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WORKING PAPER

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Interest in Finland*

Johan WILLNER & Sonja GRÖNBLOM

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The Organisation of Services of General Interest in Finland*

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Abstract

Like in most other European countries, services of general interest in Finland have in recent years been subject to competition, increased private provision, and in some cases privatisation. This development is motivated by expected cost reductions, by EU-regulations, by ideology and fashion, and in some cases also by a desire to generate sales revenues. Empirical evaluations have provided mixed results, but the relatively successful history of Finland's state enterprises makes it hard to believe that the public sector would be unable to organise SGI-services efficiently. A number of potential market failures suggest that renationalisation should be taken seriously as an alternative to regulation. This would not necessarily be a very radical policy, because public ownership is still fairly prominent among SGIs in Finland.

Keywords: public ownership, privatisation, cost efficiency, social objectives.

JEL-Codes: H11, H42, H44, L33, L90

1. Introduction

Finland used to have a large sector of state-owned and municipal enterprises, on which there was a consensus throughout nearly the whole political spectrum. State-owned firms contributed to 18-22% of industrial value added before the privatisation wave. This is more than the corresponding percentages in for example Sweden (6%), Germany (7%), Britain (11%) and Austria (14%).² These enterprises were usually organised as limited companies where the state owned nearly all or at least a majority of the shares.

Railways, telecommunications and postal services were on the other hand, like hospitals and educational institutions, organised as integral parts of the public sector. The electricity industry represented an intermediate case, through the creation of the vertically integrated limited company Imatran Voima Oy as early as 1932 (Ranki, 2012).

Some state-owned companies were sold prior to the 1990s, but not as part of any systematic reduction of public ownership. The first government report on privatisation, *Visio yksityistämisestä Suomessa* was issued in 1991. The subsequent economic crisis meant that implementation had to be postponed until 1994, but the state has now divested all its majority holdings in industrial enterprises. Some services have also been reorganised as publicly listed companies, and private provision has increased either through privatisation or entry.

2. Remaining state ownership: an overview

The state still owns shares in 65 companies and is the majority owner of 42 of them (*Expansion of the ownership base*, 2015). If all subsidiaries, including those abroad, are included, there might be more than 1000 completely or partially state-owned firms. They have 214,000 employees, with more than half of them in other countries. (*Statsrådets principbeslut...*, 2011). The assets amount to EUR 30 billions (2014 *Annual Report of the State's Ownership Steering*, 2015). Some enterprises are subordinated to other ministries, but the Prime Minister's Office (PMO) has the overall responsibility for ownership policy. The PMO distinguishes between firms where the state has predominantly a shareholder interest (Group 1a), companies with a strategic interest that calls for ownership or regulation (Group 1b), and companies with an "...industrial, societal or other political mission... or some other special role" (Group 2); see *Expansion of the ownership base*, 2015, p. 6.

Group 1a consists of 17 companies, of which four with the state as the dominant owner. Many companies in this group are listed industrial enterprises which are owned through the completely state-owned holding company Solidium. They are outside our scope, but the group also includes Telia-Sonera, created through

² For more details, see Willner, 2006, *Bureaucrats in Business*, 1995, and Parker, 1998.

a merger between Finland's and Sweden's former non-commercial telecommunication authorities, and Elisa, Helsinki's former non-commercial telephone association. Group 1a also includes an electricity generating company and a producer of alcoholic beverages, in addition to some other companies where an exclusive focus on profits might not necessarily be appropriate. There is a minimum target for state ownership (50.1%) only for Kemijoki. Key economic indicators for those companies are presented in Table 1 below.

Table 1. Companies with a questionable focus on shareholder interest only

Company	Activity	Ownership steering	State ownership	Net sales (EUR m)	Operating margin	Personnel
Altia Plc	Manufacture and import of alcoholic beverages	PMO	100.0%	426	-4.4%	987
Ekokem Corporation	Environmental business, energy production	PMO	34.1%	201	17.5%	324
Kemijoki Oy	Electricity production	PMO	50.1%	39	-6.2%	78
Elisa Corporation	Telecommunications, ICT and online services	Solidium	10.0%	1,547	18.1%	4,217
Sampo Group	P&C life insurances, banking	Solidium	11.9%	5,618	n/a	6,800
Telia Sonera AB	Telecommunications services	Solidium	3.2%	11,757	24.1%	26,013

Source: *2014 Annual Report of the State's Ownership Steering*, Helsinki 2015, *2014 Annual Report*, Solidium.

PMO = The Prime Minister's Office

Group 1b consists of 20 limited companies that are subordinated to the PMO, mostly with dominant state ownership and often with a history as public sector SGI- or SGEI- providers.³ Only three of them are listed. The largest of these companies are listed in table 2, along with key economic indicators.

³ The EU recommends the term 'services of general interest' (SGI) instead of 'public services' when there is a public service obligation but not necessarily public ownership. 'Services of general economic interest' represent a SGI-subcategory with potential market failures but where economic transactions are involved (*A quality framework...*, 2011, *Public Services...*, 2007).

