ECONCHANGE

State's changing role in regard to the economy in turbulent times

Timo Harjuniemi, Julia Jousilahti, Juha Leppänen, Johannes Nuutinen,
Taru Saarinen, Willliam Hynes, Alan Kirman, Frans Lammersen, Jussi Ahokas,
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State’s changing role in regard to the economy in turbulent times

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Abstract

Economic systems around the world are facing pressure to change from multiple directions. The COVID-19 pandemic as well as Russia's invasion of Ukraine and its aftermath have required states’ active involvement to ensure the sustainability of their economies and societies. In addition to short-term shocks, the economy is facing a number of long-term challenges:, the need to tackle climate change and rapidly transition to a fossil-free energy system, the strengthening of geopolitical blocs and tensions, an ageing population and the effects of technological development on employment. These changes challenge the established premises of fiscal, trade, labour, industrial and innovation policies in Finland and call for the state to take a more active orchestration role in the economy.

This more active role in economic policy requires new capabilities from the state. The state must be able to maintain an up-to-date overall understanding of the complex and constantly changing operational environment, steer societal resources towards implementing politically-decided strategic goals, and more strongly coordinate different actors and sectors of society amidst the changing economy. Strengthening these capabilities requires adequate resources in public administration and training for civil servants.

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Keywords research, research activities, economic policy, fiscal policy, labour policy, industrial policy, geopolitics, climate change, public administration

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Valtion muuttuva rooli taloudessa murrosten aikakaudella

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Tekijä/t	Timo Harjuniemi, Julia Jousilahti, Juha Leppänen, Johannes Nuutinen, Taru Saarinen, Willliam Hynes, Alan Kirman, Frans Lammersen, Jussi Ahokas, Paavo Järvensivu

Kieli	Englanti	**Sivumäärä**	80

Tiivistelmä

Talousjärjestelmiin kohdistuu tällä hetkellä monenlaisia paineita kaikkialla maailmassa. Koronaviruspandemia ja Venäjän hyökkäyssota Ukrainassa seurauksineen ovat edellyttäneet valtioilta aktiivisia toimia talouden ja yhteiskuntien toimitakyvyn turvaamiseksi. Lyhyen aikavälin sokkien lisäksi talouteen kohdistuu useita pitkän aikavälin paineita, kuten tarve torjua ilmastonmuutosta ja luontokatoa sekä siirtyä nopeasti fossiilittomaan energiajärjestelmään, geopoliittisten blokkien ja jännitteiden vahvistuminen, väestön ikääntyminen ja uusien teknologioiden vaikutus työllisyyteen, jotka edellyttävät valtiolta entistä aktiivisempaa roolia taloudessa. Toimintaympäristön muutokset haastavat Suomen talouspolitiikan totuttuja lähtökohtia finanssi-, kauppa-, työmarkkina-, teollisuus- ja innovaatiopolitiikassa.

Entistä aktiivisempi talouspoliittinen rooli edellyttää valtiolta uusia kyvykkyyksiä. Oleellisia ovat valtion kyky muodostaa ajankohtainen kokonaiskuva talouden toimintaympäristön muutoksista, yhteiskunnan resurssien suuntaaminen poliittisesti päätettyjen, strategisten tavoitteiden toimeenpanoon sekä eri politiikkalohkojen sekä yhteiskunnan sektoreiden vahvempi koordinaatio talouden murroksessa. Näiden kyvykkyyksien vahvistaminen edellyttää riittäviä resursseja hallintoon ja virkahenkilöstön kouluttamista.

Klausuuli

Tämä julkaisu on toteutettu osana valtioneuvoston selvitys- ja tutkimussuunnitelman toimeenpanoa. (tietokayttoon.fi) Julkaisun sisällöstä vastaavat tiedon tuottajat, eikä tekstisisältö välttämättä edusta valtioneuvoston näkemystä.

