.2.3. Evolution towards more competitive market structures

The number of providers and their market shares, i.e. the degree of market concentration, is only one indicator of the intensity of competition in newly liberalised public service markets. Further elements that impact on competitive market structures include the number of markets and the kind of competition (competition for or in the market), as well as the extension of customer choice. Taking into account all these elements, we developed a map of the evolution towards more competitive market structures in the countries and sectors included in this analysis. The results are presented in table 2. As we are comparing different sectors (including such diverse sectors as electricity and

local public transport) with different market structures and kinds of competition, this should be seen as a first attempt to summarise and interpret changes in public-service markets and not as the ultimate conclusion on these issues.

Table 2: Evolution towards more competitive market structures

	Austria	Belgium	Germany	Poland	Sweden	UK
Postal services – letter and direct mail market	Limited	Limited	Rather limited (fully open from 2008 onwards)	Very limited	Moderate	Rather limited
Electricity	Limited	Very limited	Limited (abolition of regional monopolies but concentration of main producers)	Strong	Moderate (high share of spot-market trading)	Strong in generation; moderate in supply
Local public transport	Limited	Very limited	Rather limited	Limited	Strong but decreasing because of more market concentration	Strong but decreasing because of more market concentration
Hospitals	Limited	Limited	Moderate	Limited	Very limited	Very limited

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

Taking the limitations of our approach into account, only a few sectors show a clear shift towards highly competitive market structures. As can be seen in table 2, Poland and the UK have highly competitive markets in electricity and the UK and Sweden in local public transport. Moderate progress towards more competitive markets was made in Sweden, the UK and Germany in postal services, in Germany and Poland in local public transport and in Sweden in electricity, but progress was rather limited, limited or very limited in the remaining sectors including all three sectors in Austria and Belgium, postal services except for Sweden and the hospital sector except for Germany.

1.3. Towards a more private ownership structure?

1.3.1. Privatisation and ownership

Public services are usually associated with public ownership. In reality, however, ownership structures are much more diverse, including public and private companies, and in the health-care sector even private not for profit providers. Before liberalisation providers in all four sectors in Poland and the UK were fully publicly owned (although in local public transport companies were often owned by local municipalities or

regional governments). The national postal services were also exclusively in public hands in the remaining four countries. Furthermore, electricity was almost exclusively public in Austria with ownership spread between the federal government, the provinces and larger municipalities, local public transport in Belgium (seven regional bus and tram providers and the national railway company) and hospitals in Sweden. In many sectors, ownership structures were mixed but with public providers having a dominant market share. This was the case in local public transport in Austria, Germany and Sweden, in the hospital sector in Austria and Germany and in the electricity sector in Sweden. The hospitals sectors in Austria, Belgium and Germany traditionally also contain a substantial share of private not-for-profit providers. Such providers include churches and charitable organisations. In contrast, public services with predominantly private ownership were relatively rare. Before liberalisation, private companies in our sample dominated only the electricity sectors in Belgium and Germany, and health in Belgium.¹⁰

Privatisation entails a shift of ownership from public to private asset holders. While European Directives on public-service liberalisation call for equal and unrestricted market access for competing companies, they do not include propositions regarding the ownership structure of public-service providers.¹¹ Hence liberalisation is not necessarily linked to privatisation and in a number of cases privatisation actually preceded liberalisation (e.g. the divestment of public shares in Germany electricity companies in the early 1980s). However, liberalisation in many countries and sectors was nevertheless coupled with privatisation. This coupling arose because governments were desperately looking for income to reduce their budget deficits or boost their surpluses or because policymakers believed that private companies were more efficient than their public counterparts and the state should no longer have a stake in a liberalised economic sector. This assumption certainly played an important role in the British public-sector reforms. Given the diverse ownership structures before liberalisation, it should not be surprising that privatisation rarely entailed a shift from an entirely publicly owned to an entirely privately owned sector. In fact, the UK was the only country in our sample that followed this rather extreme path. In electricity and local public transport, all providers are now in private hands, while the Royal Mail is still a hundred per cent publicly owned and the hospital sector is also still largely in public hands, even if some of the new hospital buildings are legally owned by private investors.

More frequently, instead, liberalisation entailed a shift from a full or predominantly public to a predominantly private ownership structure on the market. Examples are the electricity sector and local public transport in Sweden, letter mail in Germany and in several countries the parcel and express mail services. Furthermore, a number of countries have experimented with hospital privatisation, but only in Germany was this

¹⁰ In Germany, regional governments owned shares in the regional electricity companies but most of these shares were divested in the 1980s long before the start of the liberalisation process.

¹¹ A number of regulations, however, implicitly favour private providers since they do not include regulations concerning employment standards. The lack of a 'common level of playing field' advantages new competitors with a significantly younger workforce and with worse employment conditions.

policy applied systematically. As a result, the ratio of private hospitals to total hospitals increased by more than ten per cent between 1991 and 2004.¹² However, in all six countries private for-profit hospital companies only account for a minority share of the total hospital stock. The standard mail services in five of the six countries are still predominantly publicly owned (the exception is Germany where the majority shares of the incumbent has been sold to private investors), as is local public transport in four countries (exceptions are Sweden and the UK) and electricity in two countries (Austria and Poland). Austria and Poland are the only countries where public companies still play a dominant role in all four sectors, while in the other four countries at least two sectors are predominantly in public hands. Even in the privatisation-prone UK, postal services and hospitals are still mostly publicly owned.

Privatisation does not always have to include a full transfer of ownership rights. In a number of cases, instead, publicly owned companies have only been partly privatised, with the state maintaining a majority or minority share of the assets. This can take the form of selling ownership rights to a strategic partner, e.g. a foreign company active in the same sector or business segment, or through offering company shares on the stock market. While the British government typically divested public companies in initial public offerings, transferring all company shares to private investors, other countries were much more cautious. In Austria and Poland the federal or regional governments have still considerable stakes in partly privatised electricity companies. In Austria, existing legislation forbids the federal government from liquidating its majority share in the country's largest electricity generator, the Verbund Gesellschaft.

In the postal sector, only Germany has sold a majority share of the former monopoly provider, Deutsche Post, while in Austria and Belgium the state has retained half of the stakes and a majority of the voting rights in the post incumbents. Because of the importance of public services in national economies, some countries have retained all shares in state-owned companies even after markets have fully been liberalised and companies have been converted to shareholding companies. Sweden still fully owns the electricity company Vattenfall AB (the successor to Vattenfallsverket) and the post incumbent Posten AB, the UK and Poland are still in full ownership of the national postal companies and Austria and Belgium of the major local public-transport providers.

In addition to part privatisations, ownership can also be shared between the public and private sector in joint ventures or public private partnerships. Such joint ownership can be found in electricity distribution in Belgium, where the leading private electricity company until recently operated local distribution networks in cooperation with municipalities (resulting in joint public-private companies), or in local public transport in Germany, where some communities have invited the private sector to invest in their municipal transport operators. Another specific form of public-private partnerships is the British Private Finance Initiative (PFI). In the case of the London underground

¹² In Belgium public hospitals became private hospitals through wide-spread mergers but in the Belgium case private hospitals with few exceptions are private not-for-profit.

system, the infrastructure is built and maintained by several private consortia, while the underground service is run by the municipally owned London Underground. In the hospital sector, PFI contracts enable private investors to construct and maintain new hospital buildings, including the provision of cleaning, catering and security.

Independently of the ownership structure, liberalisation has caused a systematic shift in the legal form of public-service companies. While previously part of the public administration and then autonomous public companies, most of them have been converted into private-law companies (either as a holding, a joint-stock-company or a limited-liability corporation). This has happened to virtually all public companies in the electricity and postal sector, although the British Royal Mail was converted into a publicly owned private-law company as recently as 2001. Exceptions are some municipally owned transport companies in Poland with a special ownership status and the Swedish transmission operator Svenska Kraftnät, which retained the status of a governmental company. In Austria, Germany and Sweden, even some public hospitals have formally been turned into commercial corporations.

As private companies, some of the former state-owned providers have expanded their business activities into other markets segments. Electricity companies have moved into gas supply and waste management while postal service companies have invested in logistics or in those cases where they kept the postal bank into the insurance and leasing business. Some former public companies, including Deutsche Post World Net and Swedish Vattenfall have heavily invested internationally. Both companies, as a result, now earn large parts of their revenues outside of their home countries. But private German electricity companies have also diversified and internationalised their business portfolios and are now major players in European energy markets, while as a result of the same development the British and Polish electricity industries are largely foreign owned. Even in health care, the increasing role of private providers has facilitated the emergence of multinational private hospital chains.

Internationalisation processes are partly driven by the growing involvement of institutional investors such as private equity funds. Public services are not only a safe terrain for investments, but many public service sectors are also expected to grow in the future. A private equity fund has recently acquired the private Swedish healthcare multinational Capio, another has obtained a major share in La Poste/De Post in Belgium (after it had already acquired a large share of Denmark's post incumbent). As a result of concentration and internationalisation processes, ownership structures have repeatedly been changed in some of the sectors. The extreme example once again is the UK where after two major waves of mergers and acquisitions none of the companies in the electricity sector have the same operating structure as in the period following privatisation and in the early 1990s.

1.3.2. Towards a dominant private ownership structure?

Table 3 summarises changes in ownership structure in terms of market shares. A clear shift from a predominantly public to a predominantly private ownership structure took

place in the UK and Sweden in electricity and local public transport and in Germany in postal services and the hospital sector. Furthermore, a substantial increase can be found in postal services in Austria and Belgium and in electricity in Austria, Germany, Poland and Sweden. In Belgium there was also a moderate increase in private ownership in the hospital sector but this is limited to the growing share of private not-for-profit hospitals. In most of the remaining sectors, there was an increase in private ownership but with a limited effect on overall ownership structures.

Table 3: Evolution towards a dominant private-ownership structure in four sectors

	Austria	Belgium	Germany	Poland	Sweden	UK
Postal services (letter market)	Predom. public ** <i>Substantial increase</i>	Predom. public ** <i>Substantial increase</i>	Predom. Private (incumbent sold) Strong increase	Predom. Public Marginal increase	Predom. public Limited increase	Predom. public Limited increase
Electricity	Predom. public Substantial increase	Predom. private Moderate increase	Predom. private Substantial increase (conversion of Eastern Germany)	Predom. Public Substantial increase	Predom. private Substantial increase	Predom. private Very strong increase
Local public transport	Predom. public Limited increase	Predom. public Very limited increase	Predom. Public Moderate increase	Predom. public Limited increase	Predom. private Strong increase	Fully private Very strong increase
Hospitals	Predom. public* Limited increase	Predom. private* Moderate increase	Public equals private* Strong increase	Predom. public Limited increase	Predom. public Very limited increase	Predom. public Limited increase

* Large or dominant share of non profit private hospitals

** 49% of incumbent in private hands

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

Comparing market and ownership structures (table 1 with 3 and 4) it becomes clear that there is no straightforward causal relationship between private ownership and market concentration. Instead we can find high degrees of market concentration in predominantly publicly owned sectors such as local public transport in Austria and in predominantly privately owned sectors such as electricity in Belgium. In fact it is hard to detect any general patterns that could explain the differences. Obviously, market and ownership structures are influenced by the historical legacy – although sometimes there are also radical breaks in historical developments as shown by the liberalisation and privatisation campaigns in Poland and the UK. Sector-specific peculiarities also play a role, but, most importantly, outcomes are shaped by contemporary social and political struggles. As mentioned earlier, changes in government majorities have had a major impact on the timing of the liberalisation and privatisation processes. In addition, the

different ways liberalisation and privatisation was carried out by the national governments certainly had an influence on market and ownership structures.

What can nevertheless be concluded from the rather complex picture is that in the two cases in which we had a predominantly private ownership structure before liberalisation – electricity in Belgium and Germany – market concentration has further accelerated. Conversely, in the two countries with nationalised electricity industries before liberalisation – Poland and the UK – the authorities were more successful in restraining private capital interests.¹³ Another important finding is that the liberalisation processes in European public services were more successful with regard to changing ownership structures than creating competitive market structures. Whereas five out of the 24 sectors included in our sample have seen a strong or very strong increase in private ownership, only three-and-a-half sectors (the half sector being electricity supply) have shown a strong evolution towards competitive market structures.

1.4. *Forms of regulation*

Before liberalisation, public ownership was the prevalent form of regulation of public services. As shown in the previous section, out of the 24 national sectors considered in this analysis only two had a majority share of private companies and none of the sectors was entirely free of public ownership. Some of the public companies were initially part of the state administration and as such under direct control of the respective ministry. At some point all national post and telephone companies were departmental agencies with the responsibility to build and maintain the national communication infrastructure. But electricity and public transport were also considered to be crucial infrastructures and were therefore run by public servants or workers with a similar status under close supervision of federal, regional or local governments.¹⁴ Health care, too, was seen as an essential activity that could be left to private sector decision-making. It is often forgotten, but the nationalisation of public services was often the result of insufficient supply and poor quality of services that were previously provided by private companies.

¹³ In a recent European Commission Staff Working Document accompanying the legislative package on the internal market for electricity and gas (SEC (2007) 1179) the Commission assumes ownership unbundling is the main reason that explains the different market structures in the European Union. Countries with ownership unbundling, according to this conclusion, have lower market concentration and hence more intense competition in their electricity markets. Yet the evidence given by the Commission to support this assumption is rather weak. The Commission randomly selects eight countries with legal unbundling and compares them to ten countries with ownership unbundling. It furthermore takes the market share of the largest company as indicator. This already shows that in seven out of the ten countries with legal unbundling the largest company still accounts for more than 50 per cent of the market. If it were to take the market share of the three largest companies, the picture would change insofar as in number of countries with ownership unbundling market concentration would also reach more than 80 or 90 per cent. Yet the table also shows that Poland and Sweden stand out as the countries with the lowest market concentration.

¹⁴ As a result, workers in these sectors were sometimes required to have national citizenship, which meant that the sectors were not accessible for migrant labour.

In addition, there has always been a tension between public-service planning and market-directed service delivery. As company owner, the state not only controlled planning and investment activities, but also prices and service quality and by expanding supply it could make sure that all citizens, even those living in poor and remote areas, had access to the respective services. This does not mean, however, that states always lived up to their responsibilities. State ownership did not prevent public services from being under-funded and of poor quality. Changes in price systems were also often tied to the election cycle rather than reflecting long-term calculations. State-ownership, furthermore, was not the only form of control. While in the Swedish electricity industry the state exerted considerable influence over the private sector through the creation of voluntary clubs in which the state-owned Vattenfallsverket oversaw private electricity companies, in other countries and sectors with a significant share of private ownership the state heavily intervened by adopting sector-specific legislation. Such legislation enabled governments to oversee investment plans, coordinate and secure supply, approve prices and sometimes even to impose social regulations such as in Belgium where electricity suppliers were prohibited from cutting off households' electricity during the winter.

In the Belgium and German electricity sectors, which are the only sectors in our sample with predominantly private ownership before liberalisation, electricity companies were obliged to submit investment plans for approval to the federal or regional governments. In Belgium, furthermore, electricity prices were approved by the Control Committee for Electricity and Gas, an independent body composed of representatives from the electricity and gas industry, trade unions and national and regional governments. In Germany, prices for small companies and households were confirmed by specific Energy Supervision Boards, while those for industrial companies were controlled by the anti-trust authorities of the federal states. Prices were approved ex-post reflecting production costs plus a modest premium. Prices did not reflect supply and demand and they were intended to prevent the accumulation of large profits resulting from the exploitation of regional monopolies or national oligopolies. On the other hand, there were few incentives for public or private providers to reduce production costs (as described below, the shift from ex-post to ex-ante price regulation shows how such incentives can be created without introducing competition). In Austria electricity prices had to be approved by a social-partner committee, which subsequently favoured households and small businesses over large industrial firms (one of the immediate results of liberalisation was that prices for households and small businesses increased).

In other sectors, prices were even more influenced by social concerns. In postal services, for example, standard letter mail was cross-subsidised by the telephone business and if cross-subsidising did not cover the losses of the mail section additional resources were provided from public funds. In Austria cross-subsidising also benefited the postal company's own regional bus transport service. After liberalisation, the absence of cross-subsidies had to be covered by the municipalities and regional governments. Fares in local public transport were generally heavily subsidised and in the more developed systems included a flat-rate ticket valid for all transport providers in

a certain city or region. Health care, on the other hand, was entirely financed through taxes or mandatory insurance contributions, both incorporating some form redistribution between richer and poorer citizens and was subsequently free at the point of delivery. Subsidies, more generally, were another important form of regulation, as those who received subsidies had to adhere to specific rules. In the hospital sector, for example, hospitals that received public funding in several countries had to accept every patient while, exclusively privately financed institutions could select their customers. In sum, regulation before liberalisation and privatisation was rather all-embracing, covering the entire process of service provision, from planning and investment to consumer prices.

1.4.1. From state ownership to enabling competition

Liberalisation and privatisation was often promoted and always accompanied by major changes in the regulatory systems (in the case of Swedish post, the regulatory framework was actually reformed after the introduction of competition). While before liberalisation public ownership was the dominant form of regulation in most countries and sectors, liberalisation and privatisation processes have amplified differences in the regulatory regimes. In very general terms, the focus of regulation has shifted from governing the whole process of service provision to regulating particular aspects of the service supply chain or to partially controlling outcome. General trends also include the establishment of formally independent regulatory authorities with varying degrees of autonomy and powers to discipline or coordinate market participants, the granting of licences and the signing of contracts. In addition, there are a number of new instruments that are applied more specifically in one or two sectors included in our sample. One of these is the universal service obligation.

The electricity sector is a case in point. Regulation no longer includes planning and investment, and end-consumer prices are now freely set by the electricity suppliers, except for Belgium and Poland where electricity companies are partly still subject to planning and price control. Instead, the focus of regulation has been narrowed to the transmission and distribution segment of the electricity supply chain. Here, new regulations introduced by the two European electricity directives, which were transposed into national law, first called for the functional and then legal unbundling of the network systems from other supply-chain activities. While functional unbundling required the network operators to establish independent accounting systems for their network operations, legal unbundling means that network operations are carried out by a legally independent company, which nevertheless can be owned by a parent company with business activities in generation and supply. Unbundling is important for the authorities to determine the costs of operating the networks, which may otherwise be used by the network operators to cross-subsidise their other business activities (which again may disadvantage competitors in generation or supply).

After unbundling, the transmission and distribution operators were required to grant access to competing firms. In most countries, the terms of access were regulated by the newly established regulatory bodies. Only Germany, which initially asked its network

operators only for functional unbundling, opted for the possibility to find a solution based on negotiations between the parties involved. Meanwhile Germany has also introduced legal unbundling and regulated third-party access. In two countries in our sample (Sweden and UK) the transmission-network operators have not only been legally unbundled, but they are also owned by independent companies, and in the Swedish case the independent operator is state-owned (whereas in the remaining three countries transmission networks are run by electricity companies that are either active in generation or in sale or in both). Ownership unbundling did not take place in distribution. Distribution-network operators with few exceptions are also active in other supply-chain segments.