Table 2: Special Interest Companies 2014 (net sales higher than 20 EUR m)

Company	Activity	State ownership	Minimum state ownership	Net sales (EUR m)	Operating margin	Personnel
Finnair Plc*	Airline company	55.8%	50.1%	2,205	-3.2%	4,981
Fortum Corporation	Electric utilities	50.8%	50.1%	4,751	72.2%	8,592
Neste Oil Corporation*	Energy (fuels)	50.1%	50.1%	15,011	1.0%	4,833
Arctia Shipping Ltd	Specialised shipping (ice-breaking)	100.0%	100.0%	61	27.4%	261
Gasum Corporation	Natural gas (transmission and wholesale)	75.0%	0.0%	108	0.5%	273
Leijona Catering Oy	Restaurant services (including student meals and catering for the defence forces)	100.0%	100.0%	66	6.4%	521
MeriTaito Ltd	Waterways maintenance and hydrographic surveying	100.0%	100.0%	31	1.3%	228
Mint of Finland Ltd	Metals (the design and minting of money)	100.0%	50.1%	76	-3.4%	212
Patria Plc	Defence and aviation	90.4%	50.1%	462	12.1%	2,564
Posti Group Corporation	Postal services	100.0%	100.0%	1,859	0.3%	24,617
Suomen Lauttaliikenne Oy (FinnFerries Ltd)	Cable ferry and ferry services as part of the public road network	100.0%	100.0%	49	23.9%	318
Vapo Ltd	Energy production (peat and wood-based fuels, district heating)	50.1%	50.1%	847	5.9%	1,091
VR Group	Railway and road transportation including track construction and maintenance	100.0%	100.0%	1367	6.6%	9,689

*) Listed companies

Source: 2014 Annual Report of the State's Ownership Steering, Helsinki 2015.

Group 2 is heterogeneous and consists of 28 companies, with 21 dominated by state ownership (*Expansion of the ownership base*, 2015). This group includes the national broadcaster Yle, which is subordinated to the Ministry of Transport and Communication, and the national betting agency Veikkaus, which is subordinated to the Ministry of Education and Culture (because of profits earmarked for cultural purposes). Yle and Veikkaus will remain completely state-owned. The monopolistic retailer of alcoholic beverages, Alko (with a mission to encourage responsible drinking), is subordinated to the Ministry of Social Affairs and Health. Most companies in this group are to remain in

complete state ownership, but there are a few exceptions, such as the Finnish Aviation Academy, Kuntarahoitus (financial services to the municipal sector), University Properties of Finland LTD, and Aalto University Properties LTD. Finnish Aviation Academy belongs to the Ministry of Education and Culture and Kuntarahoitus to the Ministry of Environment. Suomen Yliopistorahoitus and Aalto University Properties belong to the Ministry of Finance, like the electric grid company (Fingrid), which was recently transferred to this group. The holding company Solidium, which is subordinated to the PMO, belongs to this group, although the companies represented in its portfolio are completely commercial.

The PMOs categorisation reflects an insight about varying needs for wider objectives than shareholder interest. However, the definition of SGEs has changed over time, mostly by reducing the number of industries that are perceived as calling for more than commercial objectives. This is for example reflected in Elisa's and TeliaSonera's position in category 1a, and in the transformation of several public utilities in group 1b into commercial business enterprises (although recognised as being associated by a strategic interest that calls for state intervention). There are also some inconsistencies, such as in the case of the unlisted company Kemijoki and the listed company Fortum being categorised as 1a and 1b respectively. Both will remain in dominant state ownership (at least 50.1%).

3. The motives for privatisation and public sector reform

It is difficult to identify the precise motives for privatisation in Finland, in particular when it comes to industrial enterprises. In most other countries, there has been a strong belief that privatisation will make the economy more efficient. But policy documents in Finland do not focus on efficiency. The most important official motive was to achieve industrial consolidation through mergers with private companies, and thus to reduce competition, but without the partial nationalisation that would otherwise have been the outcome. However, the government also wanted to reduce public-sector debts by using sales revenues from privatisation, when Finland wanted to enter the EMU when having large public debts caused by the crisis in the 1990s. Moreover, state ownership was associated with a developmental mission (see section 5.5), and it was perceived as fulfilled.

It nevertheless seems obvious that ideology and fashion have also played some part. For example, a research report issued jointly by the Ministry of Finance and the University of Vaasa described privatisation as "linked to the value and norm climate of society and to the nature of the political administrative system, power hegemonies and corresponding issues" when calling for a reduction of the "size and significance of the public sector" (Salminen and Viinamäki, 2001: 56). Such motives may also be linked to a

desire to demonstrate pro-market credentials, given the history of cooperation with the former Soviet Union.

Fashion, ideology and a desire to generate sales revenues are likely to have played some part also when it comes to SGIs, in particular in the partial privatisation of SGI-providers such as Fortum and TeliaSonera. However, in contrast to the case of manufacturing and banking, the restructuring of SGIs was also linked to a desire to reduce costs through increased competition from private providers. The government has also referred to EU directives such as 2003/54/EC and 2003/55/EC (*Reforming Network Industries*, 2006). They are based on a belief that competition, lower profit margins and higher cost efficiency would lead to significant price reductions (by up to 36% in EU network industries according to Martin et al., 2005) and, in the long run, higher dynamic efficiency (*Reforming Network Industries*, 2006).

