Author(s): Nevalainen, Pasi; Yliaska, Ville

Title: From state-owned smokestacks to post-industrial dreams : The Finnish government in business, 1970–2010

Year: 2021

Version: Published version

Business History

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/fbsh20

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To cite this article: Pasi Nevalainen & Ville Yliaska (2020): From state-owned smokestacks to post-industrial dreams: The Finnish government in business, 1970–2010, Business History, DOI: 10.1080/00076791.2020.1842874

To link to this article: https://doi.org/10.1080/00076791.2020.1842874

Published online: 18 Nov 2020.

BUSINESS HISTORY
https://doi.org/10.1080/00076791.2020.1842874

From state-owned smokestacks to post-industrial dreams: The Finnish government in business, 1970–2010

Pasi Nevalainen[a,b] and Ville Yliaska[c]

[a]Department of Industrial Engineering and Management, Aalto University, Espoo, Finland; [b]Department of History and Ethnology, University of Jyväskylä, Jyväskylä, Finland; [c]Faculty of Education, University of Lapland, Rovaniemi, Finland

ABSTRACT
While state-owned enterprises (SOEs) used to be considered obsolete tools for governmental intervention in the economy, in recent years governmental intervention in the business sector has re-emerged as a topic of debate. However, scholarship on the changes in and the modernisation of the SOE model is limited. In this article, we examine how the Finnish state's ownership policy adapted to the requirements of economic globalisation between the 1970s and the 2010s. We show that the attitude towards globalisation was pragmatic and aimed at safeguarding the competitiveness of domestic companies. The state-owned company system was gradually adapted to meet new needs, losing most of its original industrial policy significance. SOEs had to be made competitive and profitable, but company-specific targets depended on the ownership criteria associated with the companies. At the same time, the government paid more attention to supporting research and development in the private sector.

KEYWORDS
State-owned enterprise; government business relations; governmental intervention in the economy; ownership policy; new public management; R&D policies; innovation policies; varieties of capitalism; state capitalism; economic globalization; corporate governance

Introduction

In December 2016, the Finnish government established a new state-owned enterprise (SOE), Valtion Kehitysyhtiö (Vake), whose objective was 'to get the capital invested in state-owned enterprises to circulate more efficiently'.[1] The idea behind Vake was to form a state-owned fund (EUR 2.4 billion in the beginning) using the stocks of other SOEs in order to invest in new businesses. The establishment of this new state-owned company symbolises the change in the Finnish state's policy that developed between the 1970s to the 2010s and shows that although government ownership is far from obsolete, its basis and implementation have changed. Attention has shifted from traditional 'smokestack industries' to encouraging innovation and investments in high technology.

Over the last 40 years, the economic policies of Western countries have shifted from coordination towards market liberalisation. The most important common denominators during this period were the decline of direct state ownership and the opening up of state

CONTACT Pasi Nevalainen pasi.nevalainen@aalto.fi

monopolies (e.g. Millward, 2011; Parker, 1999; Toninelli, 2000). However, economic globalisation did not, as scholars noted in the early 2010s, lead to the complete disappearance of state-owned companies or government interventions (Christiansen, 2011; OECD, 2017). On the contrary, there have been several examples of politics and political interests being connected to both state-owned and private businesses (Musacchio et al., 2015). Over the past decade, international phenomena, such as the concentration of economic growth in Asia, the economic crises in Europe and the current pandemic, have further highlighted the importance of government-business interventions (Lazzarini & Musacchio, 2020; Megginson, 2017). However, the majority of recent academic research on SOEs deals with emerging economies, especially China (Bruton et al., 2015; Grøgaard et al., 2019; Grosman et al., 2016; Megginson, 2017).

The Western SOE model has converged with the private enterprise (Colli & Nevalainen, 2020; Musacchio & Lazzarini, 2018). This development is far from unambiguous. Although most countries are part of the global economic system, the importance of state ownership is hardly the same across the globe. According to the Varieties of Capitalism discussion, international influences lead to different outcomes in national contexts. Understanding change – for example, how the 'old' SOE model was transformed into the 'new' one (see Colli & Nevalainen, 2020, p. 301) – requires further empirical research.

Finland is a Nordic country where SOEs have historically played a significant role in the industrialisation policy and where the role of SOEs has been strongly developed since the late 1970s. In this article, we investigate the following major phenomena in the reorganisation of Finland's state-ownership and industrial policies between the 1970s and the 2010s:

First, *what were the various influences on state institutions and did these influences affect the state-ownership model?* Second, we will examine *the extent to which external influences led to the convergence of national SOE systems in Europe*. Third, we will look at *the extent to which new state interventions, such as innovation policies, emerged to replace 'old-school' industrial policies*. Through our historical analysis, we will review how the state-ownership policy has adapted to global phenomena in a small country, such as Finland.

Analysing the turning points in ownership policy reveals how the underlying economic logic changed. Following Fellman (2008), we divided the research period into three phases (Table 1) and added three perspectives (external influences, the state and SOEs) through which to examine the changes in the SOE model. Although a specific 'mental turnabout' is apparent during the 1970s in the aftermath of the oil crisis, the most profound reforms only took place in the late 1980s and especially in the 1990s, when the European-integration process became an increasingly important factor that accelerated the course of events.

In the public debate, policy changes are typically presented as necessary solutions to an acute crisis or structural problem. In Finland, crisis management efforts focused on political consensus, specifically regarding the problem of the profit squeeze and the necessary structural changes. As the roots of the economic crisis of the 1970s could be found at the structural level, the proposed reforms were designed to have far-reaching effects. Everything was under reconsideration and negotiation: taxes, SOEs' management, the public sector, state finances and the power balance between the administrative sectors. Our main argument is that the efforts of the different parties shared the desire to restructure the country so that it could face the post-industrial era.

In our analysis, the interaction between international phenomena and the domestic context is key (Figure 1). We propose that external factors, such as the end of the post-war

Table 1. Periodisation.

	Economic globalisation	The Finnish state administration	State-owned enterprises
State-led growth (1956–1981): inwardly closed, highly coordinated market economy	The Cold War – an era of SOEs and national monopolies	A bureaucratic administrator-state became a Nordic welfare state	100% state ownership, mainly domestic operations, participation in international trade
Liberalisation (1982–1993): the speculative bubble and the delayed structural crisis; the third interlude	Liberalisation – the initial stages of European economic integration	New public management–style reform, political transition towards a more market-friendly orientation, beginning of corporate-governance development	Development of business organisations, rapid growth of foreign subsidiaries, first partial privatisations, exposition of former monopolies and national champions to competition
Towards an inwardly and outwardly open coordinated market economy (1993–2008)	European Economic Area – industrial jobs are increasingly moved to low-cost countries	New public management–thinking is an established norm, further and wider reforms	State as a minority owner, some state-owned multinationals, privatisations, some agencies incorporated, public–private partnership

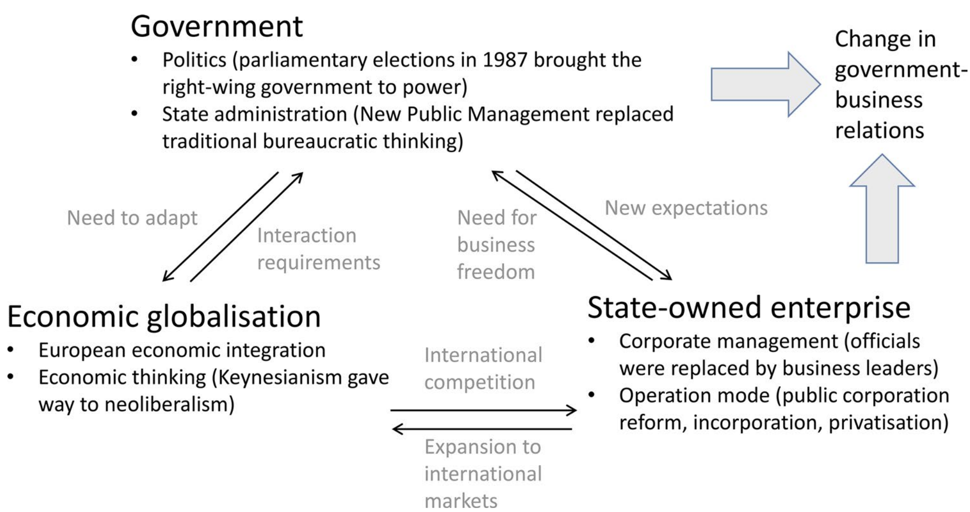

Figure 1. The impact of international influences on the domestic context.

economic boom in the 1970s[2] and the growth in international trade, influenced the national context, leading to changes in domestic politics and institutions and changing the government-business relations. By looking at the interaction between the external (international) and the domestic factors, we seek to find the most important mechanisms for policy change. The major external impact, labelled as 'economic globalisation', includes a variety of structural and ideological elements. The government refers to both political decision-making and state administration. SOEs can be seen either from the perspective of active management or as organisational structures under state administration.