Part of regulating third-party access is the establishment of network tariffs. This is increasingly done ex-ante instead of ex-post. The reason is that, by giving the network operators the possibility to save the difference between the projected and the real costs, the new regulation creates specific incentives to reduce production costs (exceptions are Belgium, which has maintained an ex-post assessment process, and Germany, which is expected to switch to an ex-ante system by 2008). Hence while wholesale and retail prices are increasingly determined by supply and demand – obstacles in this regard include the continuous dominance of long-term contracts between generating and supplying companies – network tariffs are still subjected to strong and increasingly sophisticated regulation. This has not happened by coincidence. Instead, the regulation of terms and conditions of third-party access to transmission and distribution networks, including the establishment of network tariffs, is seen as crucial to enable competition in the areas of generation and supply. Yet the ability to enhance competition greatly depends on the regulatory powers of the responsible institutions, which in the new regulatory regime are the newly created electricity regulators. In this respect there are substantial differences between the six countries under investigation.

While the British regulator Ofgem has repeatedly imposed large fines on electricity companies for uncompetitive behaviour, the Austrian regulator has problems receiving the necessary information from the market participants and the fines it can impose on infringing companies are rather insignificant. There are also considerable differences in the degree of autonomy of the regulatory authorities from the respective governments, and hence in their receptiveness to political intervention. The Polish regulator, the chairman of ERO, for example, has considerable regulatory powers but at the same time works closely with the ministry of economic affairs. In Sweden, too, the activities and tasks of the regulatory authority are determined by detailed yearly regulatory letters adopted by the Swedish parliament.

The focus on transmission and distribution and on enabling competition does not mean that regulation does not cover other aspects of the supply chain – in Belgium and Poland transmission network operators have to submit plans for the maintenance and expansion of the transmission grid to the responsible ministry or the respective regulator – but they do so in rather fragmented ways. Belgium stands out, as here electricity companies are subjected to a series of public-service obligations, which among other things require providers to offer social tariffs for low-income customers and continue a

minimum supply to households that have problems paying their electricity bills. In Germany the largest providers in a region are required to guarantee a minimum supply, but regulation in the electricity sector in general does not include a universal service obligation. Several countries have stepped up consumer protection and developed special instruments to help customers to find the best electricity deal (which is not exactly easy given the complicated pricing models used by electricity companies) and in the UK network operators are assessed against specific performance targets such as their ability to maintain uninterrupted supplies or the time they need to respond to customer complaints, while electricity suppliers have to subscribe to a voluntary code. But while regulation puts considerable emphasis on the enhancement of competition-service outcome is increasingly left to the ‘free play’ of market forces.

1.4.2. Universal service obligation

Postal services have also experienced the creation of new semi-independent regulatory authorities but in most cases with less regulatory powers and a closer relationship with the responsible governmental departments. Only the British regulator, Postcom, has made itself a name for imposing a fine on the incumbent, the Royal Mail, for uncompetitive behaviour, and only the German regulator has put strong pressure on the former monopoly provider to lower prices in the reserved area. The Austrian regulator, in contrast, willingly approved the incumbent’s application to raise prices for standard mail. Most countries in our sample have some form of price control for letters – only the Polish Poczta Polska is free to set its own prices while they must somehow relate to real costs – the procedures vary considerably. Austria, Germany and the UK have switched to ex-ante price regulation, while in Belgium and Sweden providers are allowed to increase prices in line with the growth of the consumer price index, with the Belgian incumbent being allowed to add a small supplement.

In Belgium, Germany, Sweden and the UK the regulator has also the responsibility for regulating access to the incumbent’s internal services by competing companies (e.g. letter sorting), but the most important task is to specify and control the universal service obligation. Belgian electricity companies are subject to a number of public-service obligations and the regional transport operator in Flanders is required to meet a number of minimum standards such as minimum frequency of services and maximum distances between bus stops, but in our sample it is only in postal services that the establishment of a universal service obligation is part of the European sector directive and therefore mandatory in all countries. The universal service obligation is imposed by legislation or as a specific postal licence held by the universal service provider. Belgium again stands out, as here the universal service obligation is part of a management contract between La Poste/De Post and the Belgian government.

The objective of the universal service obligation is to make sure that all citizens have “easy access” to postal services. The question, perhaps, is what is considered to be easy access. The First Postal Directive lists a number of general principles but leaves it to the member states to define the scope of the universal service obligation. In all six countries

the universal service obligation establishes minimum standards regarding mail delivery. In Austria, Belgium, Poland and Sweden mail is delivered on five days a week, in Germany and the UK on six. In four out of the six countries the universal service obligation also includes detailed provisions on the number and distribution of postal outlets. In the UK the universal service provider is required to maintain a network of post offices to ensure that 95 per cent of the population is within five kilometres of an outlet and that 95 per cent of the population within ten kilometres in each postal code area. In Belgium, each of the 596 Belgium municipalities is entitled to have its own postal office, whereas in Germany municipalities with more than 2,000 and in Poland with more than 2,500 inhabitants must have at least one postal outlet. In addition, there are also specifications with regard to the total number of outlets – in Germany the minimum number is 12,000, in Belgium 1,300 – and the density – in Germany there must be an outlet within a radius of 80 square kilometres, in Poland within 65 square kilometres.

Austria and Sweden lack such specifications but in both countries the universal service providers need approval by the government or the regulator if they want to close a post office. In Belgium the closure of post offices is also only possible under special circumstances and in Poland the universal service provider needs approval by the local major. However, the detailed provisions have not prevented the former monopoly providers, which in all countries are responsible for the fulfilment of the universal service obligation, from closing down a substantial part of their post-office networks. In Austria and Germany the universal service providers have shut down about 40 per cent of their post offices in recent years, while the Swedish incumbent has outsourced the respective services to private sector partners. Of the 2,475 postal outlets in Sweden, only 436 are still run by Posten AB.

In most countries the universal service obligation also establishes minimum standards regarding office hours of post offices. In Austria, Germany and the UK there are also minimum requirements regarding the distribution of letter boxes. In Sweden such standards also regulate the access of handicapped customers. Last but not least, the universal service obligation also sets minimum transit-time targets. According to these targets, universal service providers in Austria, Belgium and the UK are required to deliver more than 90 per cent of letters the day after they have been mailed. In Germany, Poland and Sweden the threshold is between 80 and 85 per cent. Austria, Germany and the UK also have additional transit-time targets for parcels. Austria stands out in this respect as 90 per cent of the parcels have to be delivered two days after being mailed.

The fulfilment of transit-time targets is controlled by the regulator, as is the adherence to the provisions regarding the number and distribution of outlets and mail delivery days. The Belgian universal service provider in addition is required to conduct a yearly survey on customer satisfaction. Based on the results, the company has to develop an action plan to improve the issues that the respondents felt to be unsatisfying. As noted before, so far the companies that exclusively provide services in the reserved area are also fulfilling the universal service obligation. In Sweden and the UK, which already

have fully liberalised markets, the same function is fulfilled by the incumbents. In both countries no other company has applied for universal service status. However, in most countries it is still unclear what will happen to the universal service obligation after the lifting of the reserved areas in 2009 or 2011. Also still unclear are the questions of whether and if so how universal service providers will be compensated for maintaining a country-wide network and service. One possibility which is currently under discussion is that the new competitors would be required to pay into a fund from which the costs for upholding the universal service will be paid.

1.4.3. Licences and contracts

While the universal service obligations impose a rather detailed control regime, companies outside the universal service are free to offer postal services at their own terms and prices. So far only the former monopoly suppliers are subject to the general service obligation while the new competitors in letter markets usually have licences (the exception here is Austria where new companies only have to submit a document in which they explain how they intend to establish deposit facilities and arrange redress and complaint procedures). The number of licences issued differs considerably. Germany in this regard is in a category of its own. The German regulator has issued more than 2,000 licences. A large part of the licence holders are, however, inactive. Next to Germany comes Poland with 90 postal licences issued so far. Germany also stands out as the only country where licence holders must adhere to certain labour standards. In theory, licence holders are required to offer working conditions that do not significantly fall below those that are common practice in the reserved area. In practice, however, this provision has hardly any impact. The German regulator does not assess working conditions when issuing licences. In fact, the new competitors have extensively resorted to low-paid mini jobs to take market share from the market leader. Licences are also issued in the electricity sector and here especially for providers in the supply markets, whereas generators and transmission- and distribution-network operators have to meet a number of technical standards to receive a permit for operating their facilities.

In the electricity and postal sectors, licences are typically granted on a permanent basis. In local public transport, in contrast, liberalisation has led to a shift from permanent to temporary licences and contracts. Exceptions are the UK, where bus companies outside London have permanent non-exclusive licences and are free to choose the routes they want to operate. Permanent exclusive licences until recently have existed in Austria and Germany but, following the 2005 Communication of the European Commission on the Regulation of Public Passenger Transport, exclusive-licences for bus services must be renewed after eight years. At the same time, the transport authorities, which since the mid 1980s have been set up in Austria, Germany and Sweden to coordinate different means of transport and different transport providers in a particular region, have started to put temporary contracts for particular routes or bundles of routes out to tender. The background is that in these countries subsidies on many routes meanwhile make up the larger part of the income of the transport providers. Demand emanates from the transport authorities rather than from passengers. Moreover, bus companies are public

contractors rather than own-initiative driven businesses, as in the UK outside London where bus companies operate routes where they believe they can attract a sufficiently large number of passengers (with the effect that bus companies are competing on the same highly frequented routes, while less frequented routes are not served).

Competitive tendering, according to the assumption, improves the ability of the transport authorities to plan and coordinate supply and to respond to short-term changes in demand, while at the same time limiting costs as providers have to compete for contracts. Yet while in Sweden a radical shift to the tendering system was put into practice in the second half of the 1980s – Sweden is therefore often considered as role model for the other countries – in Austria and Germany some areas and routes have been subject to tendering procedures while others are still served by companies with route-specific licences. The result is a mixed system with a long-term tendency towards competitive tendering. In Germany authorities have even started to put regional railway services out to tender. Apart from Sweden, Greater London, with about 7.5 million inhabitants, has also introduced a city-wide tendering system in which Transport London puts individual routes out to tender with competing private bus companies.

Making the cheapest bid is ultimately the most important reason for being awarded a contract, but quality issues like the technical equipment and general condition of the bus fleet and the experience of drivers also play a role. In some cases, past performance is also taken into consideration by transport authorities when awarding new contracts, but tendering must be in line with public procurement legislation. One consequence of the shift to a tendering regime is that efforts to control outcome have greatly increased. London Buses is an excellent example. The authority measures the performance of each route against minimum standards and benchmarks. Evidence stems on the one hand from the companies' own records on operated mileages. On the other hand the authority itself has created a sophisticated control system. Teams of approximately 120 part-time staff are sent out to selected observation points to record buses and their arrival and departure times with electronic devices. An observation point is surveyed 16 times during a twelve-week period. The data is then computed, validated and the results matched against the scheduled timetable. Bus companies have the chance to explain divergences from the schedules, but London Buses is threatening to impose fines on contractors if the cause was the company's own responsibility (e.g. as a result of understaffing or of insufficient preventive maintenance of buses).

In addition, London Buses also conducts passenger surveys to assess the quality of the different companies and their services. A sample of passengers is interviewed each quarter covering a wide range of bus service features based on the journey they have just made. Performance data is made available for individual routes and for all routes in a particular London borough. League tables of the main operators for each of the various performance criteria are also published. In Belgium, the regional Flemish bus company is also obliged to conduct a survey every two years in order to assess passenger satisfaction, and the operator is required to improve services according to the results, but generally it is in those transport systems that have shifted towards competitive tendering where regulatory efforts have increased – especially compared to

the bus system outside London, where the authorities check little more than the company's adherence to certain technical and safety standards.

In Belgium, contracts also play a crucial role in regulating local public transport. Yet in contrast to the above contracts, these are not put out to tender. Instead, they are management contracts concluded between the regional governments and the regional transport providers. As such, the regional governments give the regional operators exclusive access to the transport markets in their respective areas. On the other hand, management contracts impose a number of duties on the contractors, including the above-mentioned survey on passenger satisfaction. Yet while the regional providers enjoy exclusive access to the regional transport markets, they themselves use competitive tendering to outsource parts of the services to private bus companies. As noted earlier, up to a third of all routes are outsourced. While in Belgium outsourcing is practised on a large scale, in other countries municipal transport providers have started to experiment with sub-contracting to independent operators. Examples of subcontracting can be found in Vienna and Warsaw.

Tendering and outsourcing have also become increasingly important instruments in the regulation of the hospital sector. Yet while in the UK an independent health-care regulator has been established, health care differs from the other three sectors included in this analysis insofar as regulation in health care has remained comprehensive, including a large number of technical and professional standards. Most changes in the regulatory framework have taken place in the financing of hospitals rather than in the provision of treatments – although changes in financing of course had an impact on care provision. There are three major trends that can be observed in one or the other form in the six countries under investigation. First, the share of private health-care funding has increased through the growing share of private health insurance and the introduction of co-payments, which can be understood as a specific form of user-fee. Secondly, due to the growing split between health-care funding and provision, funding organisations are increasingly acting as purchasers, amplifying pressure on hospitals to deliver best-quality services at the lowest possible costs. In turn, hospitals in several countries have created internal markets with prices attached to the various treatments, which are then charged to other departments or divisions in the same hospital.

Although the introduction of internal markets in hospitals hardly means that the different departments are competing with for patients, it nevertheless changes the distribution of resources in the hospital organisation and perhaps the role and behaviour of the chief physicians and the head of the clinic. Hospitals, as a result, are acting increasingly like independent profit-seeking businesses. In the UK the emphasis on entrepreneurship in hospital care has been facilitated by the introduction of a new legal status for public hospitals. As trusts or foundation trusts, they are still not-for-profit organisations, but they have greater freedom to raise money from commercial activities. Foundation Trusts, furthermore, are no longer accountable to the Ministry of Health but to the newly established health regulator.

A third major tendency is the transformation of payment systems. Hospitals are no longer compensated for the number of days a patient stays in the hospital. Instead they

receive a pre-fixed sum for each category of treatment. This sum can vary somewhat between hospitals and patients but it is independent of the actual duration of the treatment. The increasingly performance-oriented form of financing has increased pressure on hospitals to keep patients only as long as ultimately necessary. The creation of internal markets and the shift towards output-oriented compensation have both strengthened the managerial orientation of hospitals. In some countries this was linked to growing autonomy and budgetary responsibility of clinics (e.g. Sweden and UK), while in others the result was a wave of centralisation with the aim to make better use of economies of scale (e.g. Austria and Belgium).

While the changes described above apply in various forms to all six countries, the UK stands out, as here the way the hospital infrastructure has been financed has also been altered. New hospitals are increasingly financed by private finance initiatives (PFI). In PFI projects it is the private sector that finances the construction and equipment of the facilities and frequently also non-medical services such as cleaning, catering or security. The trust or foundation trust that represents the respective hospitals in turn leases the facilities on a 30-year or longer contract. Most of the new hospitals in the UK are financed by PFI schemes. However, there is increasing evidence that this form of financing is more expensive than if the money had simply been raised by public loans (here you need to insert some references to support your point). As a result, PFI-hospitals have cut-back services in order to save money to be able to pay the yearly fees for the lease.

As a result of liberalisation and privatisation, competition and anti-trust authorities have become important regulatory players in all four sectors included in this analysis. Authorities have been particularly active in overseeing the wave of mergers and acquisitions in the electricity sector as part of larger concentration processes in the European energy markets. Less frequently, interventions have been made in postal services and local public transport, despite a number of stunning takeovers, which in the case of Deutsche Post World Net has helped the former monopoly supplier to become a leading global logistics company. In Austria the anti-trust authority approved Austrian Post's takeover of its main private competitor. In some countries the hospital sector has also become a target of anti-trust activities. In Germany the federal anti-trust authority has repeatedly intervened as the sale of public hospitals to private hospital providers has threatened to give them an exclusive position as the only provider in a particular city or region. In the case of Hamburg, where a private company acquired all seven municipal hospitals, the authorities ordered the new owner sell at least one hospital to a private competitor. In another case the anti-trust authority has even disallowed the takeover.

1.5. Conclusion

A common characteristic of public services in Europe before liberalisation was the lack of competition. Hence a major objective of liberalisation was the introduction and improvement of competition. Part of the process was the abolition of national and regional monopolies and the creation of country-wide if not European-wide markets

with a large number of competing providers. In reality, however, liberalisation has led to the formal breakdown of regional boundaries but at the same time has accelerated existing segmentations and created new ones. Only rarely has the outcome been integrated and homogenous public service markets. Furthermore, while in some sectors and countries liberalisation has led to an increase in the number of providers, in others it has had the opposite effect and the number of suppliers actually decreased. And even where the number of companies has increased, this has not necessarily enhanced competition, as the largest suppliers have been able to expand their market shares in the now nationwide markets. Sometimes the number of providers first increased as a result of the market-opening and then decreased again as a result of accelerating competition. In sum, only in a few sectors in our sample has liberalisation had clear positive effects with regard to enhancing the emergence of a highly competitive market structure, and it is not necessarily those sectors dominated by private companies that have comparably low market concentrations. Instead, high market concentration can be found in sectors both with predominantly private and predominantly public ownership.

Before liberalisation, public services were not only characterised by a lack of competition, they were also associated with public ownership. In reality, however, ownership structures were more diverse, including public, private and in some cases even private not-for-profit providers. Only about half of the sectors in our sample were fully publicly owned before liberalisation. Liberalisation, moreover, is not necessarily linked to privatisation. Yet in many countries and sectors the introduction of competition was coupled with full or partial divestment of public assets in the former monopoly suppliers. The result, however, rarely entailed a shift from an entirely publicly to an entirely privately owned sector. More frequently, privatisation led to the transformation of predominantly public to a predominantly private ownership structure. As a matter of fact, liberalisation processes were more successful with respect to changing ownership structures than enhancing competition. Regardless of ownership structures, most providers were converted from autonomous public companies to private law firms as holdings, joint-stock companies or limited liability companies. As private companies, they not only expanded their business activities but also invested outside their home countries. In some cases, liberalisation and privatisation, thus also led to the transformation of former monopoly suppliers into leading multinational corporations.

Liberalisation and privatisation was often promoted by changes in the regulatory systems. Before liberalisation the dominant form of regulation was public ownership. In all of the 24 sectors included in this analysis there was some form of public ownership. Public ownership gave the local, regional and federal governments the chance to closely watch service provision and intervene into service delivery. In addition, the state exerted considerable influence over private providers by overseeing investment plans, coordinating and securing supply and approving prices. Regulation, in short, governed the whole process of service provision. With liberalisation, the focus of regulation shifted from governing the entire process to regulating certain aspects of the service supply chain or to partially controlling outcome. In this connection, independent

regulatory authorities, licences and contracts have become important regulatory instruments.

In the electricity sector, for example regulation now focuses on the transmission/distribution segment of the electricity supply chain while generation and supply are largely left to market mechanisms. Accordingly, the newly established regulators set network tariffs but no longer intervene in wholesale and retail prices. While regulation in the electricity sector has been limited to a particular supply-chain segment, the adoption of the universal service obligation in postal services has put increasing emphasis on the control of outcome. The universal service obligation includes detailed provision regarding mail delivery days, number and location of postal outlets and transit time targets. In universal postal services even prices are still subjected to price control. However, companies without a universal service obligation – until now only former monopoly suppliers grant universal supply – are free to offer services at their own terms and prices. While the universal service is closely watched by the newly established post regulator, the new competitors have merely to obtain a postal licence.