The EU-directives do not require competition in non-commercial services, but transforming most service providers to commercial limited and often listed companies makes competition mandatory. Competition is on the other hand not possible in a natural monopoly, but it can be achieved in industries such as electricity, water, railroads, and gas by separating the natural monopoly activity from the rest of the industry.

The official motives can be criticised for other reasons as well. There was no need to generate revenues, because the public sector ran a surplus when the first blueprint was drafted in 1991. The subsequent deficit was caused by reduced tax revenues and increased transfer payments caused by an economic crisis that became more severe because of attempts to roll back the public sector. Privatisation may in fact reduce the state's credit-worthiness by reducing its wealth (and hence future dividend incomes). Moreover, the perceived need to reduce state-influence does not require privatisation. State-owned companies and organisations can be made both more and less independent than for example regulated privatised utilities.⁴ Also, the motive to raise funds through the stock market does not require an ownership stake below 50%.

4. Why would ownership matter?

Society is not necessarily better off by privatisation even if it was true that there is always a public-sector cost disadvantage. Services like electricity, telecommunications, gas and railways cannot become perfectly competitive. Society would then have to choose between higher costs and high profit margins and hence welfare losses or other distortions. However, it is not self-evident that public production is always less cost efficient.

⁴ For example, state-owned universities may have become less autonomous despite a status of formal semi-independence in the presence of pressure to become more business-minded.

A prominent explanation for higher costs under public ownership in the theoretical literature is based on lower incentives to pay a manager for cost-reducing efforts in the presence of asymmetric information (agency problems). It is often argued that public-sector managers tend to be more risk-averse or that they are paid according to civil-service rules when high-powered incentives would be called for (Bös, 1993, Dixit, 1997). Public firms that pay a fixed salary would indeed be less efficient if efforts cause only disutility for their managers. But a public firm that pays a performance-related salary can in fact be *more* cost efficient than under private ownership, because non-commercial objectives, such as maximising the total surplus (or at least giving a weight to the consumer surplus in the objective function) strengthen the incentives to pay the essentially lazy and greedy manager for cost reductions (De Fraja, 1993; Willner, 2003a; Willner and Parker, 2007).

The assumption that managers and other economic agents are driven only by extrinsic rewards and punishments is on the other hand a crude simplification. The theory of public and private ownership in the presence of potential intrinsic motivation is in its infancy, but it seems that public ownership can be superior also in the presence of intrinsic motivation (Grönblom and Willner, 2014). However, the presence of potential intrinsic motivation can also and somewhat paradoxically explain why private ownership can be superior, as a welcome contrast to a literature that tend to suggest that either one or the other form of ownership is universally superior, instead of how its performance can change. For example, the intrinsic motivation can be crowded out by extrinsic rewards and punishments in a public-sector organisation, for example if employees become alienated by managerialism and sticks and carrots (as inspired by the New Public Management). It has even been argued that the private sector should learn from traditional public-sector organisations to rely on intrinsic motivation, to implement career paths that discourage opportunism, and to apply non-pecuniary rewards (Frey and Benz, 2005).

While increased competition may be beneficial by reducing the profit margins of oligopolistic firms, entry will not necessarily lead to higher cost efficiency. Competition can sometimes reduce the willingness to pay a manager for cost reducing efforts (Martin, 1993, Parker and Willner, 2007)⁵. This negative effect of competition may be even stronger if competition requires vertical separation, such as in the railway, electricity, gas, fixed-line telecommunications, and water industries (Willner and Grönblom, 2013). Increased competition because of entry may reduce efforts also in the presence of potential intrinsic motivation (Grönblom and Willner, 2014).

⁵ This may explain findings such as in Martin and Parker (1997) and Fraquelli and Erbetta (2000), suggesting that being exposed to competition did not necessarily make privatisation in Britain and Italy more successful.

Another explanation for inferior performance under public ownership is based on employees or other internal stakeholders that achieve excessive payments (internal rent capture).⁶ Privatisation and/or increased competition would indeed reduce the labour rents (Alamdari and Morrell, 1997; Barrett, 1997; Newbery, 2001; and Grönblom and Willner, 2008). But the excess wages under public ownership should then be treated as part of the pre-liberalisation total surplus like the profits. Wage reductions as such do therefore not mean that privatisation and liberalisation improve welfare. The threshold cost reductions that are needed for such a restructuring to be beneficial are in fact higher if cost differences are explained by internal rent capture rather than waste (Willner, 1996/2000; Grönblom and Willner, 2008.). Moreover, the belief that wages are higher under public ownership may reflect a now abandoned ambition of being a model employer. As for Finland, public sector employees tend to get *lower* wages if there is a significant difference at all (de Castro et al., 2010).

A third type of argument is based on the belief that politicians and civil servants are biased towards an excessive output and/or too low prices or so as to please voters (distorted objectives); see Boycko et al., 1996. Administrators may also care for their organisations, unfortunately by identifying budgets or organisational size and with success (Bös, 1993). But a higher activity than under profit maximisation can in fact come closer to welfare maximisation than the profit maximising solution, in particular if privatisation means monopoly or an oligopoly (Willner, 2001).