First, we are interested in the formation of *ownership policy* or *ownership steering*, the laws, institutions, practices and regulations that determined how SOEs were run (e.g. Megginson & Netter, 2001, p. 377).[3] Using these various instruments, the state could effectively define

SOEs' goals and structures and engage in industrial policies via ownership. In Finland, these principles and structures were formed not only via political decision-making but also via the work of government civil servants. The interaction between government and SOEs was not one-way; rather, state-owned companies also had their own means of influencing the government.

Second, we are interested in the formation of the new innovation or industrial policies that favoured public investment in private companies. We are interested in the extent to which such policies can be connected with a change in state-ownership policy.

To investigate the government's industrial policy, we systematically reviewed key public documents: policy decisions, committee reports and working-group reports. A particularly important source was the government's decision in principle on the ownership policy, which were typically made once during the term of government and which outlined the main objectives and policies of ownership policy. The issues that were noted in government guidelines were generally prepared in advance in committees and work groups, whose memos are publicly available. In addition to these documents, we have used archival resources (other memos and protocols of interest groups) to further understand the flow of events and the underlying reasons for the changes. These same sources, especially the working documents found in the archives, also reveal the perspectives presented by the SOEs during the process. We also used the extensive research on the political history and the administration history of government-business relationship in Finland.

Changes triggered by the shock of the 1970s

There is broad agreement among scholars that the gradual changes in SOE models from the 'old' to 'new' that took place in the industrialised nations started in the 1970s. The academic literature on the reasons behind these changes is now extensive and diverse. In today's business-history debate, this development is compounded by economic-globalisation factors, such as technological development, trade liberalisation, emergence of international law and institutions (GATT, WTO, EU, etc.), enormous international capital flows and declining transport costs, that have played an increasing role in shaping the business-government relations since the late 1970s.

Chronologically, the starting point was the oil crisis and the subsequent economic crisis, which broke economic predictability and performance (Rodger, 2011, p. 256). The generally accepted view was that there was a need for new policies to replace the collapsing Bretton Woods system and to reverse the onset of stagflation. Another explanation for the change was the structural shift in the economy. During the crisis, economists note that profits were being squeezed in many of the OECD countries. Investments were low compared to the previous decades (e.g. McCracken, 1977). The stagflation and the profit squeeze put pressure on the collaboration between the social-democratic governments and the labour unions in several countries. Past coordinated-stabilisation policies (for capital, labour and the state) fell apart (Scharpf, 1991). The common response to these issues was to deregulate and increase competition.

However, these explanations are inadequate because the chronology does not include both the culture and the ideas that played a part in process earlier than the structural changes became apparent. The post-war system seemed stable and predictable and created a productive environment for individualism. The post-modern era moved away from the concepts of national consensus, managed markets and citizen responsibility, replacing them with individual interest *á la* public choice theory, flexible and instantly acting markets and diverse conceptions of identities (gender, racial, etc.) (Rodger, 2011).

All these factors had an impact on the grounds for state ownership. The golden age of traditional SOEs (from the 1950s to the 1970s) was strongly linked to the construction of an industrialised society. The gradual change from the golden age to the neoliberal/globalisation era started in the late 1970s. At the same time, the economic structures shifted towards the technology of the third industrial revolution (e.g. Schön, 2013, p. 48). In Europe, the pro-market reforms together with the potential of new technology were expected to lead to a convergence of market and business structures (Parker, 1999; Thatcher, 2004, 2007). In this context, SOEs began to look like relics, mainly hindering and distorting the free market economy (e.g. Clifton et al., 2006). In the early 2000s, it seemed like SOEs were disappearing altogether, at least in the Western countries (Toninelli, 2000).

Although this development was true in some cases, it is also apparent that the answer to the crisis of the 1970s varied from country to country and that institutional and political structures created local path dependencies (Hancké, 2009). Moreover, while state ownership and control are interrelated, state ownership does not automatically mean that an SOE would operate in a particular way because the impact of state ownership depends on the local institutional context (Cuervo-Cazurra et al., 2014, p. 924).

In the 2010s, scholars discovered that Western SOEs had not disappeared but, instead, had transformed, as was the case with Vake. In addition, we should not forget that many of the activities previously carried out by the state agencies have been incorporated into SOEs (Clifton et al., 2011; Grossi et al., 2015). The new coming of the SOE was not a return to the past (see Cuervo-Cazurra et al., 2019). States were still involved in businesses, but the state's full ownership had changed to minority ownership and to different forms of partnership with private investors. In addition, SOEs operated in different industries than before, and in the globalising world, several state-owned companies became multinationals (Christiansen, 2011; Colli & Nevalainen, 2020; Cuervo-Cazurra et al., 2014; Musacchio & Lazzarini, 2014; Musacchio et al., 2015). Multinational state-owned companies did not come exclusively from China and other developing countries. The World Investment Report of 2017 found nearly 1,500 state-owned multinational enterprises, of which 420 were from Europe (UNCTAD, 2017).

The scholarly perception of government intervention in business has expanded. Government influence in business is not limited to state-owned activities as states also use different means to support private enterprises. However, SOEs still have a special role in the economy. As Megginson and Netter (2001) noted, although governments can intervene in *any* firm, regardless of ownership, 'the government's transaction costs of intervening in production arrangements and other decisions of the firm are greater when firms are privately owned' (p. 330).

State-owned enterprises as a 20th-century solution

The Finnish SOE system consisted of multiple layers that had been built over time and, by the 1970s, formed a rather fragmented structure. The oldest layer consisted of state business agencies, such as the post office (established in 1638), the telegraph (1855) and the railway

(1862), which, in the 20th century, were developed into national service institutions. Although the latter were also considered to be 'business agencies'[4] to some extent, they were not, until the 1990s, defined as SOEs in the full sense of the term.

In the decades following Finland's independence (1917), the growth of the state-owned company sector was related to the industrialisation of a newly independent and economically backward nation. The first SOE is often considered to be the forestry company W. Gutzeit Co, which the Finnish state bought from a Norwegian owner in 1918. Afterwards, state ownership expanded into basic industry and infrastructure. Initially, each SOE had a clear objective, such as prospecting for an abundant ore reserve, building a large hydropower plant to support electrification or producing fertilisers to improve inefficient agriculture (e.g. Kuisma, 2016). In the early 1930s, some of these organisations were transformed, as a result of a political compromise, into state-owned limited companies (Puumalainen, 1976).

During the interbellum, the existence of specific industries was considered by the government to be a sign of a respectable nation state, yet these industries were not thought to be able to exist and evolve without government investments (e.g. Kuisma, 2016). According to Fellman (2008, p. 160), 'The motivation behind the foundation of state-owned companies was not outspokenly ideological, in the sense that state ownership was preferred to private capital, but primarily pragmatic'. Due to Finland lagging behind in terms of economic development and the very complicated foreign policy situation, SOEs were clearly involved in the process of 'catching up'. This meant a state-promoted industrialisation policy.

> State-owned companies have a special role in the implementation of industrial policy. As the owner, the government can influence the decision-making in these companies. (Industrial Committee's Report 1975:47, p. 205)

After the Second World War, SOEs slowly changed in the context of rationalisation and centralisation. The most obvious example is the state-owned war-material industry, which was forced to direct its production towards the civilian market. The state-owned metal industry group Valmet was formed from the military engineering workshops that began to apply their expertise by building tractors and paper-machine rolls (e.g. Björklund, 1990). After the war, the Valmet's main tasks were to employ workers, to produce commodities to pay the war reparations to the Soviet Union and to act as a 'spare valve' for trade with the Soviet Union (Sahari, 2018). Through growth and acquisitions, SOEs expanded into new businesses, thus expanding the entire SOE sector. During the decades following the war, the existence of SOEs was justified by the argument that they were needed in order to invest in projects where private capital was insufficient. The Economic Planning Agency concentrated largely on regional policy and on the industrialisation of the periphery (Committee Report, 1954:4; Paavilainen, 1963).

In a sense, during the Cold War, Finland truly was a mixed economy. All at the same time, Finland traded with the Soviet Union and developed trade relations with countries in the socialist trade block (SEV) while integrating into the West (through the EFTA Agreement in 1961 and the EEC in 1973). In this context, Finland experienced rapid industrialisation and strong economic growth (Hjerppe, 1988, 1990). From the 1960s onwards, Finland began to develop into a Nordic welfare state. Confidence in social and economic planning peaked in the 1970s. Different planning systems were implemented within the state administration, and the number of central agencies in the government increased.

The large and still expanding role of the state began to become a problem. In the mid-1970s, the working group on SOEs' objectives[5] noted that the expansion of SOEs and, in particular, their extension to new products and industries, which no longer had anything to do with the state's original ownership interest, was causing conflicts and uncertainty. From the SOE's point of view, the biggest problem was to balance the politicians' will and the company's own objectives.