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Referat

De ekonomiska systemen runt om i världen är för tillfället utsatta för förändringstryck från flera olika håll. Coronapandemin och Rysslands invasion av Ukraina, samt dess följder, har krävt att staterna aktivt säkerställer hållbarheten i sina ekonomier och samhällen. Utöver kortsiktiga chocker, står ekonomin inför ett antal långsiktiga påfrestningar, som behovet av att ta itu med klimatförändringen och förlusten av biologisk mångfald, den snabba övergången till ett fossilfritt energisystem, förstärkningen av geopolitiska block och spänningar, den åldrande befolkningen och den tekniska utvecklingens effekter på sysselsättningen. Dessa förändringar utmanar de etablerade förutsättningarna för skatte-, handels-, arbetsmarknads-, industri- och innovationspolitiken i Finland och kräver att staten tar en mer aktiv roll i ekonomin.

En mer aktiv roll i den ekonomiska politiken kräver nya förmågor av staten. Centrala förmågor som behövs omfattar att kunna upprätthålla en uppdaterad övergripande förståelse av den komplexa och ständigt föränderliga verksamhetsmiljön, att kunna styra samhällets resurser för att genomföra politiskt beslutade strategiska mål, samt en starkare samordning av olika aktörer och sektorer i samhället i en föränderlig ekonomi. För att stärka dessa förmågor krävs tillräckliga resurser inom den offentliga förvaltningen och utbildning av tjänstemän.

Klausul	Den här publikation är en del i genomförandet av statsrådets utrednings- och forskningsplan. (tietokayttoon.fi) De som producerar informationen ansvarar för innehållet i publikationen. Textinnehållet återspeglar inte nödvändigtvis statsrådets ståndpunkt

Nyckelord	forskning, forskningsverksamhet, ekonomisk politik, finanspolitik, arbetsmarknadspolitik, industripolitik, geopolitik, klimatförändring, offentlig förvaltning

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Contents

1 Introduction

In February 2023, the Financial Times reported that EU member states had won approval for €672bn in state subsidies under the European Union's temporary state aid framework (Fleming, Hancock and Espinoza, 2023). Germany, often regarded as a European bastion of fiscal discipline, has notified no less than 53 percent of the whole sum. This equates to roughly 9 per cent of the annual gross domestic product of the biggest EU member state.

Such numbers imply that the state apparatus has, at least temporarily, taken a stronger leadership role in steering economic development in advanced industrial nations. The Financial Crisis of 2008, the COVID-19 pandemic as well as the energy crisis brought on by the Russian attack on Ukraine in February 2022 have seen the European Union rapidly developing a novel approach to state subsidies and economic policy overall. The EU - an economic bloc built on free trade and a restrained attitude towards state interference in the economy - has decided to put many of its core economic principles on hold. Due to the economic fallout from the COVID-19 pandemic and the Ukraine war, European fiscal rules are suspended until the end of 2023. The fact that the European Union has taken steps towards a common fiscal policy - in the form of common debt via the pandemic recovery fund - signals a shift in how the EU and its dominant member states, such as Germany, assess the future of European economic policy (Schneider, 2023).

At the same time, the US is aiming to generate green energy investments through hundreds of billions of dollars in state subsidies (The White House, 2022a), raising concerns about the deterioration of global trade and free market principles. The renaissance of industrial policy in the US is forcing Europe to reconsider its stance on trade and industrial policy too.

Many believe that such deviations from free-trade principles would soon make room for a return to the status quo where a set of predictable rules regarding, for example, trade and the level of public debt and deficits would dictate the level of state interference in economic affairs. This might not be true. The early part of the 2020's has been marked by overlapping crises, based on which the current era has been described as "permacrisis" or "polycrisis" (Whiting and Park, 2023), an extended period of instability and insecurity, as popularised by the economic historian Adam Tooze. This era of multiple crises has also affected the stability of the economy and state-market relations in developed capitalist nations. The COVID-19 pandemic and the Russian invasion of Ukrainian territory required active intervention by states to maintain critical economic activity. While these acute crises have required states to step in, it is possible that the demands for active state-led steering of the economy are strengthened by longer-term global pressures too.