Public ownership has also been criticised for distortions in favour of excessive and hence too expensive quality in order to avoid complaints (Ferguson, 1988).⁷ However, it is well known that a profit maximising monopoly is likely to distort quality downwards or upwards, depending on how the slope of the demand function changes (Spence, 1975). To introduce competition can under reasonable circumstances lead to an underprovision of quality, insofar that higher quality is reflected in higher marginal costs or sunk costs (Willner and Grönblom, 2016), or in the presence of asymmetric information (Belleflamme and Peitz, 2010). A particular type of quality problems would occur in the case of privatisation with vertical separation, in which case the upstream monopoly would have an incentive to underinvest in the maintenance of the network infrastructure (Buehler, 2005). Fragmentation in the energy sector can also mean that an interconnected system of plants with different owners can break down because of failures in one particular plant (Auriol, 1998).

⁶ Bradburd (1995) deals with a natural monopoly and suggests that internal rent capture means that welfare might be improved by privatisation even without competition.

⁷ A similar criticism relates to a possible bias towards easy-to-operate pricing systems (Ferguson, 1988).

Finally, privatisation is often advocated also as a response to globalisation, although the connection is often unclear. There may have been a temptation in many countries to sell companies to international investors (Florio, 2013), and it is often believed that capital mobility without federalism might narrow down the policy choices to a ‘narrow straightjacket’ of privatisation, deregulation, and low taxes (Rodrik, 2000). A need to react swiftly in the presence of international competition was indeed mentioned in Finland as calling for privatisation (with mergers), and it is sometimes argued that it is now more difficult to use state-ownership as a policy instrument (*Valtion yhtiöomistuksen ...*, 2001; Miettinen, 2000; Salminen and Viinamäki, 2001). However, if using public ownership as a policy instrument means a weight for the consumer surplus in the firm’s objective function, we may ask how international competition changes the range of this weight, given that the public firm should break even without crowding out its private competitors (insofar as it is desirable to maintaining a market with mixed ownership). Willner and Flink (2015) suggest that this range will not necessarily shrink, except for when the workers are not mobile.

5. Case studies of privatisation or increased private provision

5.1. Electricity

The electricity sector was classified as highly regulated in 1991 (5.9) according to the OECD index of the intensity of market reforms, mainly because of vertical integration (6.0) and public ownership rather than barriers to entry (0.0).⁸ The overall index was 1.7 in 2013, with 0.0 for entry, 0.0 for market structure, 3.9 for vertical integration and 2.7 for public ownership (OECD, *Regulation in...*, 2013).

The state-owned generating company Imatran Voima/Fortum and Pohjolan Voima, which was owned by Finnish industrial enterprises, generated about half of the electricity supply in Finland, the remainder being supplied by local and often municipal companies. Vattenfall (from Sweden) entered in 1995 by taking over a number of local producers, and households became able to choose supplier. Imatran Voima and Pohjolan Voima were also large owners of the national grid, but new legislation led to an organisational separation of generation and transmission in 1996. The state-owned producer was renamed as Fortum in 1998, which has now activities in the Nordic countries, Russia, Poland and the Baltic countries.⁹ The national grid became Fingrid in 1999.

Fortum and Vattenfall were also significant actors in electricity distribution, together with a large number of local actors. Vattenfall’s distribution was sold to a new company, Elenia, which is partly owned by Goldman Sachs in 2012.

⁸ Extreme regulation and deregulation are represented by 6.0 and 0.0 respectively.

⁹ Fortum consisted initially of Imatran Voima and Neste Oil (now Neste), but the companies became separate listed companies in 2005.

Fortum was forced to divest its distribution company Caruna Oy in 2014. Caruna is owned mainly by foreign private equity companies but also by some domestic pension funds. This development was caused by EU rulings based on the notion that vertical integration is anticompetitive, but Caruna has a monopoly position in many regions and has recently been criticised for monopolistic price increases (25%) and for tax avoidance through internal rent payments. The government has announced a change in legislation so as to prevent similar abuse in the future (Yle, 4.2.2016).

In addition to being a significant owner, the state will also safeguard its strategic interests by regulation by the Energy Authority (until the 31.12.2013 the Energy Market Authority), now under the Ministry of Employment and the Economy.¹⁰ Fortum is now directly subordinated to the PMO, like Neste. The state owns 50.8% of the shares, and it will keep at least 50.1%. In contrast to Fortum and Neste, Fingrid is an unlisted commercial company subordinated to the Ministry of Finance. The state owns 53.1% of the shares, but there is no lower limit, despite the grid's natural monopoly status.¹¹

Total factor productivity increased in 1994-96, but not significantly in 1996-98. It is therefore difficult to judge whether the reorganisation did pay off. Finland's participation (with Sweden and Norway) in Nordpool may also have led to more efficient pricing. All types of plants have been described as fairly productive, and some studies suggest that full liberalisation and Cournot-competition might not reduce prices and increase welfare in such a market (Kopsakangas-Savolainen, 2003; Sulamaa, 2001: 117-29, 155-60). Moreover, an integrated public monopoly is likely to be superior in a network industry, in particular in the presence of agency problems or internal rent capture (see Willner, 2008; Grönblom and Willner, 2008; and Willner and Grönblom, 2013). Gugler et al. (2014) suggests that vertical integration in the European electricity market would indeed mean cost savings of 13% for the median firm in their sample, and 15-20% for larger firms. This suggests that Finland and in EU should reconsider its policy of vertical separation.