In local public transport, regulation also increasingly focuses on the control of outcome as regional transport authorities tender more and more services in temporary contracts. The tendering organisations have created new control instruments and procedures to make sure that contractors meet their responsibilities. The introduction of public tendering at the same time entails a shift from licences to contracts. The UK has established an independent health-care regulator and outsourcing and subcontracting have also become increasingly important in the hospital sector in other countries, but changes in the regulation of health care have mainly taken place in the area of financing. Although the resulting creation of quasi-markets rarely enhanced competition, they nevertheless increased the pressure on hospitals to reduce costs.

In sum, with liberalisation the objective of regulation shifted from overseeing the process of service provision to enabling competition. In certain market segments the loss of regulatory oversight has been compensated for by increasing efforts to control outcome. More often, however, outcome is left to the ‘free play’ of market forces. This is problematic insofar as our analysis has shown that, in terms of the creation of highly competitive market structures, the outcome of liberalisation and privatisation is rather modest to say the least.

2. *VARIETIES AND VARIATIONS OF PUBLIC SERVICE LIBERALISATION AND PRIVATISATION – SECTOR SUMMARIES*

2.1. *Electricity*

2.1.1. *Processes of liberalisation and privatisation*

The UK stands out as here the liberalisation process started earlier than in the other five countries. In the early 1980s the conservative government introduced the first legal measures that abolished the regional monopolies in electricity supply (Pond 2006a:3ff). In the late 1980s this was followed by preparations for the sale of generating companies and regional electricity distributors in England and Wales and later on in Scotland and Northern Ireland. While Nuclear Electric remained publicly owned, the other two companies were gradually sold to private investors with the state maintaining a golden share until the mid 1990s. As these were withdrawn in 1995, a swathe of takeovers took place across the sector with the involvement of a number of American-owned energy firms. Yet most of these companies had badly misjudged the prospects of the UK electricity market and either sold up or wrote off their investments in the following years. The twelve distribution networks were transformed into independent companies and subsequently taken over by private capital while the national transmission operator, National Grid, was floated on the stock market (ibid). Before 1998, generating companies could directly supply to large customers and retail companies could acquire generating capacities as long as no more than 15 per cent of their supply came from company-own sources. The cap on self-generated electricity was lifted by the Labour government in 1997. This allowed for a much greater degree of integration and therefore triggered another wave of acquisitions and takeovers, this time involving mainly German and French electricity champions (ibid).

Sweden had liberalised a large part of the electricity sector by the mid 1990s. The previous system of voluntary cooperation in so-called clubs was replaced by a system that allowed for competition in generation and supply. The transformation was initiated by the conservatives and completed within a few years under a social-democratic government (Andersson/Thörnqvist 2006a:4ff). Whereas in the UK the retail market was not fully liberalised before 1998, all Swedish customers could choose their suppliers from 1996 onwards. Vattenfallsverket was transformed into the state-owned but private-law company Vattenfall AB. As such it became the largest electricity generator and supplier in the country and is now also active outside Sweden. After a series of mergers and takeovers, its main competitors on the home market are meanwhile owned by German and Finish companies (ibid). In 1998, two years after liberalisation, the government created a new regulatory authority, Energimyndigheten,

to oversee the electricity sector. Yet while generation and supply was liberalised, distribution continued to be organised in the old cooperative model. State-owned Svenska Kraftnät is responsible for transmission and distribution but to meet its responsibility it is dependent on close cooperation with Vattenfall and the private firms which run the regional networks (ibid). In 1996 Sweden joined the Nordic electricity exchange, Nordpool, with the result that Sweden is the only country in our sample with a substantial proportion of supply coming from short-term trade. Another consequence is that 40 per cent of electricity consumed in Sweden comes from outside the country (Thomas 2005:100).

In the UK and Sweden the liberalisation and privatisation was the result of new parliamentary majorities and was primarily driven by national decisions. In Poland, too, the reform was initially nationally motivated and dominated by the simultaneous shift from a planned to a market economy. Changes were therefore radical even though they evolved only slowly, taking more than two decades to be completed. In the planned economy, electricity was generated, distributed and supplied by one integrated nationalised company. The former monopoly provider was split-up into one transmission and several dozens generation and distribution companies (Radzka 2006a: 1ff). While transmission was monopolised by state-owned Polskie Sieci Energetyczne S.A., the other market segments were gradually opened up for private investors, many of them from outside Poland. Despite repeated announcements by the government to further privatise the industry, the state retained substantial shares of ownership in a number of the newly created enterprises (ibid). The result is a highly dispersed ownership structure with several hundred companies offering electricity to end-consumers.

In the remaining three countries change took place more gradually and was induced by the EU electricity directives rather than by changes in elections or social systems, although all three countries introduced full customer-choice before the 2007 deadline. In Germany, the first cautious steps to liberalisation were introduced in 1990, but the crucial reform of the electricity market was enacted in 1998 (Brandt 2006a:6ff). Initially Germany was the only country that opted for a negotiated third-party access without the establishment of an independent regulator. Moreover, it required its large integrated electricity companies to establish separate accounting procedures instead of creating independent subsidiaries. In both regards Germany gave up its exceptional position in 2005 when it established an independent regulator and enforced legal unbundling (ibid). On the other hand, Germany had fully liberalised its electricity market in 1998. This included the abolition of the traditional regional boundaries. The effect of the reform was hardly more competition, however. Instead it triggered a process of mergers and acquisitions with the result that the market shares of the largest companies, already high before liberalisation, have increased even further (ibid).

In Austria, the major generating company, Verbund, was turned into a joint-stock company and floated on the stock market as early as 1988, but the federal government retained 51 per cent of the shares. In general, however, Austria implemented the EU requirements including legal unbundling, the establishment of an independent regulator

and the granting of third-party access through legislation from 1998 and 2000. As a result customers have been able to choose their supplier since 2004 (Hofbauer 2006a:2ff). As in Germany, however, only a small minority of households have taken advantage of this possibility. Despite the regulatory changes, the structure of the industry remained remarkably stable. It is still dominated by Verbund, the nine provincial companies and the five provincial-capital companies that existed before liberalisation (ibid).

Belgium also followed the path and schedule set out by the relevant European directives. As such, it started to introduce legal unbundling and the opening-up of the markets in 1999. The market was opened up in several steps until 2003 (Verhoest/Sys 2006:2ff). As in Austria, liberalisation had only marginal effects on the structure of the Belgian electricity industry. The sector was already dominated by one privately owned company before liberalisation and this company further expanded its share in the retail market. However, to intensify competition the government requested the private market leader to auction parts of its generation capacity through the electricity spot market Belpex (ibid).

2.1.2. Towards more competitive market structures?

Markets and competition

Except for generation in Belgium, all electricity providers in the remaining five countries enjoyed some form of monopoly. While in Poland and the UK there was only one monopolistic company on the national level, in Austria, Germany and Sweden monopolies were the result of the exclusive access of one or several cooperating companies to regional and local markets. In the case of Germany, the existence of regional monopolies was laid down in legislation prohibiting regional electricity corporations from expanding into each other's markets, while in Sweden the national provider Vantenfallsverket cooperated with local electricity companies in regional clubs. In Austria one national company was responsible for generation and transmission, while the provincial companies and provincial-capital companies mainly operated distribution networks and provided supply in their respective areas. Belgium was an exception because it had competition in generation, but one company dominated the market with a market share of more than 90 per cent (ibid. 2006:1).

The opening-up of the electricity market entailed a gradual abolition of these monopolies as more and more consumers were enabled to choose between different suppliers. While theoretically all customers can now choose between different providers – while in Sweden the market was fully liberalised as early as 1996, in Poland the last barriers were lifted as recently as 2007 – there are remarkable differences between the countries when it comes to making use of this opportunity. As table 4 shows, more than half of the large industrial users in Sweden and the UK and more than half of medium industrial/commercial customers in the UK have switched their suppliers. Among small commercial users and households, between 20 and 50 per cent have also done so in

Sweden and the UK, but only between five and 20 per cent in Belgium and Germany and less than five per cent in Austria and Poland (European Commission 2005)

Table 4: Rate of switching

Cumulative switching since market opening	Large industrial users	Medium industrial/commercial	Small commercial/household
>50%	SE, UK	UK	
20-50%	AT, BE, DE	AT	SE, UK
5-20%	PL	BE, DE	DE, BE
<5%		PL	AT, PL

Source: European Commission: Report on progress in creating the internal gas and electricity market Com(2005) 568 final (15. 11. 2005).

Liberalisation not only meant that end-consumers can choose between different suppliers but also that suppliers can buy electricity from different generating companies. Competition among generating companies is expected to bring down wholesale prices, which can then be passed on to end-consumers through lower retail prices. The problem is that in many countries there are large integrated companies active in generation and supply and if electricity is bought from an outside company such transactions are often based on several-year-long contracts. Although competition may rise if the contract is up for renewal, competition is rather weak during the period covered by the contract. To increase pressure on generating companies, all countries have created short-term electricity exchange markets, yet the Belgian power exchange Belpex is not expected to fully operate before mid 2008. As can be seen from table 5, it is only Sweden where the proportion of electricity traded on the short-term market has reached a substantial level, while in Germany it is at least significant. In Austria, Poland and the UK, in contrast, the proportion is rather insignificant, ranging between one and two per cent (ibid).

Table 5: Percentage of power traded in power exchange

		Percentage of power traded in power exchange
Austria	EXAA, 2002	2%
Belgium	BELPEX 2005	-
Germany	EEX 1999	8%
Poland	Polish Power Exchange 1999	1%
Sweden	Nordpool 1996	34%
UK	Power Pool 1990; NETA 2001; BETA 2005	2%

Source: Thomas 2005.

Number of providers and market shares

The abolishment of national monopolies in Poland and the UK led to an increase in the number of providers and a decrease in market concentration. In Germany the abolition of regional markets and the establishment of an integrated national electricity market in generation and supply allowed the largest providers to expand their market shares, with the result that liberalisation has increased overall market concentration. In Germany, there are four instead of eight major companies in generation, which together produce 95.6 per cent of German electricity. In supply there are four instead of five major companies and they account for 70 instead of 50 per cent of the supply market (Brandt 2006a:8). Sweden also experienced concentration processes in the electricity sector: While the follower of Vantenfallsverket, Vattenfall AB, still generates about half of Swedish electricity, many small and medium firms have merged, with the result that three producers, Vattenfall, Fortum and E-on (Sydkraft) now account for between 85 and 90 per cent of the generating market. The same three companies also account for more than 50 per cent of the supply market (Andersson/Thörnqvist 2006a:3). While in Austria the national Verbundgesellschaft, the nine provincial companies and the five communal providers more or less kept their market shares, in Belgium the market leader, Electrabel, has defended its more than 90 per cent market share in generation, while at the same expanding its share in the supply segment. There, Electrabel now owns 85 per cent of the market (Verhoest/Sys 2006:4). Belgium as a result is a category of its own when it comes to market concentration in electricity generation and supply. Poland is the country with the lowest market concentration in both market segments in our sample. While market concentration is generally higher in generation than in supply, the UK stands out because here it is the other way round: The three largest companies in generation produce 40 per cent of electricity while the three largest firms in the supply segment supply between 59 and 65 per cent of power to end-consumers (European Commission 2005).

Table 6: Market shares and number of companies in electricity generation

	Market share of the largest company in generation	Market share of the three largest companies in generation	Market share of the three largest companies in the retail market	Number of companies with a market share over five per cent in the retail market	Number of fully independent suppliers in the retail market
Austria*	45%	75%	60%	5	4
Belgium	92%	98%	92-100%	3/2	14/6
Germany	38.7%	81.4 %	60%*	4	13
Poland*	15%	35%	47-50%	6	20
Sweden	49.3%	90%	50%	3	
UK	15%	40%	59-65%	6	3

Source: PIQUE country reports. *Thomas 2005. European Commission: Report on progress in creating the internal gas and electricity market Com(2005) 568 final (15. 11. 2005).

Evolution towards more competitive market structures

Summarising the findings from above see two countries with a strong evolution towards more competitive market structures (see table 7): Poland and the UK (although in the UK competition is significantly stronger in generation than in supply). We see a moderate evolution towards competitive market structures in Sweden, which has a very high market concentration in generation (in our sample only surpassed by Belgium) but a high share of spot-market trading and a large proportion of foreign electricity. In Germany and Austria liberalisation has had only a limited impact with respect to competition. In both countries, customers are now free to choose their suppliers but the choice is rather limited given the evolving market structures. While in Germany market concentration has decreased as a result of liberalisation, in Austria regional boundaries continue to play an important role as consumers are reluctant to switch providers. Perhaps liberalisation has had the least impact on competition in Belgium. This is interesting as Belgium not only had a predominantly private market structure before liberalisation but it is also the only country where generating companies were already competing before end-consumers were given the right to choose among electricity suppliers. However, market concentration was already high before liberalisation and it increased even further with the abolition of the regional monopolies in the supply segment.

Table 7: Evolution towards more competitive market structures

Austria	Belgium	Germany	Poland	Sweden	UK
Limited	Very limited	Limited (abolition of regional monopolies but concentration of main producers)	Strong	Moderate (high share of spot-market trading)	Strong in generation; moderate in supply

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

2.1.3. *Towards a more private ownership structure?*

Privatisation and ownership

Although the electricity sector is considered as classical network industry with monopolistic advantages for network operators, in half of the countries in our sample there has always been a significant amount of private ownership. In Belgium, the market leader, Electrabel, was predominantly privately owned, although some municipalities held a small share in the company. In (West) Germany, too, private ownership was dominant in generation and transmission and at least half of the supply was provided by private companies. However, until the 1980s regional governments

held minority shares in some of the large regional companies. In both countries there was also a substantial share of public ownership, mainly to be found in the distribution segment. Sweden was a mixed case, with Vattenfallsverket as the large state-owned enterprise cooperating with a large number of smaller privately owned companies. In two countries – Poland and the UK – the industry was entirely nationalised before liberalisation. In Austria, Verbund, the nine provincial companies and the five provincial-capital companies were also publicly owned, but by different public bodies – the federal government, the provincial governments and the larger municipalities.

While imposing the gradual liberalisation of the electricity markets, the two European electricity directives make no reference to public or private ownership. EU regulation leaves the question of ownership entirely to the member states. In some member states, liberalisation has instantly been linked to privatisation. The extreme example, perhaps, is the UK, where a nationalised industry was entirely privatised. In Poland liberalisation was also linked to privatisation, but the state kept significant shares in most of the companies despite repeated announcements by the government that it was going to divest itself of its remaining holdings. In Austria, Verbund was partly privatised with the state retaining 51 per cent of the shares. The other shareholders include some of the provincial electricity companies (Hofbauer 2006a:15). Some of the provincial governments, on the other hand, have sold minority shares of the provincial electricity companies to foreign investors. In Sweden, Vattenfall AB is still fully publicly owned, but some municipal providers have been taken over by private capital (Andersson/Thörnqvist 2006a:7). The German states had already sold most of their shares in the regional electricity companies in the 1980s. Yet private ownership has been extended through the privatisation of the electricity industry in eastern Germany in the 1990s. In Belgium, which already had a predominantly private market structure before the start of the liberalisation process, changes in the ownership structure took place mainly in the supply segment, where joint private-municipal companies withdrew from retailing and left the business to their private business partners (Verhoest/Sys 2006a:13).

Evolution towards private-ownership structures

In sum, the proportion of ownership has increased in all six countries (see table 8). Austria and Poland are the only countries which still have a predominantly public-ownership structure in electricity generation and supply (in transmission and distribution public ownership is more widespread). The UK stands out as here a fully publicly owned industry was turned into a fully privately owned one. Yet substantial increases in private ownership can also be seen in Austria, Poland and Sweden, whereas in Belgium changes were only moderate. The reason is that Belgium already had predominantly private ownership before liberalisation. The same is true for Germany, but Germany experienced a substantial increase after German unification through the conversion of the state-owned electricity industry in eastern Germany.

Table 8: Evolution towards private-ownership structures

Austria	Belgium	Germany	Poland	Sweden	UK
Predom. public	Predom. private	Predom. Private	Predom. public	Predom. private	Predom. private
Substantial increase	Moderate increase	Substantial increase (conversion of Eastern Germany)	Substantial increase	Substantial increase	Very strong increase

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

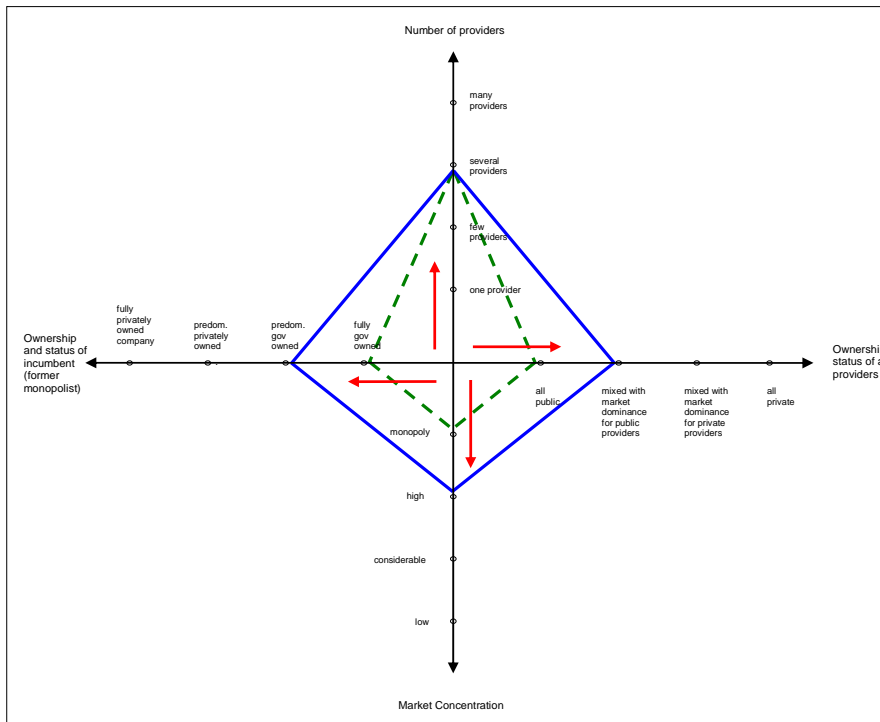
2.1.4. Forms of regulation

In terms of regulation, differences are much less pronounced than in ownership and market structures. In all six countries, regulation has become increasingly focused on certain segments of the electricity value chain and oriented towards processes rather than outcomes. Transposing the requirements of the two electricity directives, all six countries forced their electricity companies to separate transmission and distribution from generation and supply. In five out of the six countries this was done by requiring the transmission and distribution operators to establish formally independent subsidiaries for generation and supply. In Germany, in contrast, it was enough for the companies to establish different accounting systems for the different activities. Germany has meanwhile also switched to legal unbundling (Brandt 2006a:10ff). In addition, two of the six countries have established not only formally but effectively independent transmission network operators. While in the UK the transmission network is run by a private company without further activities in the electricity business, in Sweden the transmission network is still owned by the state and run by a public-law company. In Poland the transmission network is also fully state-owned but Polskie Sieci Energetyczne S.A. is also active in other market segments (Radzka 2006a:4).