The focus of this report is the relationship between the global change pressures and the Finnish economy. For the economy of Finland, a small, globalised, geographically remotely located economy with a large export sector, major global developments are, potentially, enormous in impact. Historically, one of the key factors of the Finnish success story has been the ability to tap into global supply chains and reap the benefits of globalisation. If the global economic environment, however, takes a more inward turn where the interests of great powers or political blocks dictate economic relations, Finland is in danger of becoming an outsider in the great geoeconomic game. It is therefore necessary that Finnish decision makers are aware of the implications of these ruptures in the economic environment.

At the same time, Finland seems reasonably well placed to face this challenge. The Nordic welfare model has proven to be relatively resilient and capable of buffering large scale economic shocks and damping the internal upheaval that they cause. Finnish society, among other Nordic countries, is uniquely positioned for an active and transformative role of the state in steering the economy: low inequality, high levels of life satisfaction, and high trust in government are key assets for the state to leverage for when taking a more active role of the state in steering their economy towards a sustainable, inclusive and resilient future.

1.1 Aim and structure of the study

This report is an analysis on the various global change pressures and their effects on the Finnish economy, state, and society. The aim of this report is to provide the reader with an understanding on how the turbulence in the economic landscape affects the premises of Finnish economic policy-making and the role of the state in steering the economy, and what are the possible ways forward for Finland. The study aims to shed light on the following questions:

- What kind of global pressures for change can be seen to affect the economic systems in developed countries?
- Are there changes in the fundamentals of the economy, or global challenges ahead, that would favour a greater role of the public sector and more intervention in markets than before?
- If yes, is the role of the public sector in the economy changing more permanently or is it rather a temporary phenomenon?

- How does the international debate on the growing role of the state relate to the Nordic model and Finland?
- What prerequisites do states have to take more responsibility for steering the economy? What kind of skills and capabilities would a growing role require and how could they be developed?

The structure of the report is as follows: First, we present the context, aim and structure of the study (chapter 1). To address a question as vast and complex as "the future of economic systems" is methodologically challenging. We aim to approach the question as meaningfully as possible by combining different methodological and empirical approaches, such as literature reviews and a Delphi survey.

Second, we briefly discuss the recent developments in the relationship between the state and the markets in advanced capitalist societies, based on existing literature (chapter 2.) The post-Trump, post-Brexit and post-Covid era has seen multiple analyses regarding the comeback of the big state (Gerbaudo, 2021). Granted, there is a kernel of truth in this framing: in developed economies, nation states have stepped up to support economic activity and, to an extent, have adopted crisis management policies that have gone against free-trade, globalisation and other forms of economic liberalism.

However, as we show in chapter 2, the state has never been away, and it is debatable whether there has been a "small state" predating the comeback-making big state. We argue that instead of resorting to dichotomy-building and characterization regarding simply the size of the state, it is more useful to look at variations in state-market relations as well as the various elements of state involvement in the economy.

Third, a research review is conducted in chapter 3 to provide an overview of the interlinked global change pressures and how they affect the current global macroeconomic regime. Chapter 3 is enriched with the results of the first round of a Delphi survey, a questionnaire sent to 39 Finnish economists, social scientists and other experts with the aim to understand which ones of the global change pressures are deemed most relevant for Finland. The Delphi survey is used here as an explorative method that points us towards the phenomena that merit a closer scrutiny in the Finnish context, under the broader umbrella of interdependent changes and developments in the global economy. Further information on the Delphi-survey can be found in Annex 1.

Fourth, we present an interpretation of the premises that underline economic policy in Finland as well as the basic characteristics of the Finnish economy. By premises we refer to fundamental policy ideas, goals and guidelines that are relatively widely shared among political decision-makers, other policy-making elites and even the general public. We discuss these premises in the context of fiscal, trade, labour and industrial policy in chapter 4 based on a literature review and a review of selected statistics. This is done in order to later analyse what kind of changes and decisions may be ahead in these fields amidst the changing economy due to the global pressures. Ultimately the state can steer the economy and impact its outcomes through norms and budgets in other policy domains, too, than economic policy per se. However, to be able to provide some more in-depth results on the research questions at hand, we have narrowed down the focus of this study to economic policy and the four aforementioned policy domains, which are, based on the analysis of the impacts of global change pressures (chapter 5), most affected by the turbulence in the operational environment.