The Californian electricity crisis in 2001 highlighted the difficulties of successful restructuring (Martinek and Orlando, 2001; Lijesen, et al., 2001), and many studies suggest reasons to be concerned about quality and reliability (see Kwoka, 2008; Rothkopf, 2007; Thomas, 2006; Arocena et al., 2009 and 2012, and Florio, 2013). As for ownership as such, an overview of comparative studies in Willner (2001) suggests that public ownership is at least as cost efficient as private ownership in the electricity industry.

¹⁰ The facts about these companies and their regulatory environment can be found in *Expanding the ownership base*, 2015, *Energy Authority*, 2015, and Willner, 2006.

¹¹ The state also owns 51.1% of the shares in the unlisted generating company Kemijoki, which differs from the other energy companies by being classified as belonging to group 1a rather than 1b, despite a commitment to majority ownership.

5.2. Telecommunications

Telecommunications were classified by OECD as highly regulated in 1991 (5.4) because of public ownership (6.0), concentration (5.2), and barriers to entry (5.0). The corresponding numbers were 0.8, 1.1, 1.4, and 0.0 in 2003, and in 2013 0.6, 0.7, 1.4, and 0.0 (OECD, *Regulation in...*, 2013). Finland can therefore be described as a forerunner rather than a follower.

The statutory monopoly in long-distance and international calls was abolished already in 1987, and there was competition in corporate networks and data transmission the following year. Free competition became possible in data- and GSM-networks as well in 1990. This gradual liberalisation process preceded privatisation. The Post and Telecommunications Service was transformed to the state-owned business enterprise Tele in 1990-91. There was some competition in this market in 1993, and full-scale competition on local, long-distance and international telecommunications the following year, when Tele became a limited company. Telecom Finland was separated from the PT-administration and listed on the stock market as Sonera in 1998 (for details of the transformation process, see Björkroth and Willner, 2003 and Willner, 2006). State ownership was reduced from 100% in 1998 to 52.8% in 2002, when Sonera was merged with the former Swedish telecommunications authority, then renamed and listed as Telia. The Finnish state now owns only 3.2% of the new company, now named TeliaSonera, via Solidium, and there is no commitment to remaining public ownership (*Expansion of the ownership base*, 2005).

Solidium also owns 10.8% of Elisa, which originated as the local not-for-profit telephone association in Helsinki. Like the PT-authority, Elisa's forerunner was technically progressive. For example, Helsinki was the first city in the world to get an automatic switchboard. Elisa is now focusing on ICT and online services as well as entertainment.

Elisa is largest (40%) when it comes to fixed telephony. TeliaSonera is second largest (22%), followed by Finnet Group (20%) and DNA (14%); the market share of the rest of the firms is together 4%. Finnet Group consists of a group of former and often non-profit maximising or municipal local providers. Some of them left Finnet Group in 2007 when establishing DNA. Elisa is a market leader in the growing mobile segment as well (35%), followed by TeliaSonera (34%), DNA (18%) and other operators (13%). The other operators include Radiolinja, which is owned by Finnet Group. This group is also largest in Finland when it comes to all telecommunications services taken together. TeliaSonera is not the dominant operator in Finland, but largest in the Nordic region as a network operator and in fixed telephony, data, internet, and in mobile services for consumers and the business community.¹²

¹² The market shares are included in *Finland – Key Statistics...*, 2014.

A number of features complicate the picture of a straightforward path from public monopoly to a market with purely commercial operators. The Swedish state is the largest owner of TeliaSonera (37.3%). Moreover, Solidium is the largest shareholder in Elisa, but a couple of mutual insurance companies also own some shares (*Solidium*, 2015). The fact that Finnet Group and DNA originated in the local non-profit sector is also worth mentioning.

Telecommunications are usually seen as the most successful case of liberalisation (Newbery, 2006). Services have indeed become cheaper in Finland, but the continuous technical development both within the state-owned PT-administration and after liberalisation and partial privatisation makes it difficult to establish causality. The development towards digitalisation started in 1980, and Finland was first in the world to adopt the GSM-standard in the early 1990s, and second only to France in achieving full digitalisation in 1995. An intervention analysis suggests that digitalisation reduced the costs for 4-minute domestic daytime trunk calls by 47%, whereas the first step towards liberalisation led to a further reduction by 10% (Björkroth and Willner, 2003). Moreover, there was a gradual shift towards more commercial objectives within TeliaSonera's predecessor; otherwise there would have been no scope for prices to be reduced by liberalisation.¹³ This suggests that fairly large price cuts might have been achieved also without reforms. Moreover, the low number of commercial operators suggests a scope for further price reductions.

As for international evidence, US long-distance calls became cheaper after deregulation, but the price reductions may at least to some extent be explained by technical progress and regulation (MacAvoy, 1998; Taylor and Taylor, 1993; Sung, 1998). There is no conclusive evidence of higher productivity growth in Europe after the EU's liberalisation directives (Daßler et al., 2002). There was some initial quality improvements according to Boylaud and Nicoletti (2000), but van Dam and Went (2001) found signs of lower quality, and there were press reports on systematic 'confusion marketing' (see for example *The Guardian*, 14 October, 2001). Also, there are still concerns about universal access (which once called for a public monopoly), as illustrated by the fact that both the EU and several governments have launched plans to close the digital divide between regions and social groups (Florio, 2013).