Furthermore, all six countries have established independent regulatory authorities. In Britain the regulator enjoys considerable power to regulate the sector, including the enhancement of competition. In Poland the regulator also has far-reaching powers and responsibilities, while working closely together with the relevant ministries (ibid. 15). In the other four countries the regulatory authorities are less active and/or less independent of their governments. One of the major tasks of the new regulatory bodies is the regulation of third-party access. Here again Germany stands out because initially the German authorities opted for a negotiated third-party access, leaving it to the companies involved to come to an agreement on the terms and price of accessing the networks. As with legal unbundling, Germany has meanwhile also moved to regulated third-party access (Brandt 2006a:10ff).

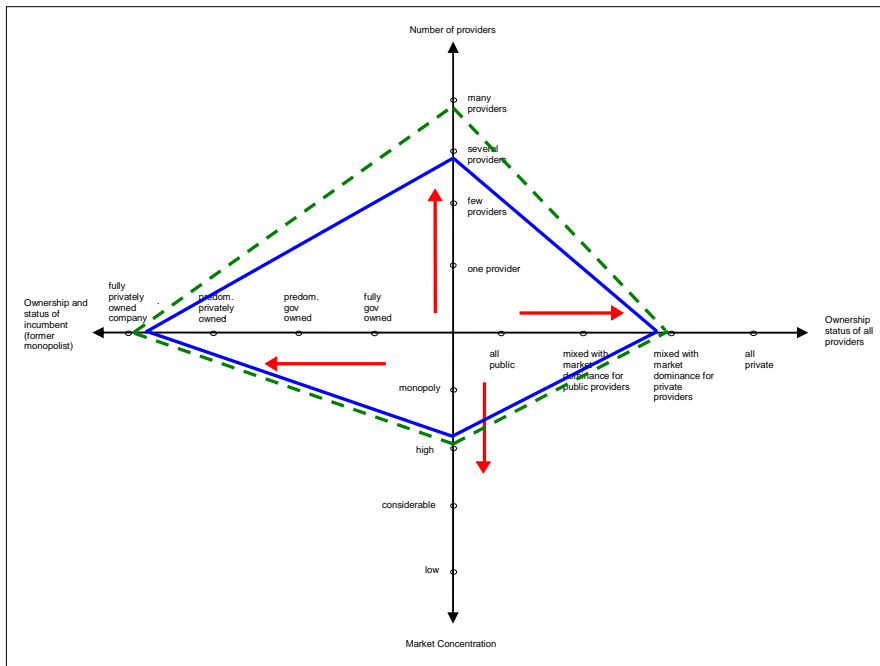
Apart from regulating third-party access, the regulatory authorities also establish network tariffs. Belgium stands out in this regard, as here tariffs are approved ex-post, that is, after a certain period, while in the other countries tariffs are set ex-ante with the objective of creating incentives for network operators to invest in new technology, as they can keep the difference between the projected and the real costs. Belgium and Poland, on the other hand, are the only countries that still set maximum end-consumer prices, since Germany is expected to lift its price caps in 2008. At the same time, Belgium differs from the other five countries as here the issuing of licences in the electricity sector is dependent on the fulfilment of a series of public-service obligations. Austria and Britain, on the other hand, have put considerable efforts in the improvement of consumer protection.

Graph 1: Electricity Austria (generation and supply)



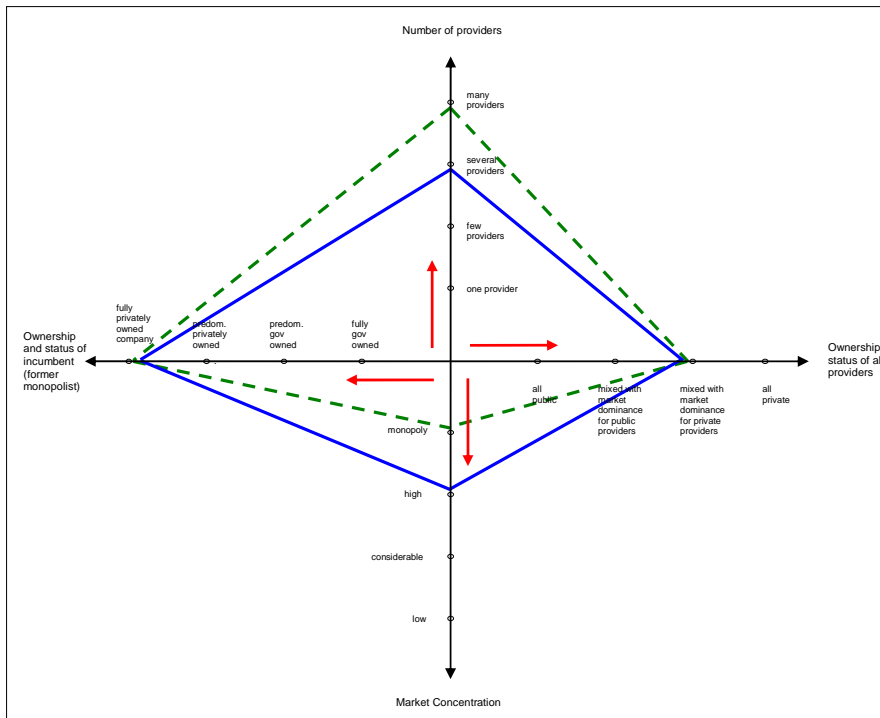
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 2: Electricity Belgium (generation and supply)



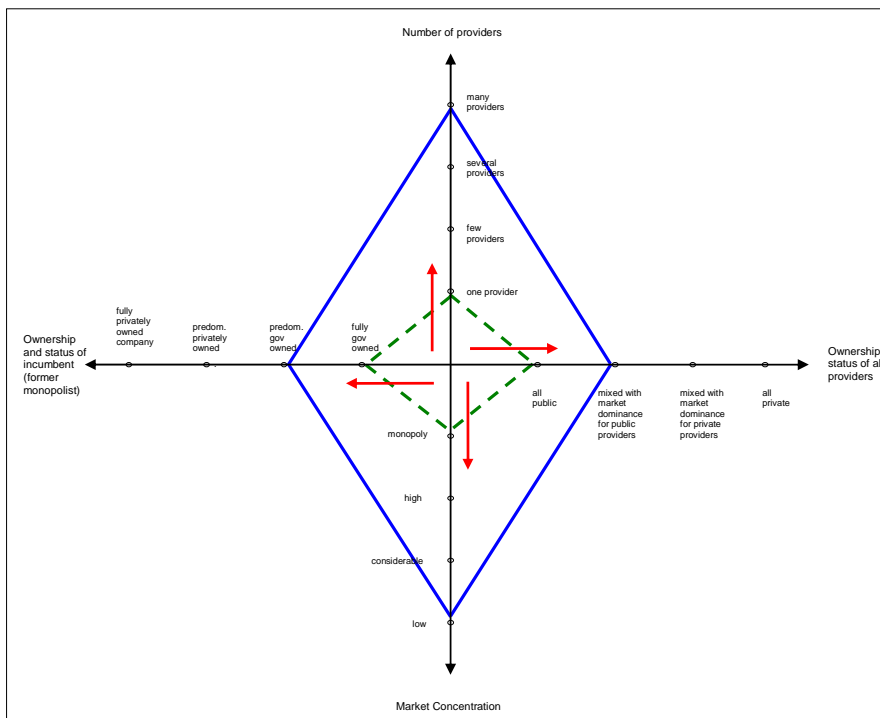
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 3: Electricity Germany (generation and supply)



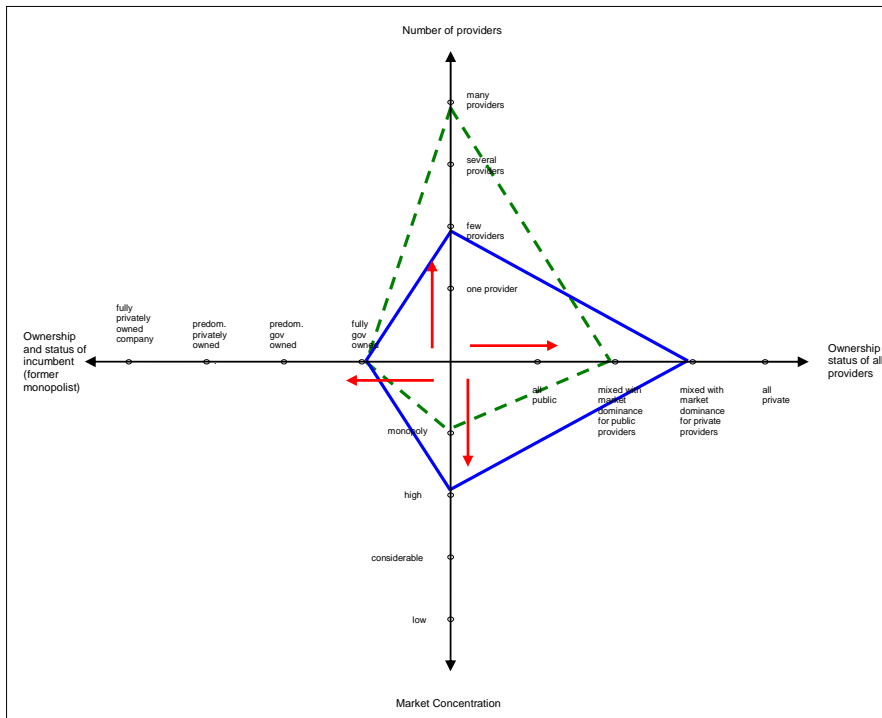
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 4: Electricity Poland (generation and supply)



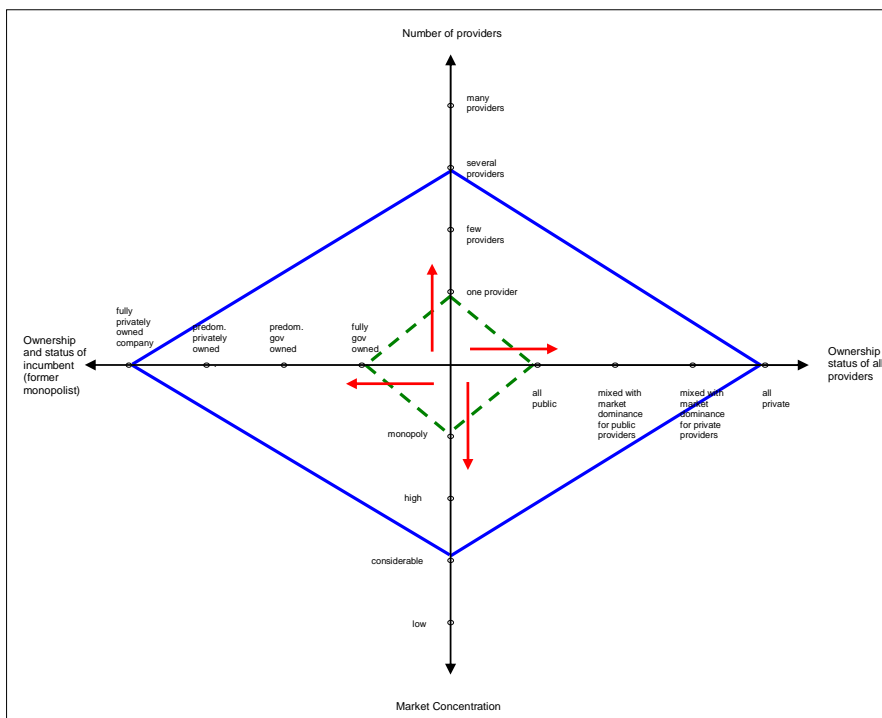
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 5: Electricity Sweden (generation and supply)



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 6: Electricity UK (generation and supply)



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

2.2. *Postal Services*

2.2.1. *Processes of liberalisation and privatisation*

Sweden was the first country in our sample that liberalised its postal services. As early as 1993, the then ruling conservative government opened the postal market to competition and it was only one year later that it enacted legislation to regulate the liberalised market (Andersson/Thörnqvist 2006b:4ff). Posten AB was at the same time transformed into a joint-stock company, owned 100 per cent by the state. To reduce costs, Posten AB has closed down a large part of its post-office network and outsourced the respective services to supermarkets and convenience stores. Hence the Swedish postal sector was already liberalised when Sweden joined the EU in 1995. However, after accession it used the transposition of the European Postal Directives to introduce a comprehensive market reform in 1997 (ibid). Since then, all postal operators have needed a licence and the universal service provider has had to meet a number of additional obligations. Following EU legislation, Sweden also established a new regulatory authority, the Post and Telecommunication Board, which, however, mainly implements guidelines developed by the government in yearly regulation letters (ibid).

In the UK the telecommunications division was split off from the Post Office in 1981 and subsequently privatised in 1984. At the same time the reserved area was restricted to letters costing less than one pound. This led to the entry of a large number of firms into the parcel and express-delivery market and a rapid erosion of the Royal Mail's market share in this business segment (Pond 2006b:2ff). In 1986 the Post Office was reorganised into five divisions – Royal Mail, Parcelforce, Post Office Counters and Girobank (formerly the Post Office Savings Bank). While Girobank was privatised in 1990, the other four divisions are still publicly owned. This is remarkable as the UK in a number of services is a forerunner of privatisation in Europe. In fact it was not until 2001 that the Royal Mail was even turned into a publicly owned private-law company (Royal Mail Group plc) (ibid). While the incumbent remained publicly owned, the reserved area was reduced in line with the EU requirements. In 2000 the government followed EU regulation and installed the Post Services Commission as independent regulator. However, instead of further limiting the monopoly to mail costing more than 65 pence or 2.5 times of the standard service, the government fully opened the market in 2006. This makes the UK one of only two countries in our sample with a fully liberalised postal market (ibid).

In Germany the liberalisation process also started early. In 1989 the former Deutsche Bundespost was split up into three public companies, one for post, one for telecommunication and one for financial services (Drews 2006:4ff). As such they were independent in day-to-day decision making, but they were still heavily controlled by the Ministry of Post and Telecommunications. In 1995 all three divisions were converted into private-law companies with the state retaining 100 per cent ownership. In 1998 the

mail division became Deutsche Post AG. In the same year the government also established a special regulatory authority to oversee the shift from a monopoly to a gradually liberalised postal market within the Ministry of Economic Affairs. In 2000 Deutsche Post was floated on the stock exchange after it had acquired a number of other companies including major logistic enterprises and private courier services (ibid). With the initial public offering its name was changed to Deutsche Post World Net, emphasising the new business strategy of the former monopoly supplier, which aims to become the world's leading post and logistics company. Since 2005 the majority of company stocks have been held by private shareholders. With respect to market-opening, Germany followed more or less the time schedule set by the Postal Directives. However, the government plans to remove any remaining restrictions for market participants by 2008 (ibid).

Austria strictly followed the framework set out by the two European Postal Directives. In 1996 the former monopoly provider was converted into a private-law company (Hofbauer 2006:2ff). In the following years the telecommunication division and the post's own bus service were hived off from the company. While Telekom AG was partly privatised, Postbus was integrated in state-owned Austrian Railways. In 2002, furthermore, the post's financial services were sold to a private bank. Post AG itself remained fully publicly owned until 2005, when 49 per cent of the company's shares were floated on the stock market (ibid). Despite the partly privatisation of the incumbent, there are no plans to open the reserved area before 2009. The government has set up a special regulatory authority, the Post and Telephone Supervisory Board. Yet the authority is under close control of the Ministry of Transport, Innovation and Technology. In recent years Post AG has acquired other firms, including its main competitor on the home market for direct and unaddressed mail and postal companies in the new member states (ibid).

Belgium also gradually opened its letter market between 1998 and 2006 in line with the requirements of the two Postal Directives while at the same time transforming the former monopoly provider (Verhoest/Sys 2006b:1ff). In 1991, La Poste/De Post was given the status of an autonomous state enterprise. The responsible ministry appointed a *commissaire du gouvernement* to supervise the company. In 2000 it was converted into a private-law corporation. With this step the government allowed for the involvement of private shareholders with two important restrictions: first the government must retain more than 50 per cent of the shares and secondly the state owns 75 per cent of the votes and the mandates regardless of overall proportion of private shareholding (ibid). In 2002 the Institute for Postal Services and Telecommunications was established as independent regulator. In 2005, 50 per cent minus one share of the incumbent was sold to private investors, including Post Denmark and the private equity fund CVC Capital (which had already acquired a substantial share of Post Denmark) (ibid).

In Poland the former monopoly provider was split up into a telecommunication and postal services division in 1991 (Radzka 2006b:1ff). Postal services were subsequently transformed into a state-owned enterprise. In 2000 a new regulatory authority, the President of the Electronic Communication Office, was established under the control of

the Transport Ministry. As part of the terms of accession to the European Union in 2004, Poland was granted the possibility to maintain a reserved area for mail weighing more than 350 grams until 2006. In 2006 the threshold was reduced to 50 grams as required by general EU regulations (ibid). As a result, the process of market opening was faster and more radical than in the other countries included in our sample. Instead of being privatised, Poczta Polska continued to operate as state company and further expanded its financial branch, including the operation of pension and insurance funds (ibid).

2.2.2. *Towards more competitive market structures?*

Markets and competition

In contrast to the other three sectors included in this comparison, postal services were a monopoly sector in all six countries before liberalisation. There was only one organisation, typically part of the public administration, responsible for collecting, sorting, distributing and delivering letters and parcels. The nature of the service demanded a countrywide service. Hence the monopoly was nationwide. Germany and the UK allowed for competition in their express markets in the 1980s, and in Austria and Belgium direct mail and newspaper delivery were exempt from the monopoly even before the adoption of the first European Postal Directive. While Sweden fully liberalised its postal market in 1993, the remaining countries only gradually reduced the reserved area in which the post incumbent still has a monopoly. The UK followed the Swedish example and fully opened its postal market in 2006, while Germany is expected to follow in 2008. In the remaining three countries, however, consignments weighing more than 50 grams are still exclusively handled by the post incumbent and the reserved area is not expected to be lifted before 2009 or even later. In the German case this means that currently about 40 per cent of the market is open to competition. Following the gradual opening of the postal market, competition as a rule is considerably stronger in parcels and express services than in letter markets. However, in some countries there is also substantial competition in certain sub-markets, such as direct and unaddressed mail as well as newspaper delivery.

Number of providers and market shares

Before liberalisation there was only one monopoly provider in all six countries. Hence liberalisation has as a rule led to an increase of the number of providers. Generally, the number of providers is higher in parcel and express mail service than in the letter market. In Germany the authorities have issued more than 2,000 licences for mail distributors. Most of the licence holders are very small or even one-person companies. Of the 2,000, some 656 are considered to be active actors in the market. Despite the large number of competitors – the post regulator issued more than 2,000 licences – Deutsche Post World Net still accounts for about 93 per cent of the total market and about 83 per cent of the section that is exposed to competition. However, some of larger

competitors, partly through alliances with other providers, have been able to challenge the incumbent's dominant position in certain urban or highly populated areas (Drews 2006:8f). After 15 years of a fully liberalised postal market the post incumbent in Sweden has about the same market share in the letter market, while six per cent is held by City Mail and the remaining one per cent is shared by 35 smaller companies (Andersson/Thörnqvist 2006b:4). The British Royal Mail still holds 96 per cent of the letter market while in Austria, Belgium and Poland the share of the incumbent company is even higher (Pond 2006b:4). In sum, the proportion of new competitors in letter markets varies from seven per cent in Sweden and Germany to four per cent in the UK, two per cent in Austria and Belgium and less than one per cent in Poland. Yet while the former monopoly providers clearly dominate the letter markets in all six countries, they have come under heavy pressure to defend their market shares in parcels and express mail. In this market segment there are not only a larger number of providers, but the largest providers have also significantly lower market shares. In half of the countries in our sample – Austria, Germany and Sweden – the former monopoly providers still have a dominant share in this market segment, while in the other three countries – Belgium, Poland and the UK – the majority of the market is held by new private providers.