The Finnish SOE system was much more decentralised than in Italy or Sweden. In the government hierarchy, the companies were placed under the supervision of various ministries and were quite independent in their daily activities. The link between SOEs and political decision-making was, in practice, based on nominations. The CEO appointments of important SOEs required the approval of the President of the Republic (Kuisma, 1997, p. 466). The companies were overseen by supervisory boards[6] to which politicians and civil servants were appointed. In practice, political control took place in various forms, often employing informal routes, such as through personal contacts. Political interference was especially evident in big projects (e.g. Kuisma, 1997). The contradiction between political guidance and the company's own interests could be seen, for example, in the fact that companies often had to locate their new production facilities to 'development areas' – that is, regions suffering from unemployment and depopulation.

Decentralised ownership control was an obstacle to the kind of coordination that the politicians in power would have preferred to practice (e.g. Industrial Committee's Report 1975:47, p. 201). For example, it was difficult to concentrate SOEs' resources for major projects. The alternative option in the 1970s was to centralise ownership management into a holding company.[7] However, the proposal did not receive sufficient support, especially from the managers of SOEs, who were accustomed to their fairly independent positions.

Adhering to the wave of international liberalism

The criticism of the welfare state increased during the recession of the 1970s. The recession took place in Finland in a slightly different manner than in the other nations that suffered from stagflation. Finland's high inflation (17% in 1975) was seen as a problem in the mid-1970s, but unemployment (at less than 2% in 1975) had not yet become a problem, thanks to the demand from the Soviet Union. Instead of unemployment, Finland suffered from a trade deficit. With the help of the IMF, the situation was stabilised, and by 1977 inflation was only at 7 per cent; however, unemployment was rising. In the 1975 deal with the IMF, Finland promised to keep domestic debt in check and to stop the growth of the public sector (Kuusterä & Tarkka, 2012, pp. 405–420).

The weakened state of public finances during the recession concretely affected the work of the state administration. A few years later, a person involved in planning the state administration recalled the situation as follows:

> By 1975, the situation had changed completely: the policy-making had been paralyzed, the economic situation threatened the development of the welfare sector, the plans made by the

> government planning systems lost their meaning, and the centralization of central government and technocratization became the subject of increasing public criticism. (Heiskanen, 1977, pp. 8–9)

The general conclusion was that the decades of exceptionally fast economic growth had ended. Expressions like 'The crisis of the welfare state', 'Eurosclerosis' and the 'English/Swedish/Finnish disease' became part of the discussion (Holkeri, 1977, pp. 71–73; Pierson, 1998, p. 148; Smolander, 2000, pp. 274–279, 289–293). At the same time, private businesses and some politicians became more vocal in considering the state's increased role in society as a threat. High taxation, regulation and SOEs were supposedly the factors that limited private entrepreneurship. The business community wanted to restore the value of private entrepreneurship, improve the country's international competitiveness, focus development more clearly towards the Western model and reduce the share of the public sector in the economy (Tarkka, 2002; Wuokko, 2016).

At the same time, the old industrialisation policy experienced spectacular losses: symbolically, the most important event was the television-tube manufacturer Valco (1976–1979/1980) in a consortium with Japanese and Finnish private companies. The original purpose of Valco was related to the Social Democratic Party's (SDP) industrial policy project meant to support the development of the country's electronics industry. The project was a contradictory combination of traditional objectives, such as the protectionist goal of replacing imports with domestic production, and new objectives, such as opening a new export industry in cooperation with a multinational Japanese partner and a domestic private television-set producer. Within the private industry, the project aroused loud resistance and fears of socialisation (e.g. Marttila, 2016, p. 304).

The project proved to be an economic and political disaster. In addition to the fact that the factory did not reach its production targets, some high-ranking politicians were involved in a related corruption scandal. In the public sphere, the company, drifting into financial difficulties in the autumn of 1979, was considered a failure of the SDP's economic policy and had a dire impact on the general perception of the state's ability to conduct business (e.g. Kuisma & Seppänen, 2015). Ten years later, the Valco case was considered to be a turning point in state-ownership policy and was the last Finnish SOE established to develop industrialisation (Working Group, 1989, p. 17).

After the 1970s, the Finland's economic policy experienced a turnabout known as the 'consensus'. The turnabout occurred without the country's political leadership being changed (e.g. Tarkka, 2002),[8] with the recession providing the immediate reason. A symbolically important event was the convention held in 1977 to tackle growing unemployment. At the convention, the biggest political party, the SDP, declared itself to be a party with a new political programme, in which the leading role was given to private instead of state-owned businesses. 'The operational environment' of private firms was put on the pedestal, and the success of private businesses was now seen as being of 'shared interest' for the nation. The biggest issue in the programme was that the SDP publicly abandoned the objective of socialism. This abandonment, which might have been a tactical move, became firmly established in the ranks of the party during the 1980s (Outinen, 2015, pp. 317–319). Other aspects of the SDP's new programme have been labelled as supply-side economics – for example, the measures to stop inflation and the refusal to devalue the currency and take on more public debt (Hämäläinen, 1993, p. 151).

While Prime Minister Margaret Thatcher, for example, actively searched for confrontation with the left wing and the unions, in Finland a *Blairian* consensus was on the table from the beginning. Even though political battles existed, they were less fierce than during the previous decades. Wide support for several key issues was achieved by major political parties. One of the major issues was to transition from an industrial society to a post-industrial one, but this time, the transition was to go ahead without the previously conventional form of state ownership.

Faith in high technology

Experts in the 1970s widely agreed that the economic crisis brought about by the 1970s recession heralded a structural shift from an industrial society to a post-industrial world. This conclusion was an important notion for many politicians and led to the revision of economic policy, with a new emphasis on public research and development (R&D) and venture capital. It also led to the reconsideration of the bureaucratic model of administration and the size and responsibilities of the public sector. All resources and all capital in the SOEs as well as all public resources in general were required in order to implement the change from the industrial to the post-industrial society.

Unemployment figures pointed to a structural change. There was a record number of 170,000 unemployed people in 1977. Recession hit the traditional industries, not just agriculture. The number of industrial workers dropped from 404,033 in 1972 to 388,322 in 1978.[9] This de-industrialisation trend continued over the next decade. By the end of the 1980s, the number of industrial workers had dropped below 250,000 (Koivuniemi, 2018, p. 225). In Norway, too, the Labour Party changed its economic policy when the number of industrial workers fell (Christensen, 2018, p. 145).

Before the 1980s, Finnish businesses developed their technology very cautiously. Most of the companies copied technology from foreign companies and adjusted it to their own uses (Aunesluoma, 2011, p. 289). Finnish technology and R&D policy were concentrated mainly within the public higher education sector (Jalava, 2011). After the recession, the university system was seen as inadequate at keeping Finland on a par with international competition. Although the new structural policy was developed within the framework of 'economic recovery', the concept did not refer to Keynesianism.[10] It was defined as (a) having tight budgetary limits to stop the growth of the public sector, (b) impeding public indebtedness, (c) stopping currency devaluations, (d) minimising inflation and (e) establishing the groundwork for new branches of industry (Sorsa, 1977).

Kalevi Sorsa's *recovery government* (May 1977–May 1979) made it clear that its aim was to help the private industry; consequently, the government had to make a few exceptions to the *debt* rule. Public debt was permissible (1) to finance investments in the export industry, (2) to develop industries that would replace the import industry, (3) to increase the equity capital of SOEs and (4) to finance the energy policy.[11] The investment policy was paramount.[12]

For the most part, these investments were supposed to go to the electronics/technology industry to help Finland adapt to the post-industrial world. For example, the leader of the SDP and the prime minister of four governments, Kalevi Sorsa, said in a 1979 television interview that the recession was an overproduction crisis. He referred to Kondratiev's waves and argued that capitalism was at a crossroads and no salvation could be found in 'bureaucratic planning'. A cycle of growth could only be restarted by developing new industrial branches. According to Sorsa, the electronics industry was the most promising bet, but it 'had not happened yet'.[13] The Valco project was a state-owned effort to steer the industrial base towards electronics, but because it had failed so spectacularly, the publicly funded private route was the only possibility (e.g. Skurnik, 2005, pp. 199–200). Nokia, which had strongly opposed the government electronics industry projects, bought the state-owned telephone-network equipment producer Televa in 1981 (Häikiö, 2001b).

The theoretical foundations of de-industrialisation were an established fact in the public sphere. From the end of the 1960s onwards, public intellectuals, futurologists and technology researchers in the West and in the East started to sketch ideas about the next structural change and the role of technological development. Two major trends were present in most of the predictions: information technology and biotechnology.[14]

The OECD also interpreted the recession as a structural change. In 1975, the OECD organised a conference on computers and telecommunications that interpreted the crisis as a crisis of overproduction. 'Computers and telecommunications will become major new infrastructure, which will give birth to new branches of industry. Car industry and other old branches of industry have been saturated and it is urgent to find new areas of growth' (Pietarinen et al., 1975, pp. 11–12; also, OECD, 1979a, 1979b, 1979c; Mattelart, 2003, pp. 64, 111–113). According to the predictions, the public sector had an important task. Bell (1974, p. 250) observed that the US federal government supplied most of the funds for R&D, while industry, universities and non-profit organisations performed the work. Because the state had a role in allocating resources, a post-industrial society would 'involve *more* politics than ever before' (Bell, 1974, p. 263).