5.3. Railways

The railways are still strongly regulated, but OECD's overall index has decreased from 6.0 to 4.4, mainly because of entry and competition in the freight market, and vertical separation without privatisation (OECD, *Regulation in...*, 2013).

¹³ It is well known that it is difficult to achieve liberalisation in the presence of a (completely) welfare-maximising incumbent. This is explained by the so called *Cournot-paradox*: welfare maximisation within a mixed oligopoly would create a monopoly (Nett, 1993).

The railways have always been state-owned, and they became a so called state enterprise in 1990, and subsequently corporatised in 1995 under the name VR Group. VR is still a completely state-owned and unlisted commercial company that the units VR (passenger transport), VR Transpoint (logistic services), and VR Track (the rail infrastructure). The present government is willing to allow for entry also in passenger services, but VR Group is not likely to be sold.

International comparisons suggest that VR Group's ratio of revenues to costs (66%) has been quite high (Newbery, 2006). Productivity was higher in Finland than in the US or Europe also in the 1980s, before corporatisation (Lehto, 1991 and 1997a). Operating profits were 5% in 2013 (*Statens ägarstyrning...*, 2014). Corporatisation increased ticket prices and some services are being threatened by cuts.¹⁴ VR Group has also recently been criticised for delays caused by technical problems, and it seems that a negative impact of the partial vertical restructuring cannot be ruled out (see our discussion in 5.1, and Buehler, 2005). However, the European Union is still promoting competition in rail services (and Finland's policy has been to support rather than to block this development), despite the widespread view that it railways might be much less suitable for restructuring than other SGI-services (Newbery, 2006).

5.4. Other services

The postal services have been corporatised and are organised as an unlisted commercial company like the railways. The overall OECD-index has been reduced from 5.0 in 1991 to 3.3 in 2013, mainly because of reduced barriers to entry and outsourcing of some logistic services (OECD, *Regulation in...*, 2013). This development was followed by higher profit margins and service cuts (Lehto, 1997b). The company is now renamed as Posti Group Corporation (Itella until 2015, and previously Suomen Posti). Posti/Itella describes itself as an international service company that handles postal and logistic services and internet trading, and as a market leader in inventory logistics in Russia. Posti is likely to remain in public ownership, but some activities, such as parcel services, might be exposed to competition.

As for rural and inter-city coach services, a state-owned operator that was part of the postal services was sold to a private company, but the VR-Group subsidiary Pohjolan Liikenne has in fact expanded into suburban bus services. New low-price operators are entering the most profitable inter-city routes, such as between Turku and Helsinki. Other routes are becoming subject to tendering, but this more of a challenge for the often well-run private-sector incumbents than an issue related to privatisation. However, the benefits of liberalisation in this industry has been questioned in the literature, because of problems with

¹⁴ Unprofitable services are not funded through cross-subsidisation but through direct Government purchases.

cream-skimming, coordination, inter- and through-ticketing and the stability of network and schedules (Tyson, 1990; White, 1990; Oldale, 1997). The UK deregulation was for example reported as being of no benefit to consumers, while making employees worse-off (White, 1990).

The private market share in health-care has increased since the 1980s after cuts in public spending. The industry is likely to remain dominated by the public sector, but the precise roles of public and private providers will depend on a controversial administrative reform the details of which are still unclear. A provider of health-care for state employees (Medivire) was privatised in 2000 and became largest of its kind in Finland (*Statsbolagen och...* 2002 and 2003), and subsequently merged with Terveystalo. This company has attracted media attention for transferring its substantial profits to tax havens (Yle, 14.11.2014, *Åbo Underrättelser*, 6.10.2012). A local hospital that was threatened by closure has in addition been sold to a voluntary organisation, and there are some specialised private hospitals such as Mehiläinen.

Private provision has increased also in municipal services, but more often through competitive tendering rather than ownership changes. Such changes have often been implemented by left-wing authorities, probably as an alternative to cuts (Granqvist, 1997). School cleaning became tendered in Helsinki in 1994-97, but the experiment was abandoned in 1998 because of lower quality and 14% higher costs. Private provision increased in the 1990s also in meals on wheels and winter-time street maintenance in Helsinki. Net costs¹⁵ fell by about 18% (partly because the entrants employed younger staff with lower wages) and 7-10% respectively, but there were concerns about lower customer satisfaction and/or quality (Kähkönen, 2001).

The municipal market share was reduced in regional and urban bus services in Helsinki (from 85 to 65%), and its municipal bus operator became completely privatised in late 2015. The independent suburbs Espoo and Vantaa privatised their operators much earlier. Competitive tendering is reported to have reduced costs by 14-30% (and net costs by 12%), and ticket prices by about 15%. There have been service cuts, but they did usually take place before the tendering process. Competitive tendering has been followed by consolidation through mergers and the disappearance of private operators that were too small for organising successful bids. Passengers are less affected than for example in those regions in Britain where the operators and not the local authorities control frequency, tariffs, route network and rolling stock. Employees have on the other hand been worse-off in terms of pay, working conditions and job security.¹⁶

As for the water industry, most companies in Finland are municipal, but some rural districts have non-commercial private provision (Hukka and Katko, 2002).