Table 9: Market shares of post incumbents in national letter markets

Austria	Belgium	Germany	Poland	Sweden	UK
Adressed nmail: 98% Post AG	Adressed mail: 98% La Poste/De Post	93% DPNW	99.1% Poczta Polska	93% Posten AB	96%
Directmail: 80% Post AG	Directmail:	4% Pin AG		6.5% City Mail	
18% Feibra (subsidiary of Post AG)	81% Belgische Distributiedienst	1% Europost (TNT), WAZ and DPS			
2% Redmail	19% Last Poste/De Post and its subsidiary Deltamedia				

Source: PIQUE sector reports.

Evolution towards more competitive market structures

In sum, while there are highly competitive market structures in express mail and parcel services in all six countries, in letter mail competition is still very limited in Poland and limited in Austria and Belgium. It is, furthermore, rather limited in Germany and the UK and only moderate in Sweden (see table 10).

Table 10: Evolution towards more competitive market structures

	Austria	Belgium	Germany	Poland	Sweden	UK
Postal services – letter and direct mail market	Limited	Limited	Rather limited (fully open from 2008 onwards)	Very limited	Moderate	Rather limited

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

Evolution towards private ownership

As mentioned before, all six countries had state-owned monopoly providers in the postal sectors before liberalisation. Accordingly, the ownership structure was almost a hundred per cent public. Most of the former monopoly providers are still publicly owned. Yet while Poczta Polska is still a state-owned company, the other postal incumbents have been converted to private-law enterprises (Radzka 2006b:14f). The exception is Germany where the majority of the post incumbent has been sold to private investors (Drews 2006:17). In Austria, too, the post company has been privatised, but the state retained the majority of 51 per cent of the shares (Hofbauer 2006:11). In Belgium, the government also kept the majority of La Poste/De Post. Yet the 51 per cent in this case gives the government 75 per cent of the voting rights (Verhoest/Sys 2006:8). Interestingly, the two countries that have fully liberalised their postal markets, Sweden and the UK, still have fully publicly owned post incumbents. Hence, in the letter market private ownership only prevails in Germany, while in Austria and Belgium ownership is still predominately public but with a large share of private investors. In the remaining three countries private ownership only plays a subordinate role in the letter market. In contrast, the ownership structure in parcels and express services has become predominantly private, even if the incumbent still holds dominant market shares such as in Austria and Germany. The exception here is Sweden, where the fully publicly owned Posten AB dominates the parcels and express mail segment.

In sum, there has been a strong increase in private ownership in the sector in Germany and a substantial increase in Austria and Belgium, while in Sweden and the UK the growth of private ownership in the letter market has been limited. In Poland the increase has even been marginal (see table 11).

Table 11: Evolution towards a dominant private-ownership structure in four sectors

	Austria	Belgium	Germany	Poland	Sweden	UK
Postal services (letter market)	Predom. public ** <i>Substantial increase</i>	Predom. public ** <i>Substantial increase</i>	Predom. Private (incumbent sold) Strong increase	Predom. Public Marginal increase	Predom. public Limited increase	Predom. public Limited increase

** 49% of incumbent in private hands

Source: PIQUE sector reports. Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

2.2.3. Forms of regulation

Public ownership also plays an important role in regulation. Before liberalisation, public ownership was the dominant form of regulation. Public ownership continues to play an important role – with the exception of Germany the majority shareholding of all former monopoly providers is still in public hands and in three countries they are even still fully publicly owned – but with liberalisation specific regulatory authorities, licences, notifications and contracts have become increasingly important. All countries have established specific regulatory bodies. The responsibilities of regulators include the specification and control of the universal service obligation, the issuing of licences, price regulation and mediation between competitors and in some countries the granting of access to parts of the incumbent's internal services (e.g. mail sorting). Generally, post regulators have less regulatory powers or are less active than their counterparts in the electricity sector. Exceptions in this regard are the UK and Germany. The British regulator has fined the Royal Mail for uncompetitive behaviour while the German regulator has put considerable pressure on German Post to reduce tariffs (Pond 2006:10; Drews 2006:13). In Austria, in contrast, the regulator has had no problems approving the incumbent's application for price increases, while in Poland the president of the regulatory authority can complain but has no power to act against the misuse of market power by the incumbent (Radzka 2006:12).

Furthermore, all the countries have introduced a universal service obligation specifying the number of days per week mail has to be delivered and the density of postal outlets and their office hours. In some countries the requirements are laid out in specific legislation, in other they are part of the licence obtained by public-service providers, while in Belgium the details are included in a management contract between the government and the public-service providers. So far only the post incumbents have the status of a public-service provider. Austria and Sweden stand out because of a lack detailed requirements, but in both countries the universal service providers need special approval from the authorities if they want to close post offices. However, the universal service obligation has not prevented the post incumbents in several countries from closing post offices. German Post, for example, has closed more than 9,000 offices and

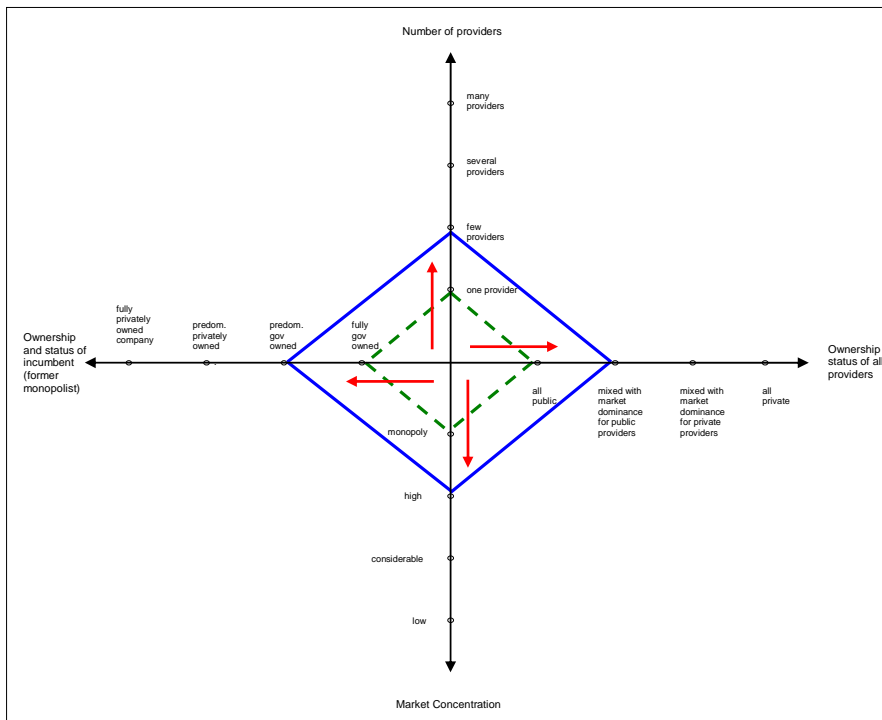
now operates no more 13,000 outlets. In Austria new regulation to stop the closure of post offices was adopted only after Post AG had shut down 40 per cent of its office network (Hofbauer 2006:12ff). Swedish Posten AB operates only 436 offices, while 2,039 are run by private-sector partners such as supermarkets or filling stations. Apart from establishing specific requirements with regard to the density of post offices, the universal service provisions also include maximum periods for the processing and delivering of mail. According to these transit-time targets, universal service providers in Austria, Belgium and the UK are required to deliver more than 90 per cent of the letters the day after they have been mailed. In Germany, Poland and Sweden the target is between 80 and 85 per cent. In addition, Austria, Germany and the UK also have transit-time targets for parcels. In Austria 90 per cent of the parcels have to be delivered two days after they have been mailed (Input Consulting 2006).

While companies without a universal service obligation are free to set their own prices, universal service providers are still subject to price control. Poland is the only country in our sample without price regulation. Prices are set by Poczta Polska autonomously while they must be related to real costs (Radzka 2006:12). If they do not, the chair of the regulation authority can submit an official complaint to the council of ministers. In Austria, prices for services within the reserved area need ex-ante approval by a price commission set up within the Post and Telephone Supervisory Authority. Universal services outside the reserved area are approved ex-post. After effectively freezing the prices between 2001 and 2003, the British regulator moved to a more flexible pricing system in 2006 (Pond 2006:10). According to the new system, prices may rise in line with the retail price index minus a certain productivity factor. Germany has a similar system. Prices are also set ex-ante taking into account the increase in the consumer-price index and expected productivity gains. However, the German regulator seems to expect higher productivity gains, as it has required German Post not only to freeze but effectively to reduce prices. In Sweden and Belgium there are no formal price fixing procedures but there are price caps: in Sweden Posten AB is allowed to increase prices to the extent of the increase in the consumer price index while in Belgium La Poste/De Post can ask for increases reflecting the growth of the consumer price index plus a certain supplement (Input Consult 2006:13ff). Belgium also stands out because the universal service provider is required to conduct a customer-satisfaction survey at least once a year. The company, furthermore, has to formulate an action plan to improve issues that are deemed unsatisfactory (Verhoest/Sys 2006:6).

Apart from the enforcement of the universal service obligation and the establishment of new regulatory bodies, licences have become a widespread instrument to regulate the postal sector. Austria stands out in this regard because it does not issue specific licences for post operators. In Austria it is sufficient if new mail operators submit the general terms and conditions of their businesses, including an explanation of how they intend to meet certain criteria such as the establishment of complaints and redress services as well as deposit facilities (Hofbauer 2006:8). While in the UK all operators need a licence, in the remaining four countries licences are only required for the universal service provider and providers in the letter market. Germany has the highest number of

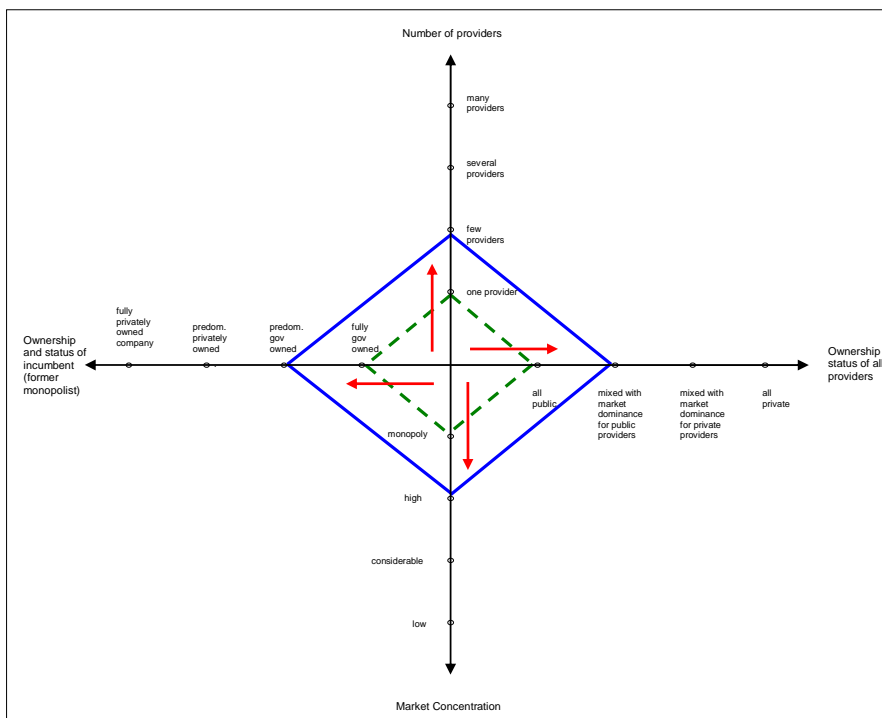
licences issued so far. Yet of the 1,861 postal licences that were awarded until 2004 only 551 are active in the market (Drews 2006:8). Poland comes next with 90 licences, followed by Sweden with 36 and the UK with 16. Germany is the only country where regulation also concerns working conditions. Operators who obtain a licence are required to offer “working conditions that do not extensively fall below the working conditions that are common in the licensed area.” In practice, however, this requirement hardly plays any role. The regulator has never denied an application because of insufficient working conditions even though working conditions at the new competitors are substantially worse than those at the German Post (ibid 12).

Graph 7: Post Austria (letter market)



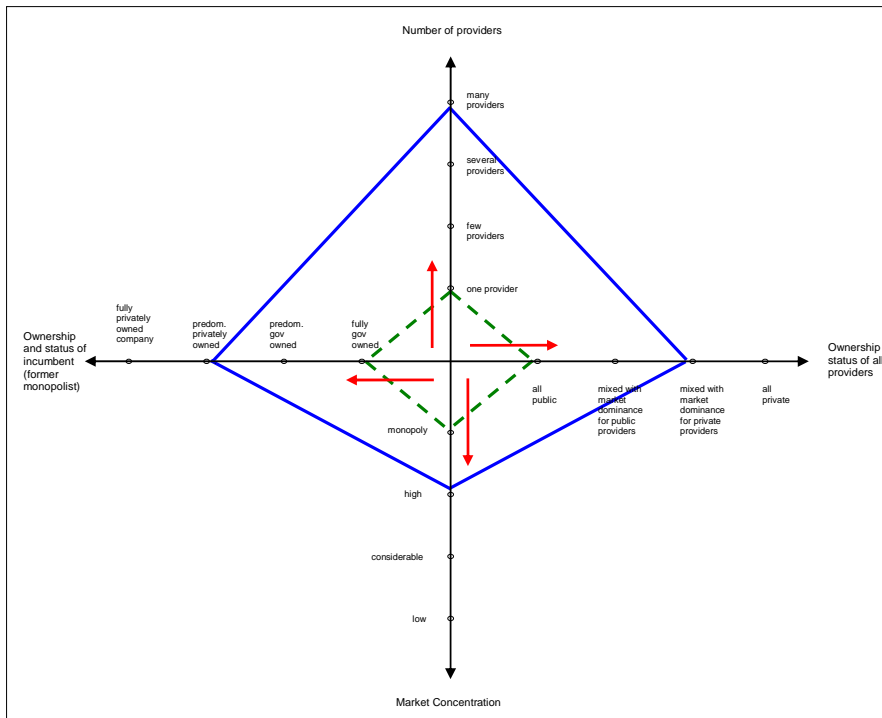
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 8: Post Belgium (letter market)



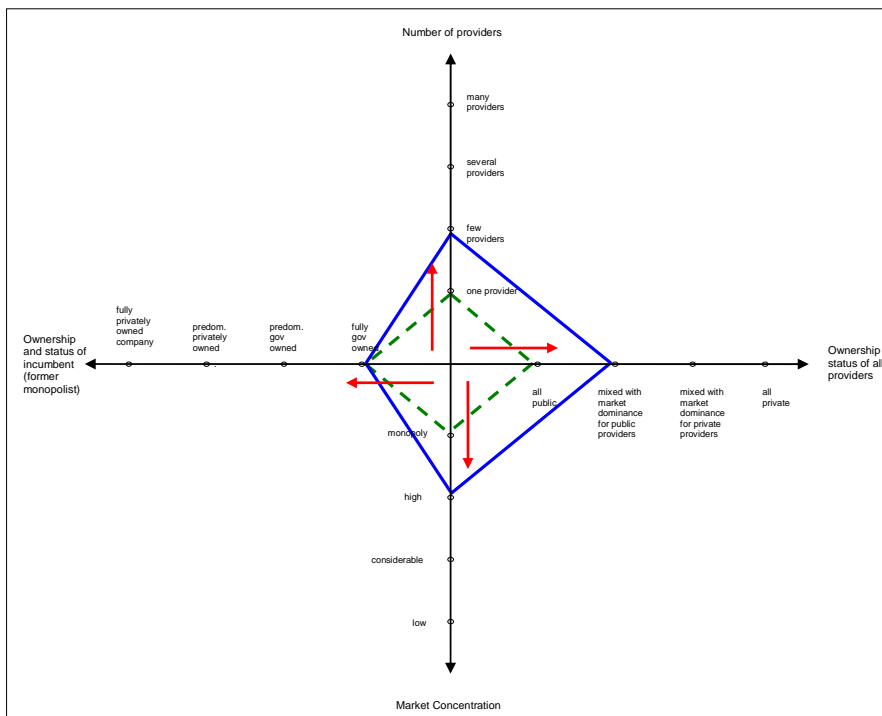
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 9: Post Germany (letter market)



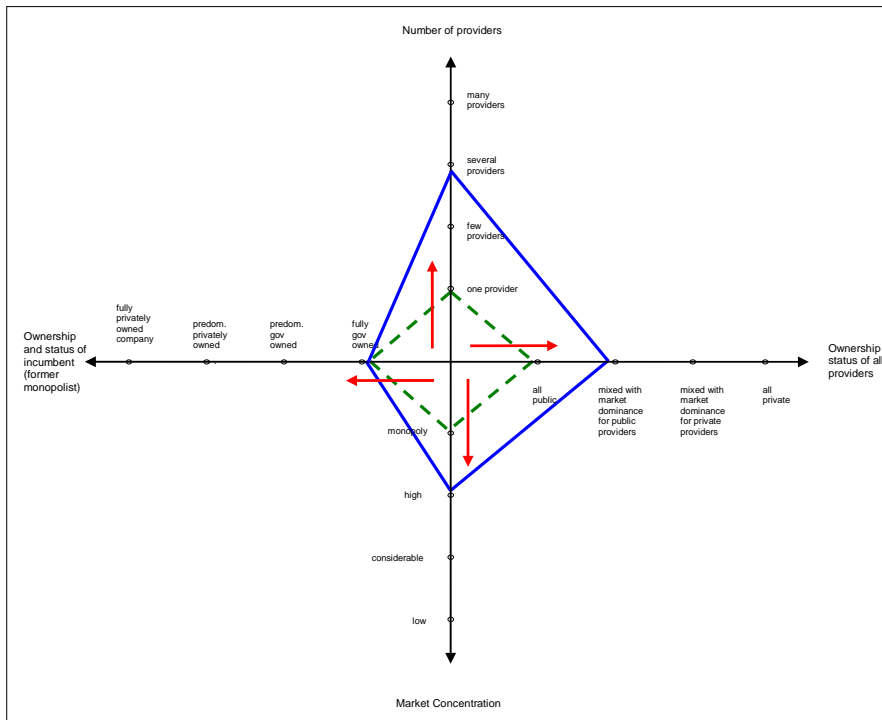
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 10: Post Poland (letter market)