According to Finland's Ministry of Finance, a new electronic service infrastructure was developing: 'To exploit these opportunities and their economic growth potential in the interest of the public, major investments will be needed. The commitment of such requires careful planning and allocation of national resources' (Pietarinen et al., 1975, Appendix 1, p. 12). The Industry Committee (1975) also drew attention to the importance of technology. The general objectives – to expand production, increase the degree of processing and use labour more efficiently – emphasised the importance of technology as a force for development:

> The development of technology through research and development – to achieve the best possible results for the whole economy – will be one of the most important areas of industrial policy in the future. (Industrial Committee's Report 1975:47, p. 21)

In 1977, the OECD published the McCracken Report. According to the report, the recession was caused by a decline in profitability, which, in turn, was caused by the lack of fear of unemployment, the growth of the public sector and wages being raised by the labour unions. The report suggested that the public sector should be downsized via marketisation, user fees and privatisation. But, most importantly, the public sector should take a bigger role in R&D investments (McCracken, 1977).

The investment percentage of the gross domestic product (GDP) in R&D became an important yardstick. This yardstick was alluring because R&D was easy to measure. Politicians could set clear quantifiable targets and hope for the best. In the words of the OECD, by investing 3 per cent of the GDP in R&D, the United States became 'a symbol for other countries which now regard this as a target to be reached' (Bell, 1974, p. 250). In Europe, France made strong commitments to the techno-optimism, and the role of the state was significant from the beginning in the new industrial policy. The most famous example is the report by Nora and Minc (1978/1980), which proposed a new national communication infrastructure based on computers (Minitel) and a long-term strategy to computerise both the private and public sectors.

These futurologist predictions were well known in Finland (Allardt, 1969; Kullberg, 1996, p. 16; Larna, 1969; Pöyry, 1983; Tarkka, 1988, p. 237). Civil servants participated in the OECD meetings, and the structural change was debated at the Ministry of Finance, which was responsible for the restructuring of the state administration. According to the expert findings at the time, international competition would involve not only companies but nations as well (through public investments in private companies).[15] Finland resorted to the old national narrative of 'catching up': there was an urgent perceived need to invest more in R&D. Some of the future forecasts were downright alarming – for example, the prediction that computers and electronic communications would replace paper was considered a direct threat to Finland, whose largest export sector was the forestry industry.[16]

In 1979, the Finnish government set up a committee on technology. The committee's prediction was that the structural change triggered by the advancement of technology would kill the old industries, making it important to increase investments in R&D 'to prevent Finland from falling behind in technologic and economic development'. According to committee's findings, R&D was important in two regards: it could both enhance productivity and create new branches of industry. The committee predicted that telecommunications would be the most rapidly advancing line of business. Data/video transfer, 'tele post', electronic banking and electronic newspapers could be a reality as early as the 1980s. At the same time, the introduction of new technologies was considered to require deregulation measures that would free up private entrepreneurship (Committee Report, 1980, pp. 1–3, 12–17, 26–28).[17]

In the late 1970s, Finland's R&D to GDP ratio was only 1.08, and the technology committee hoped it would be 2 by the end of the 1980s. In addition, the committee recommended tax cuts for corporate R&D investments. The main idea was that public investments in R&D would also encourage private companies to invest in R&D. Moreover, the committee proposed that a new technology division should be established in the Ministry of Trade and Industry (Committee Report, 1980).[18] Private Finnish companies supported the idea and hoped for public investments in R&D and education.[19] The new innovation policy led to the creation of the Development Centre of Innovation and Technology (Tekes) in 1983, which worked as an R&D financier to private and public companies and universities according to the guidelines set by the Ministry of Trade and Industry (Tiitta, 2007).

From consensus to a wave of reforms

The will to develop the public sector and public corporations was enhanced by the international management trend that swept over Finland in the 1980s. Later, in the 1990s, this trend was called New Public Management (NPM), referring to the market-oriented administrative doctrines that were adopted in the majority of OECD countries during the 1980s and 1990s. In the NPM reforms, governments privatised public companies and introduced market-type mechanisms into the public sector (Hood, 1991; Pollitt & Bouckaert, 2000, p. 159).[20]

In Finland, structural reforms began with 'business agencies', which 'represented the oldest layer of the state's business', as already described by a government organisation committee in 1957.[21] In 1981, the government launched the first committee to examine better ways of organising these agencies. The committee's starting point was existential: why did these agencies exist, what was the 'common good' by which these agencies were justified and were there still grounds for their existence (Committee Report, 1983a)? Because these organisations combined features of the government, public utilities and business, the committee decided to develop said organisations into a new specific type of organisation that would combine the best aspects of a government agency and a limited company (Committee Report, 1985).

The preparation phase for the Finnish 'public corporation reform' lasted almost the whole decade. During this period, some traditional institutions, such as the post office, telecommunications and the railway as well as several smaller agencies, were converted into organisations resembling the old British 'Morrison's' (1933) model during the 1989–1995 period, which gave agencies more independence in business (Ahonen, 1987; Nevalainen, 2014).

The managers of public corporations were cautiously optimistic regarding some aspects of the public corporation reform, but overall, feelings were mixed. Others, usually the younger-generation managers, were more enthusiastic about the reforms, but all agreed that the existing rules unnecessarily restricted their working environment (Committee Report, 1983b, pp. 85–95).[22] The managers had long complained that different bureaucratic rigidities related to state administration were limiting the companies' opportunities in unreasonable ways. The managers especially wanted to have more autonomy, which the separation from the state budget offered. However, some doubted that autonomy would lose its relevance due to the new auditing systems.[23]

The public corporation reform proved to be an intermediate step, or a training phase, for full corporatisation and, finally, privatisation. Although developments along this direction were believed to continue, the pace of development was surprising to most reformers (Nevalainen, 2014, p. 272). As the reforms of the 1990s were considered successful, the government wanted to continue and go further, especially in the administrative sector of the Ministry of Transport. The most important of these reforms culminated in the incorporation and privatisation of the public telecommunications company PTL telecommunications, which gradually lost its partial monopoly (1987–1994) and was turned into a 'public corporation' (1990), incorporated (1994) and partly privatised (1998), by which time it had already turned into a state-owned multinational enterprise Sonera (Nevalainen, 2017). In the early 2000s, the state ownership of the company was gradually decreased. The government decided to use the proceeds from these sales to secure R&D expenditure and industrial investments.[24]

The government policy was to boost the service sector through competition. In Finland, the share of private businesses, especially in the service sector, was small compared to the OECD average, as many public services were publicly owned. At the same time, as the international trade in services grew (especially in sectors that had just been liberalised), Finland's service exports were also clearly lower than the EU average. Structures that favoured public service production, such as taxation, were considered problematic by the dominant public discourse. One of the factors preventing the emergence of an efficient service market was the financial resources required for R&D.[25]

The extension of the business logic to public-sector organisations was an important factor that further accelerated the ongoing change in SOE system. In the 1980s, several Finnish SOEs established subsidiaries abroad.[26] This was related to the new business opportunities, but also to perceived pressure on the domestic market. For example, in telecommunications, international operators were aggressively increasing their operations. According to the management of the Finnish state telecommunications company, the company was forced to react, which is why it started its first international businesses for 'defensive reasons'. The management felt that it had to take over important markets in neighbouring areas to prevent international competitors from gaining a foothold or a favourable position to penetrate the Finnish market. As the company expanded into international business, its own operating logic changed to the operating logic of a multinational company, and the company's management began to demand further reforms from the government (Cheung et al., 2020).

From the state administration's point of view, the SOE expansion abroad was initially a financial issue. As SOEs needed more capital for investments, the pressure to list SOEs on the stock exchange grew (Ranki, 2012). A working group set up by the Ministry of Trade and Industry concluded in 1991 that the original industrial policy objective was no longer significant for any of the SOEs under the Ministry.[27] Therefore, there was no reason to maintain significant state shareholding in these companies. Responsible ministries also decided that as the success of SOEs required compliance with business principles, these companies could no longer be used as tools for economic policy unless they were compensated (e.g. Junka, 2010, p. 5).[28]

Previously, state ownership was generally perceived as permanent, but since the late 1980s, the thinking changed (Working Group, 1989). Listing public companies on the stock market was still a politically sensitive issue.[29] In its formulation of the new managerial guidelines, the stated that the government retained its control over listed companies. Also, Prime Minister Holkeri underlined that listing some SOEs (in 1988 and 1989) was not about privatising them but about giving them an opportunity to gain risk financing from the private capital market. According to Junka 2010, p. 35 this meant that the primary purpose was not to privatise SOEs but to ensure their capital maintenance and to broaden their ownership base to promote the expansion of the so-called people's capitalism.[30] Despite the fact that there was a public debate on privatisation in the late 1980s, a large-scale privatisation trend began only after the recession of the early 1990s, and the trend was strongest in the late 1990s and early 2000s, in line with European trends (e.g. Clifton et al., 2006).