¹⁵ Net costs include the costs associated with the tendering process.

¹⁶ This paragraph is based on Haatainen, 2000; Kähkönen, 2001; Kohtamäki, 2000; Mäkeläinen and Pirttinen, 2000; and White, 1990.

So far, reforms have not been on the agenda. Most international studies of the water industry suggest that public ownership is at least as cost efficient than private ownership (see overview in Willner, 2001). To introduce competing private provision would require vertical separation, but this might be costly for the same reasons as in other industries with a network infrastructure. Abbot and Cohen (2009) find no evidence in favour of such a restructuring in the water industry, and a report by ICB Consulting suggests that it would lead to cost increases by about 26% (*Utility Week*, 5 July 2011).

5.5. A digression: the performance of Finland's state-owned industrial enterprises

As follows from the previous sections, SGIs provide several challenges when it comes to an evaluation of increased private provision. A cost reduction may for example be explained by competition rather than privatisation, as many economists did suggest also at an early stage (see Vickers and Yarrow, 1998, Kay and Thompson, 1986). Moreover, the counterfactual may be unknown, for example because of significant technical progress both before and after restructuring, like in telecommunications and electricity in Finland. Wages, working conditions, or service quality may have changed the total surplus in ways that have not been quantified. Privatised state-owned enterprises in manufacturing may therefore provide a useful point of comparison. If the state is really unable to run a business enterprise, as argued for example by Mrs Thatcher (1993: 676-677), this would be likely to affect the SGI-provision as well.

Were Finnish state-owned manufacturers systematically inferior before privatisation? State ownership in Finland was part of an industrialisation process rather than an ideological agenda. Companies were created (and in general not nationalised) because of a lack of private venture capital. As explained elsewhere in more detail (Willner, 2003b and 2006), Finland's impressive growth during the 20th century suggests that this strategy cannot have been a complete disaster. The country's GDP grew by a factor of 8.7 from 1913 to 1998, which is second only to Japan (Maddison, 2001: 264).

This emphasis on growth and development meant that the *existence* of the state enterprises was based on wider objectives than dividends, although their *behaviour* was largely commercial. However, while not being welfare maximisers, they were often constrained by having to consider also social welfare, gender equality, public service and the environment (Aura, 1962; Miettinen, 2000). By being oriented towards growth, they may also have forced their private competitors to increase their output and lower their prices (Miettinen, 2000, *Valtioyhtiöiden...*, 2003, *Solidium*, 2015), like in a mixed oligopoly.

The state-owned firms used to focus strongly on R&D, and some of them managed to become quite successful international players. For example, Stora Enso would scarcely have become second-largest in the forest industry in the world without the foundation laid by its Finnish state-owned predecessor Enso, formerly Enso-Gutzeit (*Statsbolagen* 1990; 1996; *Statsbolagen och ...* 2001). Metso/Valmet became a world leader in paper machines (*Statsbolagen och ...* 2001, *Solidium*, 2015), but this was the case under state ownership as well. Kemira, which has been active in more than 30 countries, was known for fertilisers and pigments, and is now increasingly focusing on water management chemicals (*Solidium*, 2015). Outokumpu, is a global market leader in stainless steel¹⁷ (*Solidium*, 2015). Moreover, the state-owned and technically advanced manufacturer of cables, digital switches and mobile phones for the domestic market and the Soviet Union, Televa, was sold to Nokia in 1981. This is likely to have contributed to Nokias subsequent success (Willner, 2006; see also Kasvio, 1997; Moen, 2002). But the technically advanced (state-owned) PT-administration may also have played some part.

The presence of wider objectives even in the 1980s would suggest lower financial performance in state-owned companies than in similar private firms, in particular if they were also less cost efficient. Little is known about comparative cost efficiency, but a comparison of the financial performance of a sample of similar public and private firms in Willner (2006) suggests no systematic advantage of private ownership. The same applies to the period before the crisis in the 1990s, and also to the pre-privatisation period (*Valtionyhtiöt ...*, 1989; *Julkiset ...*, 1996).¹⁸ The state-owned companies became more profit-oriented in the early 1990s and subsequently privatised, but a comparison of the operating profits as a percentage of net sales in 1987-90 and 1999-2002 does not suggest any improvement (Willner, 2006). There is in other words no evidence of such differences in efficiency that would have called for privatisation. Finland is not an exceptional case in this respect, given the international empirical literature (Boyd, 1986; Parker and Martin, 1997; Hodge, 2000; Iordanoglou, 2001; Florio, 2004; for more details, see Willner, 2001 and 2003a.)

The ambitions to generate sales revenues and to achieve industrial consolidation may be questionable, but the privatisation outcome can be an indicator for state's ability as an economic actor and hence owner. The sales revenues 1990-2000 were about EUR 9,650 m or 6.6% of the GDP in 2000 (and

¹⁷ Outokumpu was indirectly state-owned as late as 2003, because the state owned 39.6% of the shares, and the Finnish Social Security Institution 12.3% (Willner, 2006).