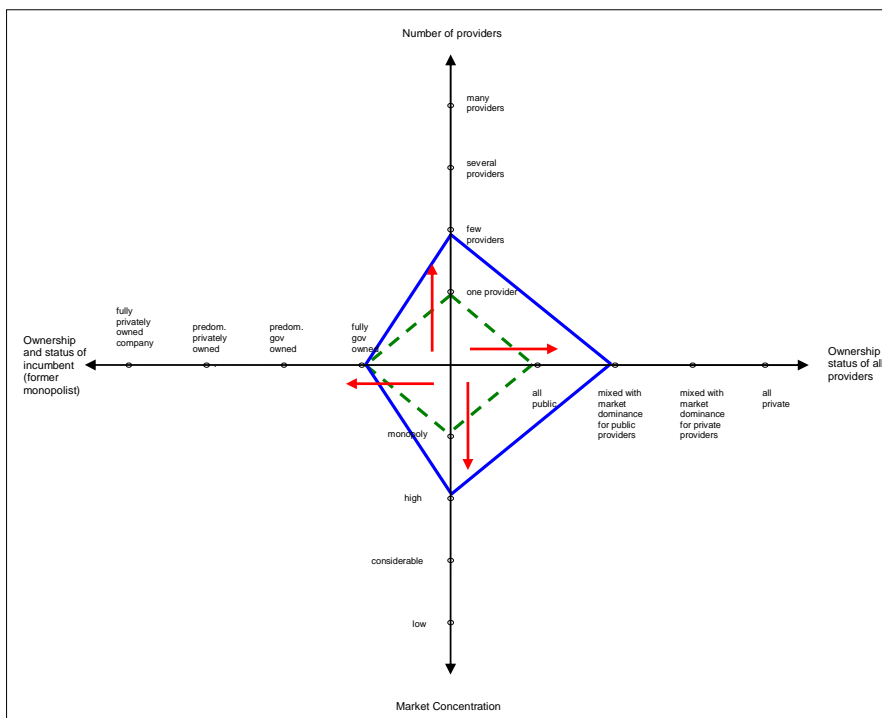
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 11: Post Sweden (letter market)



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 12: Post UK (letter market)



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

2.3. Local Public Transport

2.3.1. Processes of liberalisation and privatisation

The British government started experimenting with liberalisation in the bus sector in the early 1980s. Despite mixed effects, the conservative government introduced a sweeping market reform outside London in the mid 1980s. From then on, every licensed operator could apply to run a new route even if another company already ran a service along the same line. At the same time, subsidies for the publicly owned companies were abolished, forcing the former monopoly suppliers to compete with private companies on equal terms. As this proved to be rather difficult, the two main public providers, National Bus Company and Scottish Bus Group, were broken up and sold to the private sector (Bayliss 1999). In contrast to the rest of the country, London (with 7.4 million inhabitants almost as big as a small country) pursued a different way of liberalising public transport. Instead of making different operators compete with each other for passengers, bus routes were tendered in temporary but exclusive contracts. At the same time, private companies were invited to bid for contracts along with London Bus Lines. To further increase competition, London Bus Lines was then split up into 13 subsidiary companies, which were not only forced to compete with private providers but also with each other. In the mid 1990s the 13 subsidiaries were sold to the private competitors (Pond 2006:4-5). Around the same time the government started the privatisation of the national railway company, British Rail. In 1994 the company was split into an infrastructure and a service unit. While the infrastructure company was subsequently floated on the stock market (and replaced into administration in 2001), the rail service was turned into a number of separate legal entities and transferred, either by franchising or trade sale, to the private sector (ibid 6).

Sweden also liberalised its local transport market in the mid 1980s. Yet Sweden, like London, forced its transport companies to compete for contracts rather than compete for passengers. In 1985 new legislation enabled the municipalities to tender transport services to competing providers (Harmak/Thörnqvist 2006:1ff). Previously, municipalities had given licences to companies mainly based on the need for additional services to the already existing networks. As in the UK, public operators were forced to compete with private bus companies, but in contrast to the UK not all of them have subsequently been taken over by private competitors. However, while the number of providers first increased as a result of liberalisation, later it started to decrease (ibid). In this process a number of municipal transport companies were sold to the private sector while multinational transport companies have increased their presence on Swedish transport markets (ibid). In rail passenger transport the state-owned incumbent, Statens Järnvägar, (SJ) is still the most important transport provider, but it is increasingly forced to compete with new private operators. Sweden, as a result, is frequently presented as role model for the liberalisation of local public transport in Europe.

Compared to the UK and Sweden, liberalisation and privatisation of local public transport in the remaining four countries has been rather modest. In contrast to Sweden,

which radically changed its transport system in the mid 1980s, Austria and Germany have started to tender contracts for some routes while at the same time continuing to issue non-competitive licences for others. However, Germany stands out for its attempts to liberalise regional rail services (Brandt 2006:10f). While long-distance trains are expected to be self-sustaining, local and regional rail services are considered as services of general interest and therefore eligible for subsidies. In order to limit the amount of subsidy transport authorities in some states have started to tender contracts for regional rail services (ibid). So far, the railway incumbent Deutsche Bahn, through its subsidiary DB Regio, still operates the vast majority of regional train services, but new competitors have become increasingly successful in winning contracts. While they only account for five per cent of the regional rail passenger market, the new competitors have more than doubled their market share between 2000 and 2004 (ibid).

In Austria, regional rail transport is still largely shielded from competition, but some of the regional transport associations, which coordinate the different means of transport across Austria, increasingly use tendering procedures to lower costs. The larger part of the routes is still based on non-competitive licences obtained by the transport operators from the regional governments. However, as a result of a recent reform these licences expire after eight and instead of ten years and they are no longer automatically renewed (Hermann 2006:7f). Austria, furthermore, is an exception insofar as even the private transport companies are against further liberalisation. As most of them are small or medium-sized firms, they fear being taken over by foreign transport multinationals if they have to compete with them for contracts. A typical Austrian solution was also found to the planned privatisation of Postbus, the largest regional transport provider in Austria (formerly part of the post and telecommunication authority). After fierce resistance from staff and fears of a foreign takeover, the company was integrated in the state-owned Austrian railways, while a third of the routes were sold to private Austrian companies (ibid 12).

In Poland liberalisation and privatisation have played only a secondary role in the restructuring of the local public-transport sector. The driving force, instead, was the regionalisation or even localisation of transport services. In the planned economy the larger cities had their own municipal transport services, while transport in the smaller municipalities was provided by the national railways and one state-owned bus company. After 1990, the nation-wide bus service was dissolved and the municipalities started to organise their own transport services (Kubisa 2006:1). Basically they used three methods to cope with this task: Some municipalities set up their own organisations to provide local transport – either as semi-independent agencies or as private-law companies. Others have set up joint-stock companies and invited the private sector to invest in the joint public-private enterprises. The third method was the invitation of private companies to provide the services (ibid. 5). The latter two methods include an increase in private ownership but not necessarily in competition. Competition instead has emerged in the larger cities such as Warsaw, where transport authorities have started to tender routes to competing providers.

Belgium stands out in this comparison as it is following a rather distinctive path in re-organising local public transport. Belgium has hardly liberalised or privatised its transport sector. Instead the former eight monopoly companies were reduced to four, three of which exclusively provide transport for each of the three regions while the fourth operator is the national railway company. All four providers are fully publicly owned. Changes in ownership concerned the shifting of shares from federal to regional governments rather than the sell-off to the private sector. Much to the contrary, the regional bus provider in the Walloon region has even acquired smaller private bus companies in recent years (Verhoest/Sys 2006:4. The Flemish provider, De Lijn, on the other hand, has started to outsource parts of its routes to private operators. Currently, about one third of the routes are outsourced to private providers and the proportion is expected to rise to 50 per cent (ibid 3). Competition so far is limited to this market segment and it is controlled by the public companies. On the other hand, emerging competition has already caused mergers between local companies and an increasing engagement of large foreign transport multinationals.

2.3.2. Towards more competitive market structures?

Markets and competition

In all six countries, local transport providers enjoyed local or regional monopolies before liberalisation and only in the UK outside London do transport providers compete for passengers on the same routes. In the other countries, liberalisation of local public transport led to competition for the market rather than competition in the market, meaning that municipalities or transport authorities tender temporary but exclusive contracts for particular routes to competing firms. Yet while in London and Sweden outside the major cities all routes have been subject to the tendering procedure, in Austria and Germany some routes are tendered while others are still operated on non-competitive route-specific licences. The result is a fragmented market structure with some parts being exposed to competition and others not. In the federal state of Hesse in Germany, for example, since 2001 all contracts have been tendered, with the result that about a quarter of all routes are now subject to competition (Latniak 2006:7). The same development can be found in short-distance rail in Germany, where about 20 per cent of train kilometres were tendered in the last ten years (Brandt 2006:10f). There are no figures for Austria, but the majority of transport is still based on non-competitive licenses including local public transport in the capital, Vienna, and other major cities provided by municipal transport services, which in terms of transport volume accounts for the major part of the national market.

In Poland, in contrast, it is the larger cities where competition has emerged so far. There, transport authorities are increasingly tendering routes to competing provider while the majority of routes outside the urban centres are exclusively operated by public, joint public-private and private transport companies. Belgium stands out in this comparison because it has maintained effective regional monopolies. Each of the three

regions in Belgium (Brussels, Flanders and Wallonia) has its own exclusive transport provider while trains in the whole country are operated by the national railway company. However, the monopoly provider for Flanders, De Lijn, outsources about a third of its routes to private bus companies through a process of competitive tendering (Verhoest/Sys 2006:3). As a result, there is competition in a sub-market but controlled by the monopoly provider

Number of providers and market shares

Of the six countries included in the comparison Germany and Austria have always had a large number of transport providers. Sweden has also had a substantial number of mostly local providers. In Poland and the UK, larger cities operated their own municipal transport companies, while transport in smaller municipalities and in the rural areas was provided exclusively by one or in the case of Britain two bus companies (as holdings of a large number of subsidiaries) In Belgium, in contrast, the market was shared by eight transport providers each with its exclusive area of provision.

Germany and Austria still have a large number of providers. In Germany there are more than 2,000 and in Austria more than 500 companies providing local transport services. In contrast, the two countries with the highest degree of competition in local transport markets have a comparably low number of providers: In the UK there are now seven major transport suppliers, which partly operate independent subsidiaries. The same companies also dominate the transport market in London (Pond 2006:4f). In both cases liberalisation has first led to an increase in the number of providers – the National Bus Company was initially converted into more than 50 independent companies – but over time the number decreased again with larger companies taking over smaller competitors. The same development occurred in Sweden. Here, too, the number of providers first increased as a result of liberalisation and then decreased again. Meanwhile it has stabilised, with approximately 50 providers (Harmak/Thörnqvist 2006:2ff; Manson 2006). In the long-term, therefore, competition in local public transport in Sweden and the UK has caused a reduction in the number of providers.

A similar effect can be seen in Belgium, although here it is not the result of competition but of regionalisation. With the regional governments taking over more responsibilities for organising local public transport, the number of major transport providers has been reduced from eight to four (each for one of the three regions plus the national railways). Besides the four large companies there are also a number of smaller companies competing for routes outsourced by the regional monopoly provider in Flanders. Although limited to a submarket, competition here has already led to a concentration process, with mergers between local Belgian companies and takeovers of local companies by large multinational corporations. While in Belgium the number of providers has decreased as a result of regionalisation, in Poland regionalisation or in this case perhaps even localisation had the opposite effect: There are now 155 municipalities with their own transport services, whereas previously only the larger cities had their own transport systems, while transport in the other municipalities was provided by one national bus company (Kubisa 2006:6).

In terms of market concentration the picture is slightly different: Market concentration is relatively low in Germany and Poland. Market concentration is highest in Belgium where four companies control the local transport market. Austria also has a high degree of market concentration, with one company alone accounting for about 80 per cent of regional transport in the rural areas, while the city of Vienna's municipal transport provider dominates urban transport (Hermann 2006:9). In the UK three major companies (First Group, Stagecoach and Arriva) account for more than 50 per cent of the market, while in Sweden nine out of the 50 companies are large companies with a substantial market share (Harmak/Thörnqvist 2006:2ff).

Evolution towards more competitive market structures

In sum, we have Sweden and the UK in which liberalisation led to substantial competition in the local public transport markets. Yet in both countries competition over time has also decreased because of increasing market concentration. Germany has had a rather limited evolution towards competitive market structures, while in Austria and Poland competition is limited. In Belgium competition is even weaker due to the continuing regional monopolies.

Table 12: Evolution towards more competitive market structures

	Austria	Belgium	Germany	Poland	Sweden	UK
Local public transport	Limited	Very limited	Rather limited	Limited	Strong but decreasing because of more market concentration	Strong but decreasing because of more market concentration

Source: PIQUE sector reports Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

2.3.3. *Towards a more private ownership structure?*

Privatisation and ownership

In four of the six countries local public transport was provided by public and private companies even before liberalisation. Only in the UK and Poland were providers exclusively publicly owned, although by different public bodies. In both countries some municipalities had their own transport systems while regional transport was provided in Poland by one and in the UK by two national companies (in the UK one for Scotland and one for the rest of the country). In the other four countries there have always been private providers existing alongside the public transport services, but in terms of transport volume the vast majority of services were provided by public companies. With liberalisation the ownership structure changed dramatically in the UK, where almost all transport providers, including rail services, are now privately owned. The only

exception is the London underground system, where the infrastructure has been leased to private investors but London Underground, which provides the service, is still publicly owned. On the national railways, after a number of tragic accidents the operator of the railway tracks, Railtrack, was reconverted into a publicly owned company in 2001 (Pond 2006:4ff). Although Sweden had no explicit privatisation agenda in local public transport, the introduction of competition led to the privatisation of more than 40 municipal transport companies (Harmak/Thörnqvist 2006:3). Only seven Swedish municipalities still operate their own publicly owned transport services. Although there are a large number of private companies in Austria and Germany, they are mostly small companies with a limited market share. In Austria several hundred private companies account for not much more than ten per cent of the market, whereas in Germany more than 2,000 private firms together hold not more than 15 per cent. Another five per cent is held by shared public-private companies (Brand 2006:9-10). Instead of being privatised as initially planned, the regional market leader Postbus in Austria was integrated into the state-owned railway company while about a third of its routes were sold to the private sector (Hermann 2006:12).

In Belgium and Poland, ownership of transport companies largely remained in public hands but ownership was handed over from the federal to the regional and in the case of Poland to the local level. As a result, some communities in Poland have invited private companies to provide transport services while others have set up joint public-private service providers. In Belgium, on the other hand, about a third of transport in Flanders is outsourced to private companies (Verhoest/Sys 2006:3). In sum, however, public transport in both countries is still overwhelmingly publicly owned.

Yet even in those countries where local public transport has remained in public hands the major providers were almost always transformed from mere state agencies or public companies to profit-seeking private-law corporations. This is also true for many of the municipal transport services. The only exception in this regard is Poland, where some municipalities have kept services in semi-independent agencies. With the growing share of private ownership, large multinational companies have increasingly become active in local transport markets. Some of them operate several thousand buses and therefore more than the number of buses in service in some of the smaller countries. Large international companies already dominate the markets in Sweden and the UK, while they are rapidly expanding their shares in Belgium and Germany.

Evolution towards private-ownership structures

In sum (see table 13) liberalisation has led to a very big increase in private ownership in the UK and to a big increase in Sweden. In Germany changes in the ownership structure have been moderate while in Austria and Poland they have been limited and in Belgium very limited.

Table 13: Evolution towards a dominant private-ownership structure in four sectors

	Austria	Belgium	Germany	Poland	Sweden	UK
Local public transport	Predom. public Limited increase	Predom. public Very limited increase	Predom. Public Moderate increase	Predom. public Limited increase	Predom. private Strong increase	Fully private Very strong increase

Source: PIQUE sector reports Due to a lack of exact and comparable data for specific sectors and countries, classifications are based on estimations of the national research teams. For more detail, see the country reports for each sector.

2.3.4. *Forms of regulation*

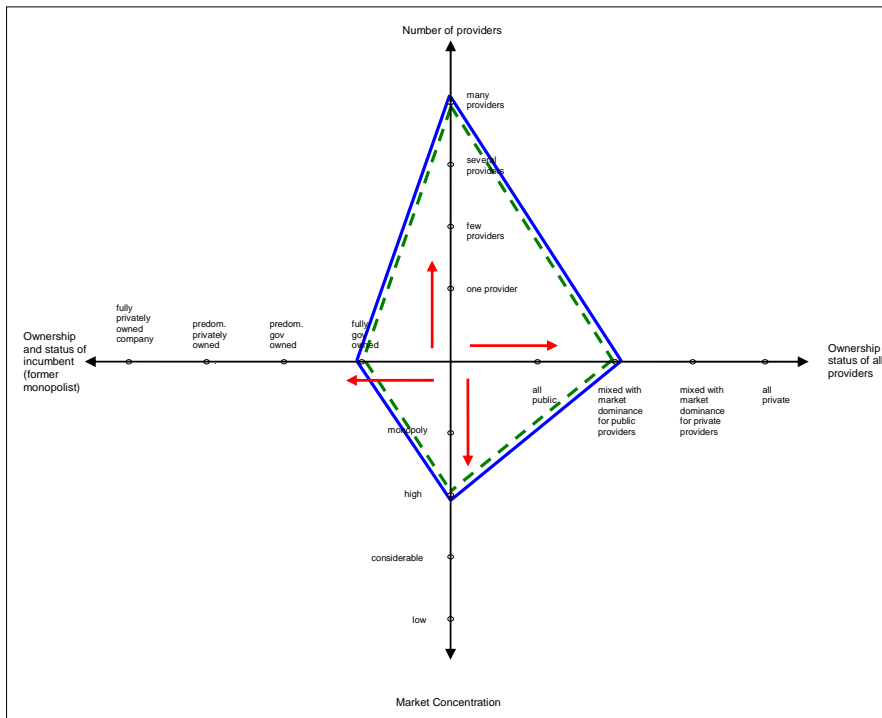
As in the other sectors, public ownership played an important role in the regulation of local public transport. The larger municipalities in particular have set up their own publicly owned transport services. But even if transport was provided by private operators, the federal, regional and local governments have had a strong impact on service provision through imposing a number of conditions an operator had to meet to qualify for subsidies. In addition, some countries have established transport authorities to plan transport as well as to coordinate the various means of transport (railways, buses, trams and the metro) and the different transport providers – including public and private operators. In some cases, transport authorities have also established uniform ticket prices. In Austria, Germany and Sweden, large parts of the country are covered by transport authorities, while in Poland similar bodies only exist in the larger cities (in the UK transport authorities exist for different means of transport in London, while in Belgium the monopoly providers in each region plan and coordinate supply).

Liberalisation has had very different effects with respect to regulation depending on the form of competition introduced. The UK outside London is the only case with competition in the market, meaning that transport providers compete for passengers on the same routes. In this case, regulation has been reduced to a mere technical matter. Transport companies must meet a number of technical standards and comply with safety guidelines in order to obtain a license for operating transport services. In contrast, in those areas where competition for the market has been introduced, regulation has tended to become more complex. Tendering organisation has to carry out a tendering procedure, which is itself time- and resource-consuming for both the tendering organisation and the applicant. Details of service provision must then be laid down in a contract to be signed by the two contracting parties – in addition to technical standards and safety guidelines which apply to all applicants. Apart from the specification of the route, the frequency of the service and transport capacity, contracts increasingly also include quality issues such as the general condition and the technical equipment of the buses (e.g. accessibility for handicapped passengers) or the qualification and experience of drivers.