By the late 1980s, public opinion had turned from suspicion of profit-seeking companies to sympathy for private entrepreneurship. According to Millward (2011), the fairly widespread suspicion of private entrepreneurship was largely due to the recession of the 1930s. The fact that this distrust had died down by the 1980s also helped the Finns to see new ways of regulating the market. For the Finns, Margaret Thatcher and Ronald Reagan represented neoliberalism in its extreme form, from which even the big businesses and right-wing parties detached themselves in the 1980s and early 1990s (e.g. Vares, 2017, p. 315). However, the objectives of Prime Minister Holkeri's right-wing government (1987–1991) – deregulation, economic liberalisation and a reduction of the public sector – aligned Finland with the international neoliberal trend (Wuokko, 2016, pp. 256, 260; Yliaska, 2014, pp. 35, 187, 240). For example, in telecommunications, the Finnish market opened rapidly in European terms (e.g. Graack & Elixman, 1999).

In Finland, the 'necessary solutions' were much more subdued than in the Anglo-Saxon countries. During the fierce privatisation of the late 1990s, the Working Group (1999, p. 3) noted that there was no reason to sell the state's property solely as a matter of principle or for short-term interests. However, the Finnish case reinforces the views according to which the phenomena of incorporation, privatisation and deregulation, together with the emergence of international competition, strengthened one another in the domestic context (see Thatcher, 2004). Next, we will discuss how the internationalisation of the market affected the state's ownership policy.

The 'faceless owner' looks for an identity

The 1980s was clearly an era of reconsidering the state as an entrepreneurial model. In the public debate of the early 1980s, state-owned companies were often depicted as loss-making. The reason was not only the Valco disaster but also the revealed losses of other SOEs, especially Valmet. In the public debate, political guidance and the associated 'ownerless money' were seen as the main reasons for the poor success of state-owned companies.

Previously, SOEs were sometimes allowed to operate at a loss if the overall social impact of an SOE's activity was assessed as positive; however, in 1983, the Finnish government issued its resolution that SOEs had to be profitable, at least at a mature stage in their life cycle. As Junka (2010, p. 5) summarised, it was considered that 'the industrial base and infrastructure of the national economy had already been built and that meeting the self-sufficiency needs of the national economy no longer required state entrepreneurship'. From then onwards, increasing attention was paid to SOEs' corporate governance.

The biggest perceived problem was that state ownership was 'faceless'. This refers to the vagueness of ownership steering and liability relationships. In particular, no one seemed to know who eventually decided who represented the 'state' at the annual general meeting and how the 'state' should be represented in the SOE's administration (Working Group, 1989).

These questions regarding the disconnect between 'the agent' and 'the principle' (the agency dilemma) were at the core of the NPM reforms (Lynn, 2006). In short, the principle-agent problem states that different interests and asymmetric information make it difficult for the principle to ensure that the agent acts in the best interests of the principle (Berle & Means, 1932). According to organisational theory, some kind of control is necessary to prevent the factory floor and/or corporate management (depending on the point of view) from acting according to its own preferences (Jensen, 1998). In the public sector, this problem was seen as more profound than in the private sector because even the roles of the different actors were undefined (facelessness). The aim was to create administrational structures (result targets and market signals) to ensure that the agents worked according to the principle. The concern over the agency dilemma in the public sector in the 1990s was inspired by public choice theory, which emphasised the self-interests of civil servants and had made an international breakthrough in the 1980s (Barzelay, 2001).

At the beginning of the 1990s, most Finnish SOEs were still having difficulties or were earning less profit than their private competitors. The Working Group by the Ministry of Trade and Industry recommended increasing private ownership. In the case of industrial companies, privatisation was even seen as a means for facilitating the restructuring of the entire industry.[31] However, significant privatisation efforts did not take place due to the deep economic recession (1990–1993).

During the following years, the ownership issue was investigated with a particular emphasis on SOEs' internationalisation. Corporate structures were to be adjusted to become consistent with 'international practices and standards'. As noted by the working group (1995), 'Instead of a specific knowledge of social interests, it is becoming increasingly important to have a coherent understanding of international business and related risks' (pp. 16–17). The discussion focused on the form and composition of the company's highest decision-making body (e.g. Kaisanlahti, 2001). Traditionally, the supreme institution in the company was the supervisory board, in which the state administration was represented by MPs and senior officials:

> Supervisory boards are internationally a rather unknown type of corporate governance. They are mainly used in Nordic and German-speaking Europe. (…) In Anglo-Saxon countries, the supervisory boards are not used. As the SOEs' ownership base will be expanded, especially when foreign investors become business owners, the supervisory boards together with state ownership become a problem for credibility. (…) From a management point of view, the value in using supervisory boards is not high. (Working Group, 1995, p. 24)

Also, in the public debate, these governing bodies had begun to be seen not so much as instruments of political control and coordination between government-owned companies but as reward-posts for politicians.[32] Such structures had begun to emerge as evidence mounted regarding the unprofessional management of and vague decision-making in SOEs.

In the coming years, the supervisory boards were not unambiguously removed; rather, the question became linked to the state's ownership interest in the SOEs. The companies were divided into groups according to the reasons of state ownership, and this classification influenced the development of the corporate governance structure in line with the private business model.[33] Changes in owner policy were justified by changed circumstances. Liberalisation in the 1980s and the accession to the European Union in 1995 were the turning points that resulted in the destruction of the old structures, practices and perpetual organisations (e.g. Kuisma, 2004, p. 11).

The Working Group on State-Ownership Policy (1999, pp. 3–5) summarised the developments of the 1990s, stating that the government was focused on the following goals:

1. to ensure that the companies had enough capital;
2. to ensure the conditions of operation and the conditions for internationalisation;
3. to develop the ownership structure of SOEs so that companies could develop steadily and create jobs;
4. to use the proceeds from the sales of company assets in a way that would strengthen the national economy; and
5. to raise the value of state ownership through incorporations and other streamlining measures.

Generally, these development goals align well with the general scholarly findings (e.g. Megginson & Netter, 2001). It is worth noticing, however, that many of these arguments emphasised the development of the SOEs' competitiveness. SOEs wanted to be put at the same level as private companies, which meant removing both obligations and privileges. In principle, the business had to be profitable, and SOEs had to be guaranteed the same opportunities as private companies. In the 2000s, the practices of SOEs had to coincide with the rules of the Helsinki Stock Exchange.[34]

For politicians, SOEs were often dangerous. At the beginning of the 21st century, ownership policy was marked by the discussion on failures and blame. The partial privatisation of the telecommunications company Sonera in November 1998 led to a disagreement between the CEO of the company and the minister responsible for state ownership, a heated public debate and ultimately to a government announcement and the creation of privatisation rules (Working Group, 1999). Only a few years later, in 2002, the state minority-owned Sonera made major investment mistakes for third-generation mobile-network licences across Europe, finding itself on the brink of bankruptcy. The public debate focused on whether the state, as the largest shareholder, should have prevented such high-risk foreign ventures. The follow-up discussion revealed that corporate governance practices were still much more fragmented than had been thought.[35]

The 2004 government decision on ownership policy emphasised the *effective* separation of SOEs' ownership and regulation within the state administration. This separation happened because there was, first, a debate on the centralisation of the ownership function and, second, a need to be clear about the state owner's interest in each company. In 2007, The State Shareholding and Ownership Act (1368/2007) further specified the division of labour between the government and the parliament. This act was seen as an instrument in the final separation of the ownership function from regulatory and policy responsibilities.[36] Marked-based SOEs were transferred to the new corporate-governance unit set up under the Prime Minister's Office (in total, 11 listed and 26 unlisted companies). Special-assignment companies, whose ownership was not based on investor interests, were left to the branch ministries. Such companies included, for example, the public broadcasting company Yleisradio and the alcohol monopoly Alko. In October 2008, the government transferred some non-strategic minority holdings to the state-owned company Solidium's portfolio.[37] The idea was that government holdings with investor interests would be placed outside the reach of political decision-making. However, in September 2016, Solidium was declared to be 'a Finnish anchor owner'.[38]

In 2016, the government once again adopted a more active stance on ownership policy, the real impact of which has yet to be assessed. The government platform again saw SOEs and their balance sheets as tools to actively reform society.[39] According to Prime Minister Juha Sipilä, 'The use of capital must be intensified, and the current ownership must be activated. This is to be done by putting the equity balance to work'.[40] The development company Vake was founded not only to sell state property but also to use the sales revenue to finance new businesses.[41] In addition to previous ownership interests (profit-seeking, strategic, and natural monopolies and special assignments), the new potential interests were *creating new businesses* and *defending Finnish ownership*,[42] criteria reminiscent of the 20th century SOEs.