¹⁸ Early comparisons of pre- and post-privatisation performance may be misleading because of the impact of macroeconomic cycles (Martin and Parker, 1997), in particular in Finland with its sharp downturn in the 1990s. Comparing the more similar periods 1998-2001 and 1987-90 would otherwise suggest similar results, but Stora Enso performed slightly better than its predecessors (Willner, 2006). Also, it may be difficult to distinguish between the consequences of merger and privatisation.

EUR 8,600 m during the period 1991-2003), and more than the EU-and OECD-averages of 4.2 and 0.2% (Schneider, 2003). The privatisations during this period did not reduce the state's dividend incomes, which amounted to about EUR 669 m in 2002 (*Hufvudstadsbladet*, 23.5.2003). Privatisation has also lead to mergers, as illustrated by the emergence of Stora Enso, Metso, Fortum, TeliaSonera and Sampo as large and often international players. However, mergers can be questioned not only for being anti-competitive, but also for being dysfunctional for the companies involved (Mueller, 2001, Tichy, 2001). This is illustrated by the subsequent split of Fortum and Metso, which led to the recreation of Neste and Valmet (*Solidium*, 2015).

The conditions when producing SGIs differ of course from the production of steel, paper or mobile phones. But the history of state-owned industrial enterprises in Finland provides no evidence of any inherent inability to organise an economic activity.

6. Concluding remarks: further privatisation, status quo or renationalisation?

Looking at particular industries, there is little evidence for lower costs under private ownership in manufacturing and infrastructure industries such as electricity and water. Higher efficiency under private ownership tends on the other hand to be observed more often in labour intensive services (Boyd, 1986; Saal and Parker, 2000; Willner, 2001 and 2003a). However, it is difficult to isolate the ownership effects. The differences in objectives between SGI-providers with different ownership are more profound than in the case of manufacturing, and it is more difficult to establish causality. For example, productivity has often increased in restructured SGIs, but productivity sometimes increased even more in core public-sector activities that have not been reformed, such as land survey offices (10.4%), tax offices (0.9%) and employment offices (26.0%) (*Kohti ...*, 2002; Hjerpe and Luoma, 1997).

It seems that the energy sector, the railways, and the telecommunications were in fact comparatively efficient and dynamic before restructuring. A similar picture is provided by now privatised industrial state-enterprises. The relative success in generating revenues and achieving a desired but disputable industrial consolidation suggests that privatisation works best if companies are well run before being privatised, in other words if there is no need to privatise them in the first place.

Such experiences suggest that ownership might be a red herring when explaining productive efficiency, as also follows from recent contributions to principal-agent theory in the presence of potential intrinsic motivation (see Grönblom and Willner, 2014 for more details). What matters if costs are the only concern is not whether an activity is run by private owners or the public sector, but whether it is well organised. Finland's low corruption and other signs

of good governance (see Kaufmann et al., 2003) has probably helped both in making public ownership relatively efficient, and in avoiding some of the pitfalls of privatisation.

However, cost efficiency cannot be the only criterion for how SGIs should be organised. Employees and consumers have usually been affected more by restructuring in the SGI-sector than in manufacturing. Oligopolistic price margins can lead to overpricing, in particular if there is further consolidation, but competition is not necessarily desirable if there are concerns about working conditions and service quality as well.¹⁹ The incentives for upstream maintenance might also be insufficient in industries with a network infrastructure. All this suggests that the tendency to reduce the importance of non-commercial organisations through privatisation or corporatisation may be misguided. The number of activities that can be described as being of a general interest may in fact be increasing.

Such activities can be regulated, but regulated private ownership is not necessarily superior to public ownership (Shapiro and Willig, 1990/2000; Laffont and Tirole, 1991). Moreover, regulation may be a poor alternative in cases where there is a fundamental conflict between shareholder interest and social and environmental objectives, as illustrated by the difficulties of preventing electricity distributors and health-care providers in Finland to transfer profits to off-shore tax havens. This suggests that public ownership may have to be reconsidered as a way to organise SGIs.

A well organised welfare maximising public monopoly is able to provide higher quality without oligopolistic profit margins, and it would even provide the most cost efficient solution in markets with a network infrastructure in the presence of a downstream agency problem. Public ownership were earlier often associated with better wages and working conditions insofar as the public sector had an ambition to be a model employer. While this ambition may have disappeared during the privatisation wave, higher wages and better working conditions should not necessarily be seen as problems to be solved by privatisation.

Renationalisation in Finland is not likely in the present political climate, but it might become a realistic alternative in a longer perspective. The political parties have usually not campaigned on promises to privatise, because there have been no signs of privatisation yielding electoral gains. The evidence suggests the opposite, as illustrated by a Gallup poll on local services (*Helsingin Sanomat*, 24.6.2003).²⁰ Moreover, the size of the sector of state-owned and municipal firms is still substantial in Finland, and the public sector is still the dominant

¹⁹ Many customers may in addition be fed up with the hassle of choosing between service providers and changing them whenever their price competitiveness changes.

²⁰ For example, the state was going to sell Altia (with the brand Koskenkorva), but was prevented by popular campaigns.

SGE-provider in a number of important industries. To increase the extent of public ownership may not be prohibitively expensive, in particular if it becomes necessary to impose such regulation that will reduce the profitability of producing the services.

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