After awarding the contract, the tendering organisation has then to make sure that the contractor meets the requirements specified in the contract. For that matter some tendering organisations have created new control regimes including specific indicators for measuring output and service quality. London Buses, for example, compares the actual mileages provided by its contractors with those specified in their contracts (Pond 2006:8ff). If there is a difference, contractors have to explain why it occurred and if the reason is within in their own responsibility (insufficient staffing, mechanical problems etc.) they are threatened with a fine under the terms agreed in the contract. In addition, Transport London also monitors the accuracy of services. To do so, teams of approximately 120 part-time data collection staff are sent out to particular observation points on three-hour shifts to record buses using hand-held data-capture devices. An observation point is surveyed 16 times during a 12-week period. London Buses then validates the data and matches the results against the timetable (ibid). It then reports on how much longer a passenger would have to wait than if the bus service was running exactly as expected. An observation point will be surveyed 16 times during a 12-week period. London Buses then measures the performance of each route against minimum standards and benchmarks. In addition, passenger surveys are carried out four-times a year in order to assess service satisfaction for particular routes, boroughs and contractors. A sample of passengers are asked for their opinions with regard to a number of quality issues based on the journey they have just made. The assessment is then published for each individual route, all routes in a particular borough and each of the contracting bus companies (ibid).

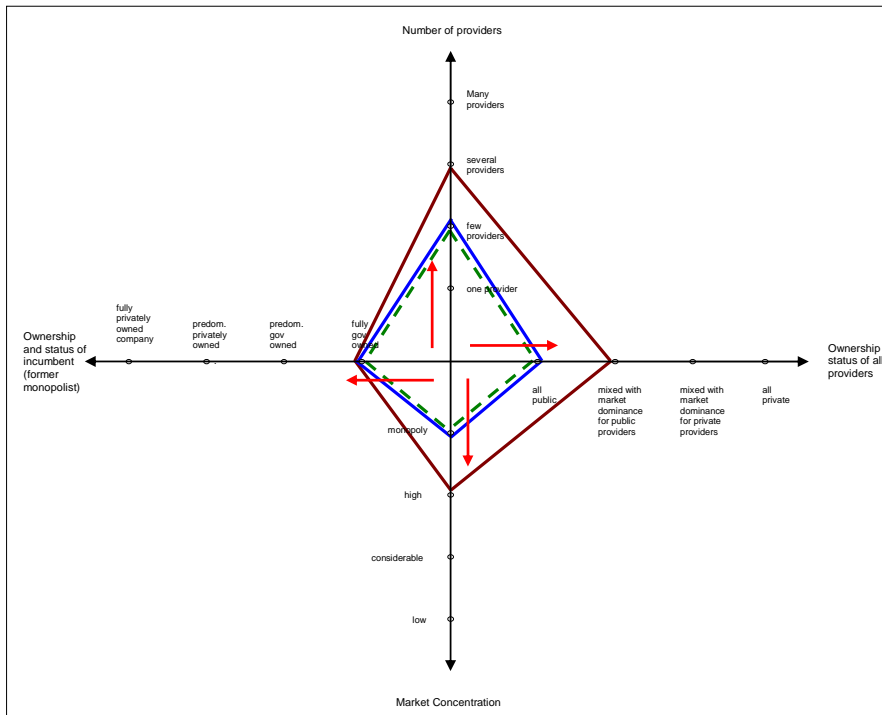
Similar mechanisms have been introduced in transport services that have not been exposed to competition through management contracts. In Flanders, for example, the regional monopoly has to meet a number of criteria laid out in the management contract signed by the company and the regional government. One requirement is to have a passenger survey every two years in order to assess customer satisfaction. Based on the results of the survey, the company has to make proposals how quality of service can be improved. In addition, the contract also refers to the quality and management of the bus fleet and requires the contractor to introduce measures to improve the responsiveness of its staff to passenger demands (Verhoest/Sys 2006:7).

Graph 13: Local public transport Austria



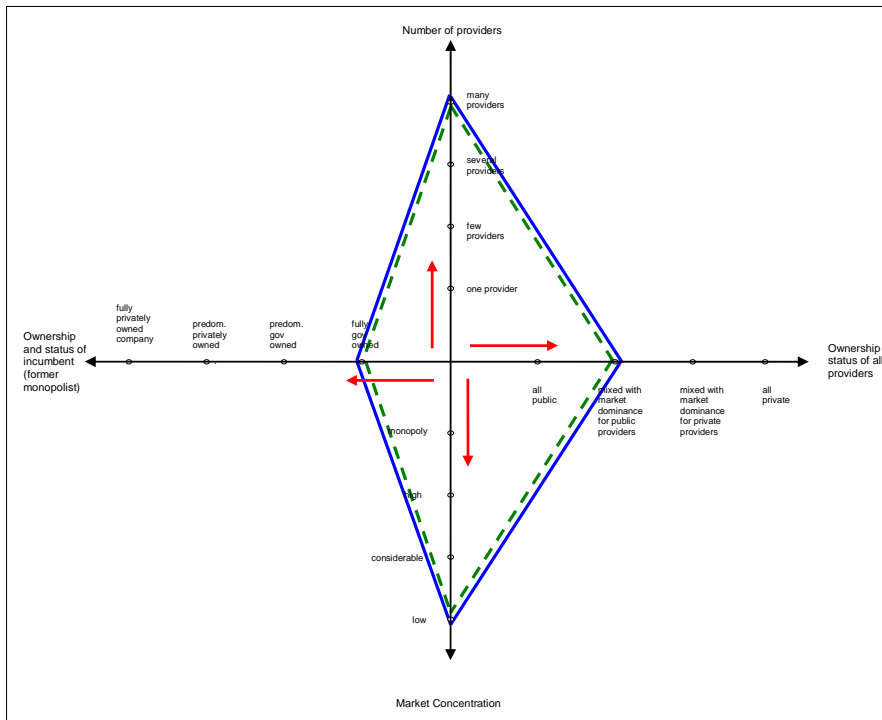
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 14: Local public transport Belgium



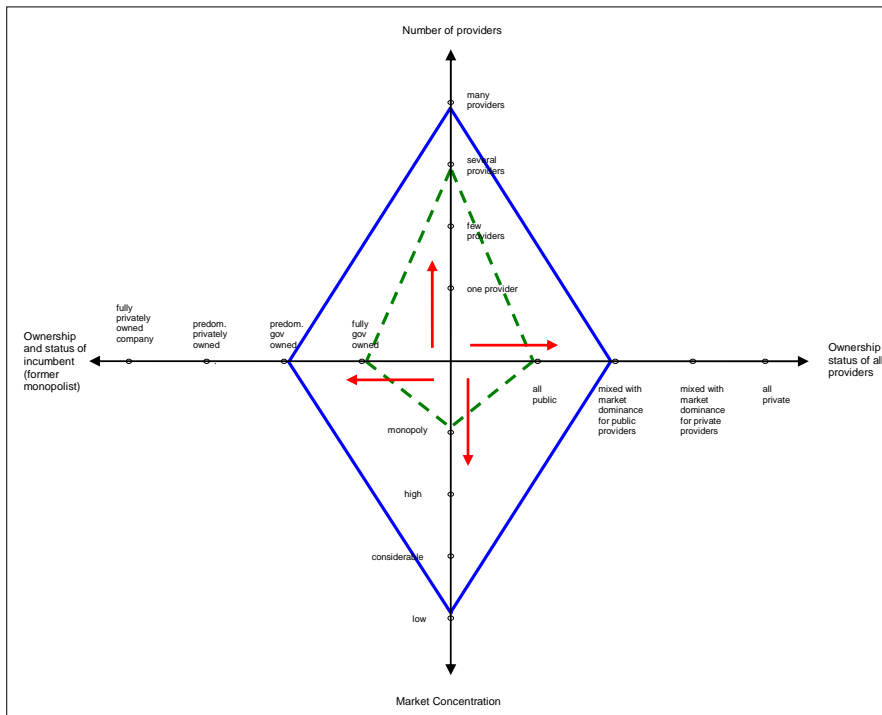
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation, brown full line including outsourcing

Graph 15: Local public transport Germany



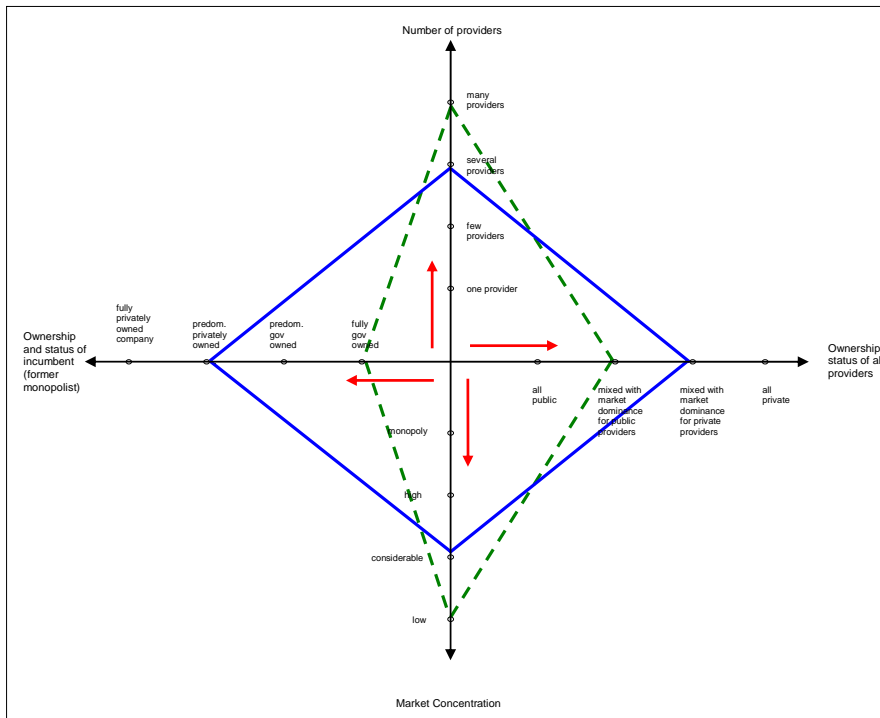
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 16: Local public transport Poland



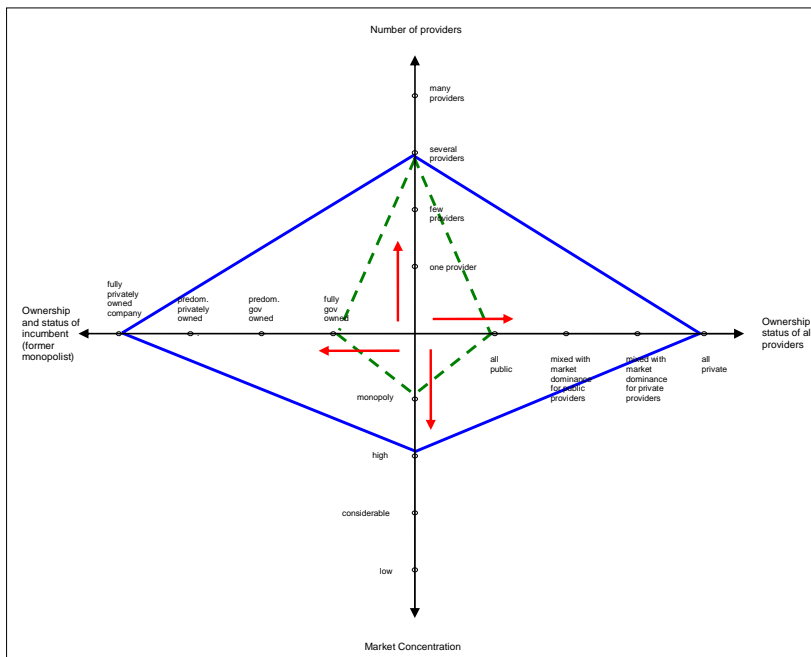
Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 17: Local public transport Sweden



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

Graph 18: Local public transport UK



Source: PIQUE country reports
Green dashed line before liberalisation, blue full line after liberalisation.

2.4. *Health Care/Hospitals*

The hospital sector is fundamentally different from the other three sectors analysed in this overview inasmuch as the national health systems in Europe hardly allow for competition between different hospitals. In countries with Bismarck-style health insurance funds, which from our sample includes Austria, Belgium and Germany, private investors have always had the possibility to open private hospitals for private patients and patients have always had the possibility to choose between different hospitals. The crucial mechanism, however, was not access to the market but access to public funding. Hospitals with public funding, in turn, could recover their costs but they could hardly make any profit. The more recent introduction of choice in the taxed-based systems in Sweden and the UK has increased pressure on hospitals but has not meant that those hospitals that run on deficits simply disappear from the market. If so, whole areas would be left without hospital care. However, growing pressure to reduce health-care costs has led to changes in hospital funding, which, in turn, triggered a process of economisation and corporatisation in the hospital sector across Europe. Part of this process is the simulation of markets and competition and in the long-run possibly an increasing share of private for-profit hospitals if they prove to be cheaper than their public counterparts.

Given the special character of the hospital sector, we depart from the sector used for the presentation of the other three sectors. Instead, we start with an overview of the ownership structure of hospitals in the six countries under investigation. We then describe major changes in the funding systems that have fuelled economisation and corporatisation. In the following section we then summarise related changes in the provision of hospital care before we present some facts with respect to the emergence of private European healthcare multinationals.

In contrast to the other three sectors, ownership in the hospitals sector does not only include public and private providers. Especially in the Bismarck-style health systems, there is substantial proportion of private not-for-profit hospitals. In Belgium even the majority of hospitals are private not for profit. On the other hand, private for-profit hospitals have in the past played only a marginal role in the Beverdige-style systems. Except for Belgium, private hospital care has increased in all countries included in this sample (in Austria only in terms of beds provided by private operators), but as can be seen from table 14 there are still substantial differences between the countries included in this comparison.

Table 14: Ownership structure of hospitals in the PIQUE countries

	Public	Private not-for-profit	Private for-profit
Austria (2005)			
Hospitals	45.8%	34.8%	19.3%
Beds	63.9%	28.3%	7.8%
Belgium (2003)			
Hospitals	36,2%	63.8%**	
Beds	38,7%	68.3%**	
Germany (2005)			
Hospitals	35.1%	38.2%	26.6%
Beds	52.3%	35.2%	12.5%
Poland (2004)			
Hospitals	81.4%	18.6%**	
Beds	95.8%	4.2%**	
Sweden (2007)*			
Hospitals	95%	none	5%
United Kingdom (2006)*			
Beds	92%	8%***	

* Since there are no official statistics on private hospitals for Sweden and the UK, these figures are estimates

** Figure includes a very small number of private for profit hospitals:

*** Most are private for-profit hospitals

Source: National Statistics, own calculations

2.4.1. Changes in hospital funding

While in the Bismarck-style health insurance systems the funding and operation of hospitals has always involved several parties (except for a small number of hospitals directly run by the insurance funds), the separation of funding and provision has become a dominant trend in the integrated taxed-based systems. The separation is meant to enable funding organisations to operate increasingly as purchasers of health-care services. As such, funding organisations can increase pressure on health-care providers to compete for contracts. This, at least, was the idea behind the introduction of National Health Service (NHS) Trusts in Britain. The 400 NHS trusts representing public hospitals in Britain are no longer granted a fixed budget. Instead they have to secure income by winning contracts from commissioning bodies including District Health Authorities (DHAs) and general practitioners with fundholding status and with a budget to purchase treatment for their patients (Pond 2006:7f). Trusts are non-profit organisations but they are expected to be run like independent businesses. The Labour Government, coming into power in 1997, even enhanced the autonomy of trusts by giving them the possibility to apply for foundation status. Foundation Trusts, as they are now called, are no longer accountable to the Department of Health. They are only accountable to a newly installed market regulator. Foundation Trusts, furthermore, enjoy additional freedom to generate income and allocate resources, including not only the winning of contracts but also the establishment of commercial arms or the

engagement in existing commercial ventures, the sale of land and property, the borrowing of money from private lenders and the transfer of staff to the private sector – which, as we will describe further below, has a lasting impact on the organisation of public healthcare provision. Until October 2006, 52 Foundation Trusts have been approved (Pond 2006:9f).

While the establishment of NHS Trusts and Trust Foundations are a special feature of the British health system, the split between purchaser and provider is also characteristic of health-care reforms in other taxed-based systems. In Sweden, for example, county councils have established separate purchasing organisations at the county or district level in order to fund the local hospitals. By 1994, 14 out of the then 26 county councils had adopted a purchasing–provider model (Andersson 2006:22). While the split between purchasing and provision is typical for the tax-based health systems – in countries with compulsory social health insurance, funding and provision has always been separated, with the local and regional governments running the hospitals and the insurance funds covering treatment costs – there has been a general trend to convert public hospitals to private law companies. This has, as we will describe below, not only facilitated the emergence of larger hospital networks, but also the engagement of private business partners and, in some cases, the sale of public hospitals to private investors.

In connection with the separation of funding and provision, the system of funding has also been altered. On the one hand, hospitals have been given capped budgets instead of full-cost coverage, with the effect that management has to set priorities with respect to spending the increasingly limited funds. On the other hand, the reimbursement for actual treatment has been changed from per-diem fees to diagnosis-related group (DRG) systems. The basic notion of the DRG system is that every case should be reimbursed by a uniform flat-rate determined by a DRG, irrespective of the actual treatment and the actual corresponding costs of an individual hospital. One consequence of the shift to a DRG-based reimbursement system has been that hospitals now have a strong incentive to send patients home as early as possible (whereas previously there was a tendency to keep patients in order to increase the hospital's capacity utilisation). Another important consequence is that hospitals can suddenly make deficits and profits, forcing them to behave like a normal profit-oriented company. The possibility of making profits with a publicly funded hospital has made the hospital sector increasingly interesting for private investors (there has always been the possibility to set up a private for-profit hospital for private patients, but as in most European countries only a small number of patients are covered by private health insurance, the market was rather limited). Not surprisingly, private hospital operators are among the strongest advocates for further liberalisation.

2.4.2. Changes in hospital care provision

Changes in hospital financing have had a lasting effect on the operation of hospitals and the provision of hospital services. Yet the consequences were not necessarily the same everywhere. In a number of countries the aim of cost containment has led to a wave of decentralisation with hospitals becoming increasingly independent and responsible for

successfully offering their services to the newly established health-care purchasers. This, for example, has been an important element in consecutive health-care reforms in Sweden and the UK. In other countries, again, the need for rationalisation has had the opposite effect, with smaller hospitals being integrated into larger units or larger centrally controlled hospital networks. Such a strategy has been pursued in Austria and Belgium (Hofbauer 2006; Verhoest/Sys 2006). In the Belgian case the concentration process was driven by a number of takeovers of public hospitals by their private not-for-profit counterparts.