SOEs and their corporate governance structures have changed to meet the needs of the times. However, in the public debate, even former state-owned companies are associated with specific social expectations. Over the 1990s, the state abandoned many of the major industrial companies that originally had a clear reason for existence but had become ordinary businesses without a direct link to government interests. While in the 1980s, SOEs were discussed from a resource perspective, since the 1990s, the debate has been dominated by management-related themes. The most discussed topic in the 2000s was management incentive systems, along with the occasional references to the special social responsibility of state-owned companies – for example, in 2015, SOEs' aggressive tax planning was debated in the Finnish public sphere.

According to Tuovinen-Thuesen et al. (2019), during the 2007–2016 period, the goal of ownership policy was to develop the SOEs' operations and shareholder value. According to them, the state succeeded. Although the share of state-owned companies decreased in employment (from 6.5% to 3.1%) and GDP (from 8.5% to 3.5%), there were no other noticeable differences in the companies' profitability and income compared to private companies.

Between 1980 and 2008, the state received a total of EUR 16 billion of net revenue from privatisations, while the position of state-owned companies in the economy declined markedly. However, if we look at the change in the value of the share capital from the early 1970s to the end of the 2000s, we find that equity capital started to grow rapidly in the early 1990s. At the same time, the ownership focus shifted from manufacturing to other sectors, such as finance, transport and energy. The annual dividend income received by the state also increased. As early as the beginning of the 1990s, dividend income rose to EUR 100 million, rising further to over EUR 800 million in 2000. In 2007, dividend income was already over EUR 1.6 billion. Half of the dividends came from SOEs' subsidiaries and associates (Junka, 2010, p. 16).[43]

Today, the number of stated-owned companies compared to 50 years ago has increased, especially through incorporations. New companies have also been set up for tasks that would have previously been handled within the agency organisation.[44] Indeed, whereas formerly SOEs were often large industrial conglomerates, today many SOEs are smaller and more specialised. In the 2010s, the Finnish state also held a small number of very large multinational companies, such as the power company Fortum and the fuel company Neste, with the grounds for ownership being linked to strategic interests. Despite this justification, Fortum was able to sell its electricity grid to international investors in 2013.

Also, when it comes to strategically important companies, the state has increasingly become a minority owner. The ownership amount that suffices to meet the 'strategic need' has fallen. Traditionally, the state-owned holding limits (the minimum level of state ownership in a company) were 100 or 50.1 per cent, depending on the company's strategic weight, and a new limit of 33.4 per cent was introduced in 2016. The justification for this was that by reducing government ownership in specific companies, 'better opportunities are available to exploit the company balance sheet to create new growth and develop the company'.[45] Such proportion of shares was considered enough to allow the state to exercise its veto if, for example, the company's articles of association needed to be amended.

Next, we argue that the Finnish state continues to pursue its industrial policy by promoting the development of its preferred industries – for example, through its R&D policy.

Government investment in innovation policy

The decisions to reform the state administration using NPM doctrines were based on the analyses of structural changes and were made in the context of the changing economic base. In 1979, the SDP leader Sorsa clarified his thoughts on the development of the state administration and its connection to the investments in the private sector: 'To make room for these measures [finance investments in the private sector], we have to stop the growth of the public sector. (…) Tight budget policy must be directed especially to administration'.[46] In Sorsa's view, the salvaged resources were to be reallocated to the private industry (R&D).

Although the SDP publicly referenced only the public administration, the discussed reforms were clearly intended for the public sector as a whole.

The new policy regarding investments in R&D was in harmony with the predominant ideas in the OECD. The question of ongoing structural change was debated in the Technical Cooperation Committee (TECO), which was responsible for the administrative initiatives. One aspect of the discussions in the TECO meetings during the 1970s was the question of how to deal with the ongoing shift to the post-industrial era and how civil servants could manage the change.[47] TECO regarded the growth of the public sector as a hazard to the efficient allocation of resources and to the functioning of democracy.[48] The instruments that TECO recommended were privatisation, market-type mechanisms and resource allocation by centralising the power over public resources.[49] The new policy mix included public investments in R&D and, at the same time, demanded measures to decrease the size of the public sector, which were difficult to undertake without better control over public resources.

In Finland, the most disputed administrative reform was related to *decentralisation*, which was popular from the 1960s to the early 1980s and was understood as a way of strengthening local democracy.[50] However, the problem with the new industrial policy was that it required centralising the power over public resources. To start with, cutting the expenditures of the municipalities in the existing system was difficult because the municipalities were guaranteed to receive back a percentage of their expenditure from the state government (Harisalo et al., 1992, pp. 67–68).[51] Eventually, the dispute led to political battles regarding the meaning of the concept of 'decentralisation'. The new state subsidy law, which put the power over resources firmly in the hands of the state (and the Ministry of Finance) and offered the municipalities a lump sum instead of a percentage of expenditures, was put into effect in 1993 (Law 688/1992). The impetus behind the reform was the severe recession Finland faced in 1991.

At the height of this crisis of the recession, unemployment rose to almost 20 per cent (from less than 6% in the 1980s). The new crisis brought back the old answers: the government, led by the Agrarian-Centre Party, wanted to give priority to public R&D and venture capital (Ministry of Finance, 1992, pp. 69–72). The conclusion was that Finland had not done enough to adapt to the post-industrial era during the 1980s and was paying the price for this indolence. The government stated that a state-subsidy reform was to be part of the austerity measures, though, at the same time, the government was ready to provide public investment for the R&D sector and for venture capital. Only through pain (cuts in welfare services) would there be gain.[52]

One aspect of centralising the power over public resources by shifting from the municipalities to the central government was the need to cut the public resources allocated to welfare services, for which the municipalities were responsible, in order to form the basis for the new industrial policy. In 1993, state subsidies formed 46 per cent of the municipalities' revenues, yet in 2002 this share was down to only 13 per cent. In total, during the 1990s the state cut the budget by a total of 57 billion marks (approximately 18 billion euros, 10% of the GNP) (Tiihonen, 2000, pp. 4, 60–64, 80).

The only parts of the budget that were not cut had to do with public R&D and public venture capital (Figure 2). The fastest growth occurred in the late 1990s (Luhtala, 2010). For example, the resources of the Development Centre of Innovation and Technology (Tekes) grew rapidly (Lemola, 2002, p. 482; also, Reinboth, 1995, p. 4). According to Prime Minister

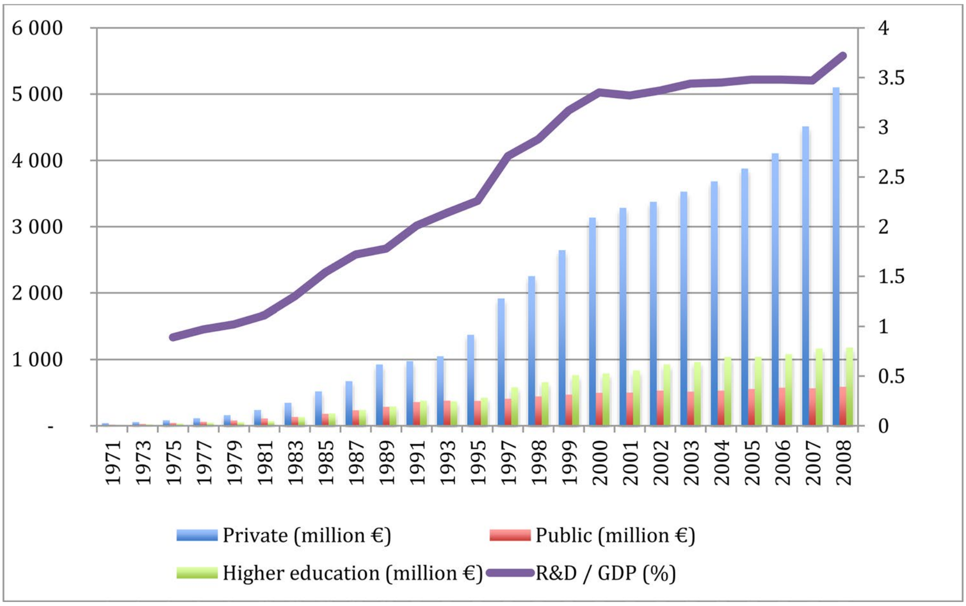

Figure 2. Investments in research and development in Finland, 1971–2008.
Source: Statistics Finland: Research and development and Government R&D funding in the state budget. Retrieved from https://www.stat.fi/til/ttt_en.html [23.9.2020].

Esko Aho, Finland needed serious rethinking and 'neo-industrialisation'.[53] The government set the objective of increasing R&D investment to 2.7 per cent of the GDP, which meant an annual increase in R&D expenditures of 7–9 per cent.[54] Any money extracted from privatisations was supposed to go to new investments rather than public services (Working Group, 1993).

During the 1990s the economists stated that there was a strong link between healthy domestic financial markets on the one hand and economic growth and innovation on the other (Vartia & Ylä-Anttila, 2005, p. 236). Also, Michael Porter's (1990) idea about a local 'cluster' of producers and users was an important aspect of the Finnish model, according to which 'nations' and not just individual companies competed in the international market (Kantola, 2010, pp. 110–113).

The lack of high-risk capital was one of the recurring economic themes in the intra-party debates of 1980s (Koivisto, 1993).[55] In order to start its public venture capital investments, the government passed a new law in 1991, which ordered the Finnish Innovation Fund (SITRA, established in 1967) to focus on high-risk investments. SITRA's funds consisted of the capital (400 million marks/95 million euros) it had acquired since the 1970s and of the Nokia stocks (100 million marks/24 million euros), which the government donated to SITRA in 1992. The state had received these shares as payment when it sold Televa to Nokia in 1981. The value of the donated shares increased 40-fold in a few years. As a result, 70 per cent of the venture capital investments in the early 1990s came from public sources. The government also founded other organisations to channel high-risk public investments, including the Finnish Industrial Investment, Finnvera and the Finnish Industrial Bail Fund (Särkikoski, 2007, pp. 246–254, 273–279, 290–294, 301).

We are not suggesting that R&D was solely a public affair. Instead, the original idea was to influence private companies so that they would start investing in R&D. As illustrated in

Figure 2, this attempt was successful: private companies started to invest more and more in R&D. However, it is impossible to say whether they would have done so regardless. In 2008, Finland's R&D investments were second (3.5% of GDP) in the global ranking (Pelkonen, 2008, pp. 60–61). Various committees argued that the state should have invested significantly more (e.g. TIKAS Group, 1995).[56]

Conclusion

Since achieving nationhood in 1917, the Finnish state acquired many assets with different ownership backgrounds. Thus, the state both created the institutional environment and acted on the market itself. This was the standard mode of operation in most industrial countries for the best part of the 20th century. This paper began by taking up the economic recession of the 1970s, which marked the beginning of the search for new alternatives in economic policies.

In Finland, the search for the new economic policies after the 1970s was based on seeking political consensus in order to avoid Thatcherist confrontation. The consensus was built on the assumption that Finland was a small country in the midst of global economic fluctuations, a situation that required political pragmatism without ideological commitments. Second, the consensus aimed to steer the nation through the ongoing structural change. The recession was widely interpreted as a structural change, whereby the overproduction of the industrial sector was forcing nations to adapt to the coming post-industrial age. According to the dominant interpretation at the time, the best option was to invest in new technology, such as electronics, computers and telematics. This required a new kind of state intervention and open-mindedness towards market competition.

The result was that, in Finland, the stance on public ownership moved slightly to the right in the political spectrum, but state intervention was not completely abandoned. The steering power of the state was reformed to be subtler. The chain of events we have analysed here had two effects. First, the SOE ownership policy was gradually reformed in favour of greater SOE autonomy from the government to enable facing the opening global markets. Corporate structures were to be adjusted to be consistent with international practices and standards. It was believed that it was important to have a coherent understanding of international business and the related risks. Second, public resources were allocated from the traditional welfare state towards post-industrial nation building with the help of new public-management doctrines. In this process, public resources were invested in venture capital and public R&D to encourage the private sector to increase its investment in innovation. Finland may not be a completely exceptional case, but its peripheral identity resulted in a peculiar situation due to the pressure of global markets.

Consensus politics with political compromises bypassed and downplayed possible resistance. Elsewhere, for example in the UK or New Zealand, straightforward privatisations engendered protest movements, which hindered the reforms. In Finland, small steps in implementing the reforms made the resistance more difficult.

Even though the Finnish case was built on consensus politics, the neoliberal wave had its effects. The antagonism towards state ownership came from several sources. First, the ownership structure of state-owned companies was openly criticised and, for many, the ownership in itself was problematic. Second, in 1979 the state project to establish an electronics corporation had just failed spectacularly, and in this context, the public support for private companies was the only way to move forward with the post-industrial structural change. Still, the system remained relatively stable as long as the market structure remained protective. The defensive position towards state intervention came from the national-historical narrative of a small nation in the periphery without capital. Public investments in innovation policy were interpreted as inevitable because big international investors did not have enough information about such a small peripheral country, leading to a shortage of investments, especially in high-risk cases. Market forces seemed to malfunction in this regard. A lack of capital became a persistent theme in national politics, a theme that was still evident in the case of establishing the state-owned high-risk investment agency Vake in 2016.

A particularly important factor was that since the 1980s, when it was directly stated that corporate governance had to comply with international business standards, this effectively referred to the introduction of Anglo-Saxon structures. By the 1990s, 'international standards and practices' were self-evident as development guidelines. Extending the companies' ownership base and attracting foreign investors was considered important. For this reason, it was often said that companies must follow certain models in order to be a credible investment targets in the eyes of international investors. The reforms were also aimed at improving the efficiency and effectiveness in achieving the commercial and/or non-commercial targets and improving the transparency and accountability of SOEs.

Ideological or intellectual forces also affected the reforms as state ownership was, in many cases, seen as an unnecessary barrier to the business environment, with efficiency ensuring competition. The institutional frameworks of international agreements also pushed Finland in the direction where competition barriers were no longer acceptable. The state almost abandoned its role as the owner, choosing, instead, to focus on regulating the market. When the state did continue to own SOEs, ownership was differentiated from regulation.

Private companies were active lobbyists for R&D and high-risk capital investments. For example, in the 1980s, Nokia stated many times that Finnish companies were unable to access enough high-risk capital and that companies needed more well-educated employees and more resources for R&D (Häikiö, 2001b, pp. 161, 176–178). Private companies also benefitted from public investments (OECD, 2009, pp. 86). It is safe to conclude that Nokia, which became a global leader in the mobile phone markets in the 1990s, was one of the success stories of Finland's innovation policy, even though the company later experienced serious problems after failing in the smartphone market. It is no wonder that in the Finnish discussion, the overall results of public investment in R&D have been the subject of a furious public debate. At the same time, it is hard to establish an unequivocal relation between R&D investments and profit-earning capacity, to individualise effective causes and to rule out alternative scenarios (Berghall et al., 2006, pp. 28–34).

The Finnish case shows how strongly the international influence was transmitted to the national context. Although Finnish corporate governance and corporate structures had their own characteristics, Finnish SOEs followed Western principles and recommendations. In many cases, the state abandoned the ownership of SOEs. In the cases where state ownership was maintained, the state's ability to pursue policies using the SOEs was weakened. However, the old SOE policies are still visible from time to time. New ways of influencing business can also include other routes than the (re-)regulation that emerged when old public monopolies were opened up in the 1980s and 1990s. In this article, we have dealt with innovation policy. Future research should also consider other means by which governments support domestic industries. We know, for example, that government agencies may have favoured domestic production in their purchasing policies in the 1970s and 1980s, giving domestic industry room to develop (e.g. Industrial Committee's Report 1975:47, p. 105; Ministry of Finance, 1993, p. 27). However, the extent or significance of such support has not yet been analysed.

Notes

1. Prime Minister's Office. (29.12.2015). *Valtion kehitysyhtiö Vake Oy:n toimintaohje*. Retrieved from https://valtioneuvosto.fi/documents/10616/1266558/Toimiohje+Valtion+kehitysyhtio+Vake+Oy.pdf/91664156-a8f2-4bb7-8e1c-f1f8a9bb0cfb/Toimiohje+Valtion+kehitysyhtio+Vake+Oy.pdf.pdf
2. Rapid economic growth took place from the late 1940s to the 1970s. This period has various names depending on the country: *Les Trente Glorieuses* (France), *Wirtschafthswunder* (West-Germany, Austria), *Il Miracolo Economico* (Italy), etc.
3. For more on *ownership policy*, *ownership steering* and *corporate governance* in the Finnish context, see the Finnish National Audit Office (2013, p. 17).
4. 'Liikelaitos' in Finnish.
5. Ministry of Trade and Industry. (17.6.1974). Memo. (valtionyhtiöt 1955–1977, HC2). FNA.
6. 'Hallintoneuvosto' in Finnish.
7. Ministry of Trade and Industry. (17.6.1974). Memo. (valtionyhtiöt 1955–1977, HC2). FNA.
8. Two parties, the Social Democratic Party and the Agrarian-Centre Party, dominated Finnish politics in the 1970s.
9. In a population of 4.7 million. Statistics Finland, Industrial Statistics XVIII (1972–1978).
10. The term 'recovery' ('elvytys') appeared in the Finnish economic discussions the 1930s, meaning that the state would rely on loan money to use public resources to tackle the recession (Heikkinen, 2009).
11. The government programme for *Sorsa II*: *Talous- ja työllisyyspolitiikka* [Economic and employment policy]; see also the memo of the Social Democratic Party Council of 24.11.1977, pp. 40–45. The Labour Archive, Helsinki.
12. Teemu Hiltunen's speech (12.10.1977). The Archive of the Ministry of Finance, Budget Department (Uaa:1). FNA.
13. Kalevi Sorsa in a television interview (28.8.1979). The Finnish Business and Policy Forum Archive (EVA) (file 86). FNA.
14. Regarding the history of the information age and the post-industrial society, see, e.g., Webster (1995, pp. 11, 30–32), Rothwell and Zegveld (1981, p. 15), Bell (1974), Toffler (1970) and Johnson (1971).
15. Teemu Hiltunen's speech (12.10.1977). The Archive of the Ministry of Finance, Budget Department (Uaa:1). FNA.
16. EVA meeting memo, Appendix C (25.10.1979); EVA meeting memo, Appendix A (31.5.1979). The Finnish Business and Policy Forum Archive (File 5). FNA.
17. This was already noticed in the mid-1970s. In the words of the Ministry of Finance, 'The application of computer/telecommunications and related systems (for instance, video-technology, cable TV), would create a new working-tool for the service sector of an economy. This comprises educational, legal, medical and other professions and a wide range of public services such as post and newspaper delivery, law enforcement and public health services now often the subject of public concern' (Pietarinen et al., 1975, Appendix 1, p. 12).
18. Also 'Teknologiakomitea vaatii 1980-luvulta: tutkimus kaksinkertaiseksi' [newspaper article] (16.12.1980). *Helsingin Sanomat*.
19. Newspaper articles: Kairamo, K. (29.9.1981). 'Elektroniikkatuotannolla on teollisuudessa keskeinen rooli'. *Helsingin Sanomat* (21.5.1982). 'Yrityksiin 55 000 tutkijaa lisää tällä vuosikymmenellä'. *Helsingin Sanomat*.