The most radical form of privatisation in health care provision is the sale of public hospitals to private investors. A number of countries have experimented with the privatisation of public hospitals, including Sweden, where in 1999 the S:t Görans hospital in Stockholm was privatised after it had been converted to an independent publicly owned private-law company in 1994. S:t Görans is one of the oldest hospitals in Sweden and employs 1,500 employees. It is now owned by the Swedish healthcare multinational Capio. Several hospitals, most of them within the county of Stockholm, have followed S:t Görans example and were also turned into independent subsidiaries. However, these companies are still owned by the county council. Two more hospitals have been reviewed for being transformed, but the trend has been put on hold with the adoption of the social-democratic initiated 'Stop Law' in 2002. While confirming the status quo, the legislation prohibits the sale of further emergency hospitals to commercial for-profit providers (Andersson 2006:8). However, with the election of a conservative government in 2006 it remains to be seen what direction health-care reform in Sweden will take in the future. In Austria, so far two public hospitals have been sold to private investors, including the German Helios group. One of them has already been closed after being re-converted to a public hospital (Hofbauer 2006:15).

While a number of countries have experimented with hospital privatisation, Germany stands out as the only country in Europe where the sale of public hospitals was carried out at a large scale and in a systematic way. Between 1991 and 2004 the proportion of private hospitals in Germany increased from 14.8 to 25.4 per cent. At the same time the share of public hospitals decreased from 46 to 36 per cent while the proportion of not-for-profit hospitals remained relatively stable (Schulten 2006:5f). However, private hospitals tend to be smaller and employ fewer employees. In 2004 the public sector still accounted for 52.8 per cent of all hospital beds (11.5 per cent were located in private hospitals) and employed nearly 60 per cent of all hospital workers (here the private share accounts for less than 10 per cent). Furthermore, more than 82 per cent of private hospitals had less than 200 beds and more than 63 per cent even less than 100. Only about four per cent of private hospitals had more than 500 beds (ibid.). Yet while in the past private investors have focused on small hospitals, more recently Germany has faced a number of stunning takeovers involving large and prestigious clinics:

- In 2001 the private hospital chain *Helios* bought 51 per cent of the shares of the clinic of the city of Erfurt with approximately 1,121 beds. In November 2002 *Helios* also acquired the remaining 49 per cent.

- In 2003 *Helios* took over 94.9 per cent of the shares of the clinic of the city of Wuppertal with more than 1,000 beds.
- In 2004 the private hospital company *Asklepios* bought the main hospital group of the federal state of Hamburg (*Landesbetrieb Krankenhäuser, LBK*) which covered seven clinics with 5,688 beds. However, the Federal Cartel Office required the new private owner to sell at least one of the seven clinics to another investor.
- In 2006 Germany saw the first privatisation of a university hospital when the private hospital corporation *Rhön Klinikum AG* acquired the university clinics of Marburg and Gießen from the federal state of Hesse. Both clinics together provide more than 2,400 beds.

The wave of hospital privatisation is expected to continue in the future. According to several studies, the proportion of private hospitals in Germany could reach between 40 and 50 per cent of the German hospital stock by 2020 (ibid.).

While public hospitals in Germany have been privatised, in Poland private companies are building a number of new private hospitals. These hospitals mainly treat private patients with private insurance. While private clinics account for less than five per cent of the hospitals beds in Poland, they are rapidly expanding their share in the health market. The number of private hospitals has doubled within a few years and currently there are plans to build five private hospitals in Warsaw in the next few years (Kozek 2006:8f). In contrast to the two public facilities that have been converted to private hospitals are only moderately successful (ibid. 11).

In connection with cost-containment, there have also been a number of hospital closures in several countries. The conservative government that won the 1979 election in Britain responded to growing health care costs by cutting beds and closing down hospitals. In 1987 alone, 4,000 beds were withdrawn from service (Pond 2006:7). While in the UK this trend was stopped by the Labour Party after it won the 1997 elections – in the 2000 National Health Plan the Labour government announced the creation of 100 new hospitals and 7,000 additional hospital beds – hospital closures have continued in other European countries. In Belgium the number of hospitals has been reduced by more than 70 per cent since 1981. Of the previously 531 institutions only 174 are left (Verhoest/Sys 2006:4). This does not mean that 70 per cent of hospital beds were withdrawn. As mentioned before, Belgium pursued a deliberate strategy of hospital concentration. However, it certainly means that patients have longer journeys to make to reach a hospital. In Austria, 15 per cent of hospitals were closed between 1990 and 2003 (including three private hospitals), accounting for almost eight per cent of all hospitals beds (Hofbauer 2006:6). In Germany, in contrast, 10 per cent of hospitals were closed between 1991 and 2004, but 20 per cent of hospital beds were withdrawn. This means the cutting of a total of 134,232 beds (Schulten 2006:3).

Table 15: Acute care hospital beds per 100,000 inhabitants

	Austria	Belgium	Germany	Poland	Sweden	United Kingdom
1995	665.4	503.3	744.5	576.4	304.5	
1996	660.3	496.6	724.0	573.5	282.6	
1997	653.2	493.8	707.3	563.9	269.1	321.0
1998	643.7	485.8	696.8	552.9	257.1	317.5
1999	636.3	477.4	688.0	530.0	253.9	314.8
2000	628.7	472.6	680.3	509.9	245.2	315.0
2001	628.7	465.8	670.4	501.5		316.0
2002	610.6	460.1	663.1	460.9		315.8
2003	606.8	451.7	656.6	463.2		316.8
2004	615.6	448.3	643.8			314.7
2005	606.6	441.1	634.9	469.0		309.7
Change 1995-2005*	-8.8%	-12.4%	-14.7%	-18.6%	-19.5%	-3.5%

* Sweden: 1995-2000; UK: 1997-2005

Source: Eurostat, own calculations

Measured by average hospital per 100,000 inhabitants, the greatest reduction took place in Sweden followed Poland and Germany. After the massive cuts in the 1980s and early 1990s the reduction in the UK was comparably moderate – although it is still remarkable given the Labour governments commitment to building new hospitals. However, in order to provide adequate hospital services with reduced capacities of hospital beds a second major development has been the significant reduction in the average length of stay per patient. The general trend therefore has been towards fewer hospital beds being used much more intensively with shorter average lengths of inpatient stays. In Germany, the average length of stay decreased from 14 days in 1991 to 8.7 days in 2004 (Schulten 2006:3).

Another common reform that can be observed in hospital system across Europe is the introduction of internal markets. Again it was Britain that pioneered the incorporation of markets into health service provision. As mentioned above, the split between purchasers and providers of health-care services increased pressure on NHS trusts to reduce costs in order to win contracts (Pollock 2004:41). However, while the reform did not translate into measurable efficiency gains – not least because less competitive hospitals could not simply disappear from the market, since this would have meant that whole districts would have been left without hospital care – it nevertheless changed the way health services are provided (ibid). While resources were previously distributed freely within the NHS, the introduction of internal markets meant that every treatment

was given a price to be charged from some other part of the NHS (ibid 44-45) This not only greatly increased transaction costs but also undermined the ability to plan and distribute resources according to health needs of the population. The internal market, furthermore, also opened the way for outsourcing (ibid).

Initially, outsourcing only concerned non-medical services such as laundry, catering, cleaning, security and administrative services. In recent years, hospitals have gone even further and increasingly contracted out medical services such as diagnostic testing or laboratory services. Outsourcing is expected to affect an even-greater part of service provision in the future. In 2000, the Labour Government in Britain signed an agreement with representatives of private health-care organisation known as 'Concordat'. In this the government promised greater involvement of the private sector including the outsourcing of up to 150,000 medical procedures per year (Pond 2006:10). In addition the government has invited the private sector to take part in its Independent Treatment Centres Programme. The background is the creation of series of treatment centres that provide standardised low-risk elective surgery. The assumption is that because of the comparably high degree of standardisation and specialisation and the exclusion of interruptions due to emergency treatments, treatment centres will be more efficient than regular hospitals and will consequently help to reduce the long waiting times in British hospitals. The first treatment centres were run by the NHS but the government has asked the private sector to provide additional "independent" treatment centres. The private providers in turn are granted a five-year-contract with a prefixed minimum amount of surgeries. By October 2006 there were 24 independent treatment centres run by private health care companies, many of them from outside Britain. The UK Department of Health estimates that the independent sector will be providing 5.7 per cent of the NHS's six million annual non-urgent procedures by 2007-08, rising to a maximum of 7.5 per cent by 2010 (Pond 2006:11-12).

Long-term outsourcing of contracts can also constitute what is often described as Private Public Partnerships (PPPs). As outsourcing, PPPs have become increasingly popular in the organisation of health-care provision. PPPs can take different forms, such as the financing and lease of hospital buildings and technical equipment, the provision of maintenance services, as well as the private management of public hospitals. In Austria, for example, several public hospitals are now run in cooperation with private hospital companies and a number of new hospitals with private involvement are planned (Hofbauer 2006). The government of the province of Styria has even announced plans to hire a private hospital company to manage its 21 provincial hospitals with 13,000 employees. The plan had to be abandoned because of public resistance.

The private finance initiatives (PFI) are a special form of public-private partnership. Private capital has been involved in the refurbishment, building and maintenance of public hospitals in a number of countries, but nowhere has this policy been pursued more systematically than in the UK. Although PFI was initially invented by the Conservatives, it was the Labour Government that made it a distinctive feature of the British health care system (Pond 2006:12-13). As noted above, the major rationale behind the promotion of PFI is to pass on risks to private investors. In addition, supporters of

PFI have argued that private sector involvement will ensure that projects are not run behind schedule and that budgets are kept to. Consequently, the role of private partners in PFI goes beyond allocating the financial resources. Instead, it also includes the design and construction of hospital buildings and in some cases even the operation of some of the associated services such as catering, cleaning and security. PFI hence involves a consortium of several companies typically including a bank or finance house, a construction company and a facilities-management firm. Once the facility is up and running, the PFI consortium charges the NHS Trust that runs the hospital an annual fee during the 25 to 30 years lifetime of the project.

Since 1997, the government has approved 80 PFI health projects worth 16.3 billion pounds. Of these, 28 are operational, 15 are in the construction phase, 12 are being negotiated. In contrast, over the same period the government has given the go-ahead to six publicly funded schemes with a total value of 500 million pounds (Pond *ibid.*). Hence since 1997 nearly all NHS hospitals have been financed under PFI. As mentioned above, there are grave doubts about the transfer of risks given the duration of the PFI contracts and there is increasing evidence that the costs are higher than they were believed to have been when the agreements were signed and they are most certainly higher than if the same projects had been financed by regular public loans. The higher interest rates have also an impact on the provision of services as hospitals struggling to meet pay their annual fees have to cut services in order to reduce costs.

2.4.3. *The creation of European health-care multinationals*

The privatisation of the German hospital sector has led to the emergence of several major private hospital companies including *Asklepios*, *Rhön-Klinikum*, *Fresenius* and *Sana Kliniken*. Together, the four largest companies account for nearly one third of all private hospitals (Schulden 2006:7f). Since all of them want to acquire more hospitals, their dominant market will even increase in the future. The struggle for market share has also led to a series of mergers and acquisitions. The largest takeover so far took place when the dialysis specialist *Fresenius* bought the private hospital chain *Helios Kliniken*. Mergers and acquisitions have attracted the attention of the German Federal Cartel Office. As mentioned above, the cartel authority required *Asklepios* to sell one of the seven clinics it had acquired in Hamburg. In 2005 it even disqualified the takeover of two public hospitals in the district of Rhön-Grabfeld by the private hospital company *Rhön-Klinikum AG* because this would have given the owner a regional market dominance. Only two weeks later it also prohibited *Rhön* from acquiring the municipal hospital of the city of Eisenhüttenstadt (*ibid.* 15f). Until recently private hospitals in Germany were almost exclusively owned by German shareholders. However, the extent of privatisation, unknown outside Germany, did not remain unnoticed and has increasingly attracted foreign investors. A first major acquisition made by a foreign company took place in 2006 when *Capio* announced the takeover of *Deutsche Kliniken GmbH*, including four hospitals, two nursing homes and one rehabilitation centre with a total of 2,600 beds (*ibid.* 7f).

Capio AB is one of the largest private hospital operators in Europe (surpassed only by Générale de Santé with 173 hospitals, which, however, has rarely expanded outside France). Capio has already been mentioned as the private owner of the former public hospital S:t Görans in Stockholm. Capio has subsidiary companies in six other European countries, including Spain, where it is the leading private health-care provider, operating 20 hospitals with more than 1,500 beds and 4,300 employees, France where Capio Santé is the second biggest private hospital group in the country, operating 22 facilities with 4,000 beds, and the UK, where it owns 21 private hospitals. In addition, the company operates diagnostic centres and psychiatric hospitals in Denmark, Finland and Norway. After having been turned into a public limited company in 2000, Capio was taken over by the private equity groups Apax and Swedish Nordic Capital in 2006 and delisted from the Stockholm stock market.

Apax is also one of the partners in the South African Network Healthcare Holdings Consortium (Nedcare). Nedcare in the same year acquired the General Health Care Group, Britain's leading private hospital owner, which through BMI Health Care operates 49 hospitals across the UK. Nedcare UK is known for being one of the NHS's preferred private-sector partners. As such, the company is currently fulfilling a five-year contract to perform 44,500 cataract operations for the NHS via mobile services as part of the UK Department of Health's Independent Sector Treatment Centres Programme. Following the deal, the European Commission's competition authority required the new owners of Capio to divest its UK hospitals and treatment centres in order to receive approval for the takeover.

Table 16: Summary table electricity generation

Dimension	Austria		Belgium		Germany		Poland		Sweden		UK	
	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>
Electricity generation												
Number of providers	Several	Several	Few	Few	Many	Several	One	Many	Many	Few	One	Many
Market concentration	Monopoly	High	Extremely high	Extremely high (increase)	Monopoly	High	Monopoly	Low	Monopoly	High	Monopoly	Low
Customer choice	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Kind of competition	Cooperation and regional monopolies	Competition in the market	Competition in the market	Competition in the market	Regional monopolies	Competition in the market	Monopoly	Competition in the market	Cooperation and regional monopolies	Competition in the market	Monopoly	Competition in the market
Evolution to more competitive market structure	Limited		Very limited		Limited (abolishment of regional monopolies but concentration of main producers)		Strong		Moderate (high share of spot-market trading)		Strong	
Ownership status of all providers	Predom. public	Predom. public	Predom. private	Predom. private	Predom. private	Predom. private	All public	Predom. public	Predom. public	Predom. public	All public	Fully private
Ownership status of incumbent	Fully public	Predom public	Fully private	Fully private	Fully private	Fully private	Fully public	Predom public	Fully public	Fully public	Fully public	Fully private
Evolution towards a private ownership	Substantial Increase		Moderate increase (already high before)		Substantial increase (conversion of Eastern Germany)		Substantial increase		Substantial increase		Very strong increase	

Table 17: Summary table electricity supply

	Austria		Belgium		Germany		Poland		Sweden		UK	
	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>	<i>Before</i>	<i>Current</i>
Number of providers	Several	Several	Many	Many	Many	Several	One	Many	Many (clubs)	Several to many	One provider	Several
Market concentration	Monopoly (regional)	High	High	High to extremely high	Monopoly	High	Monopoly	Low	Monopoly	Low (high percentage of electricity imported from outside Sweden)	Monopoly	Considerable
Kind of competition	Cooperation and regional monopolies	Competition in the market	Regional monopolies	Competition in the market	Regional monopolies	Competition in the market	Monopoly	Competition in the market	Cooperation and regional monopolies	Competition in the market	Regional monopolies	Competition in the market
Evolution towards more competitive market structure	Limited		Very limited		Limited		Strong		Strong		Moderate	
Ownership status of all providers	Predom. public	Predom. public	Predom. private	Predom. private	Predom. private	Predom. private	All public	Predom. public	Predom. public	Predom. private	All public	All private
Ownership status of incumbent	Fully public	Predom public	Fully private	Fully private	Fully private	Fully private	Fully public	Predom public	Fully public	Fully public	Fully public	Fully private
Level of increase of private ownership	Substantial increase		Moderate increase		Substantial increase (conversion of Eastern Germany)		Substantial increase		Substantial increase		Very strong increase	

Table 18: Summary table postal services

<i>Postal services – letter market</i>	Austria		Belgium		Germany		Poland		Sweden		UK	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
Number of providers	One	Few	One	Few	One	Many	One	Few	One	Several	One	Few
Market concentration	Monopoly	High	Monopoly	High	Monopoly	High	Monopoly	Very high	Monopoly	High	Monopoly	High
Customer choice	No	Yes except for reserved market	No	Yes except for reserved market	No	Fully from 2008 onwards	No	Yes except for reserved market	No	Yes	No	Yes
Kind of competition	Monopoly	Reserved market less than 50g	Monopoly	Reserved market less than 50g	Monopoly	Reserved market less than 50g	Monopoly	Reserved market less than 50g	Monopoly	Fully open since 1993	Monopoly	Fully open since 2006
Evolution towards more competitive market structure	Limited		Limited		Rather limited		Very limited		Moderate to rather limited		Rather limited	
Ownership status of all providers	All public	Predom. public	All public	Predom. public	All public	Predom. private	All public	Predom. public	All public	Predom. public	All public	Predom. public
Ownership status of incumbent	Fully public	Predom. public	Fully public	Predom. public	Fully public	Predom. private	Fully public	Fully public	Fully public	Fully public	Fully public	Fully public
Level of increase of private ownership	Substantial increase		Substantial increase		Strong increase		Marginal increase		Limited increase		Limited increase	

Table 19: Summary table local public transport

Dimension	Austria		Belgium		Germany		Poland		Sweden		UK	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
Number of providers	Many	Many	Several (plus subcontractors)	Few (plus subcontractors)	Many	Many	Several	Many	Many	Several to many	Several	Several (first increase, then decrease)
Market concentration	High	High	Monopoly	Monopoly/high	Low	Low	Monopoly	Low	Low	Considerable	Monopoly	High
Customer choice	No	No	No	No	No	No	No	No	No	No	No	Yes outside London
Kind of competition	Local and regional monopolies through non-competitive licenses	Local and regional monopolies through but increasingly competition for the market	Monopoly and outsourcing by monopolist	Monopoly and outsourcing by monopolist	Local and regional monopolies through non-competitive licenses	Local and regional monopolies but increasingly competition for the market (especially in railways)	Local and regional monopolies (public ownership)	Local and regional monopolies; Increasingly competition for the market (especially in larger cities)	Local and regional monopolies through non-competitive licenses	Competition for the market through competitive tendering	Local and regional monopolies (public ownership)	Competition in the market outside London; competition for the market in London
Evolution to more competitive market structure	Limited		Very limited		Rather limited		Rather limited		Strong but decreasing because of more market concentration		Strong but decreasing because of more market concentration	
Ownership status of all providers	Predom. public	Predom. public	Predom. public	Mixed with public dominance	Predom. public	Predom. public	Fully public	Predom. public	Predom. public	Predom-private	Fully public	Fully private
Ownership status of incumbent	Fully publicly owned (Postbus)	Fully publicly owned (some routes sold to private companies)	Fully Publicly owned	Fully publicly owned/predom. publicly owned	Rail: fully public	Rail: fully public	Fully public	Predom. publicly owned	Fully publicly owned	Predom privately owned	Fully publicly owned	Fully private
Level of increase of private ownership	Limited		Very limited		Moderate		Moderate		High		Very high	

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