20. The specific tools used in the NPM reforms varied from country to country, including, for example, management by objectives, quality management with benchmarking, decentralisation, outsourcing, separating the purchaser and provider, etc.
21. Valtionhallinnon uudistamiskomitea. (28.3.1975). *Memo*. Committee archive. FNA.
22. Hjerppe, R. (1982). Liikelaitos valtion organisaatiomuotona. *Hallinto, 1982*(9–10), 14–24.
23. E.g. Archive of the Public Corporation Committee (1983–1985). *Statements by public corporations.* (Files 2, 5 & 9). Archive of the Council of the State, Helsinki.
24. The shares were sold several times in the following years. Government's decision in principle, 26.5.2000.
25. Ministry of Trade and Industry handouts 8/1998: 'Yksityisten palvelujen kehittäminen'. (KTM, Ucd:6). FNA.
26. Archive of the Industrial Department of the Ministry of Trade and Industry. (1970–1987). *State-owned enterprises* (Hc:4). FNA.
27. Workgroup (22.8.1991). *Valtionyhtiöiden yksityistämistyöryhmän raportti* [report]. (Ucc:34). FNA.
28. This principle was written in, e.g., Government's decision in principle, 23.6.1994.
29. The Social Democrats did not want to restrict the activities of state-owned companies and opposed the privatisation demands made by the bourgeois parties (Marttila, 2016, p. 127).
30. Citizens were encouraged to participate in the stock market. Also Workgroup (22.8.1991). Valtionyhtiöiden yksityistämistyöryhmän raportti [report]. (Ucc:34). FNA, pp. 8, 15.
31. Workgroup (22.8.1991). *Valtionyhtiöiden yksityistämistyöryhmän raportti* [report]. (Ucc: 34). FNA.
32. E.g. Hilkka Kunnas (10.7.1981). 'Kaikki omistavat – kukaan ei vastaa: Mikä se on?' *Suomen Kuvalehti* (28/1981). Retrieved from digi.kansalliskirjasto.fi
33. These ownership interests were industrialisation, social causes and profit-seeking. Ownership was influenced by the extent to which the company had a strategic interest (e.g. Working Group, 1989).
34. Government's decision in principle, 23.6.1994; Decision of the Cabinet Committee on Economic Policy, 17.4.2004.
35. Minister Pekkarinen's foreword in Government Ownership Steering Department (2002).
36. Government Ownership Steering Department (2007, 2008).
37. These were Kemira (chemicals), Metso (engineering works), Outokumpu (mining), Rautaruukki (steel), Sampo (banking), Sponda (real estates), Stora Enso (forest industry) and TeliaSonera (telecommunications).
38. Government's Ownership Steering Department (2016, p. 9).
39. E.g. Cabinet Committee on Economic Policy, 12.5.2016; Government's decision in principle 13.5.2016.
40. Government Ownership Steering Department (2015).
41. Government Ownership Steering Department (2016, p. 4).
42. Tuovinen-Thuesen et al., 2019; The policy of the Cabinet Committee on Economic Policy 12.5.2016.
43. In 2017, the SOEs paid EUR 1 845 million in dividends: Solidium EUR 585 million, special task companies 146 million, unlisted SOEs 444 million and listed SOEs 670 million. Retrieved from https://vnk.fi/en/ownership-changes-and-revenue (14 September 2020).
44. Between 1950 and 1980, there were 20–25 state-owned companies, in the 1980s and 1990s the number rose to over 30 and at the beginning of 2010, the total number of state-owned companies was 57. The numbers are based on the government's annual financial reports, 1917–2010.
45. Government Ownership Steering Department (2015, 2016, p. 4).
46. Social Democratic Party council meeting 9.3.1977, p. 14. The Labour Archive, Helsinki; see also the Government programme for the recovery government, *Economic and employment policy.*
47. OECD/TECO, 22. Oct. 1976 TECO (76)12, *Technical Cooperation Committee (TECO) proposed joint activity in the field of public management.* (Hd20). FNA. See also OECD/TECO, Paris, 27 Jun. 1980 C(80)115, *Programme of Work of the Organisation for 1981: General lines of the secretary-generals's proposals*. Archive of the Ministry of Finance (Hd22). FNA.

48. OECD/TECO, Paris, Mar. 1979, CT/PUMA/500, *Cooperative action programme. Joint activity on public management improvement. Seminar for controlling public expenditure*, Archive of the Ministry of Finance (Hd22). FNA.
49. OECD/TECO, Paris, 15 Apr. 1980, TECO(80)7, *Technical Cooperation Committee. Outline of the Cooperative Action Programme for 1981*, Archive of the Ministry of Finance (Hd22), FNA; OECD/TECO, Paris, 25 Aug. 1980, CT/PUMA(80)1, *Co-operation Programme. Steering Committee of the Joint Activity on Public Management Improvement*, 2–3, Archive of the Ministry of Finance (Hd22), FNA; OECD/TECO, 15.4.1980, TECO(80)7 *Technical Cooperation Committee. Outline of the Cooperative Action Programme for 1981*. Archive of the Ministry of Finance (Hd22), FNA; OECD/TECO, 25.8.1980, CT/PUMA(80)1 *Cooperative Programme, Steering Committee of the joint activity on public management improvement*, p. 2–3. Archive of the Ministry of Finance (Hd22). FNA; OECD/TECO,6.3.1979 *Cooperative Action Programme. Joint activity on public management: policies and institutions. Synthesis report on the symposium managing change in the public administration*. Archive of the Ministry of Finance (Hd21). FNA.
50. Committee Report (1978:22, pp. 3–10); Committee Report (1981:54, pp. 1–2); Committee Report (1982:22, pp. 1–6) and Committee Report (1983:3, pp. 1–3).
51. The most critical part was that the funds the state gave to the municipalities were paid according to the calculated percentage of their actual expenditure. This hindered any attempt to cut the expenditures in the core functions of the welfare state, which the municipalities were in charge of.
52. Newspaper article. (21.8.1992) 'Hallitus kehuu 5,8 miljardin lisäsäästöjä ja lupaa kansalle 'Kipua ja särkyä" [The government praises 5.8 billion cuts and promises 'pain and aches' for the people]. *Helsingin Sanomat.*
53. Esko Aho (6.10.1993) 'Holhousvaltiosta yhteisvastuun ja yrittäjyyden yhteiskuntaa' [From tutelary state to a society of entrepreneurship and joint responsibility]. (Dc 1987–1995). Archive of the Agrarian-Centre Party, Helsinki.
54. Workgroup (16.8.1991). Memo: Teollisuuden rakenteen kehittäminen [Developing industrial structure]. (Ucc:34). FNA.
55. See Workgroup on industrial policy. (22.10.1982). *Meeting of the Social Democratic Party Council, Appendix 443.* (Ca 94). The Labour Archive, Helsinki.
56. In the 2010s, R&D investment fell to less than 3% of the GDP.

Acknowledgements

This article responds to *Business History*'s call for submissions for a special issue on the government-business relations. We would like to thank our colleagues who provided useful feedback at the development workshop in Sterling, June 2018. We also thank the editors of *Business History* and our anonymous reviewers.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Pasi Nevalainen conducted the research for this paper at the Department of History and Ethnology at the University of Jyväskylä and later at the Aalto University as an Academy of Finland Research Fellow (decision no. 333757).

Ville Yliaska has conducted this research at the University of Lapland, and as a Research Fellow of Kone Foundation.

ORCID

Pasi Nevalainen http://orcid.org/https://doi.org/0000-0003-1172-9537

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