Chapter 5 discusses the dynamics between the global change pressures and the premises of Finnish economic policy in the context of fiscal and monetary policy, trade policy, labour policy, and innovation and industrial policy. With this chapter we aim to show some of the questions and linked policy choices Finnish economic policy makers will likely face in the coming years amidst the changing economy. Chapter 5 is again enriched with Delphi survey results, where the respondents reflect how the change pressures affect the role of the state in Finland. Finally, in chapter 6 we reflect on what are the capabilities required from the state to successfully take a stronger role in steering the economy.

The study has been conducted by a consortium consisting of independent think tank Demos Helsinki (Julia Jousilahti, Timo Harjuniemi, Johannes Nuutinen, Taru Saarinen, and Juha Leppänen), OECD's New Approaches to Economic Challenges team (William Hynes, Alan Kirman, and Frans Lammersen) and BIOS research unit (Jussi Ahokas and Paavo Järvensivu).

2 The state and the market: a history of co-dependence and friction

Capitalist market economies are systems where state power and capabilities intertwine with private ownership of capital, the dynamism of entrepreneurship as well as the economic laws of supply and demand. Indeed, one should not think of the modern state and the market as competing powers but as co-dependent and symbiotic historic structures. This chapter starts with providing a loose framework for considering state-market relationships, and then briefly considers the historical developments in state-market dynamics in recent times.

2.1 Framework for the state-market relationship

Modern nation states are, with a few notable expectations, market economies, premised on the idea that the market mechanism should be utilised in organising economic activity. At the same time, however, markets are dependent on the various powers and collective capabilities of the state. A well-functioning market economy is based on the ability of the state to force market actors into a regulated framework, where the rule of law prevails and private ownership is guaranteed. As noted by the economic historian Karl Polanyi in his seminal book "The Great Transformation", state involvement was a precondition for the emergence of a liberal market society in the 19th century. Polanyi argued that state involvement, sometimes violent in nature, was used to root societies of their pre-capitalist characteristics and establish the economic rule of supply and demand (Polanyi, 1944).

In contemporary societies, state and market dynamics interact in various ways. The Nordic welfare state model combines a wide range of public services with a dynamic market economy. The Chinese form of "state capitalism" (Szabó and Szatmári, 2021) has combined gradual market liberal reforms with means of political interference, such as sovereign wealth funds and state-led investment. In the United States, the government has deliberately kept its distance from the private sector when it comes to the economy and economic relations despite the otherwise strong role of the state in society (Gertz and Evers, 2020).

Scholars Bastian van Apeldoorn and Naná de Graaf (2022) suggest a rough distinction between four different economic roles of the state to describe how the state interacts with markets[1]:

- Market creation: the state acts in various ways that enable markets to emerge and function. The state can, for example, create markets in areas of social life where markets have not existed before and upkeep functioning markets through securing a stable judicial framework.
- Market correction: the state can correct market outcomes and constrain market forces to advance a political or a social goal. For instance, the state can create solutions for market externalities. Addressing environmental issues through creating a market for carbon emissions is an example of such a state function. Moreover, the state can redistribute wealth via taxation, or provide citizens with public services that do not adhere to a market logic.
- Market intervention: the state uses economic policy to smooth out the business cycles in the market economy. Keynesian economic management where activist monetary and fiscal policy are used to control the aggregate demand of the economy is perhaps the most common example of an interventionist capitalist state. The last years have seen an interventionist state using its regulative and economic powers to support economic activity and livelihoods during, for example, the COVID-19 pandemic.
- Market direction: the state can use activist industrial policy to support long-term goals. Instead of leaving investment decisions to the market mechanism, the state can use its power to, for example, channel investments or steer industrial policy by establishing large-scale societal "missions" (Mazzucato, 2018).

Building on this categorisation, two useful axes of analysis can be derived that help in understanding states' involvement in the economy. First, the overall objectives of economic policy, simply put, can be looked at through a lens of the overall objective of the state: whether the state aims at altering the dynamics of the market, or aims at maintaining and balancing the markets and their functioning. Following e.g. the work of Mariana Mazzucato (2021), states taking a more explicit role of steering economic activity

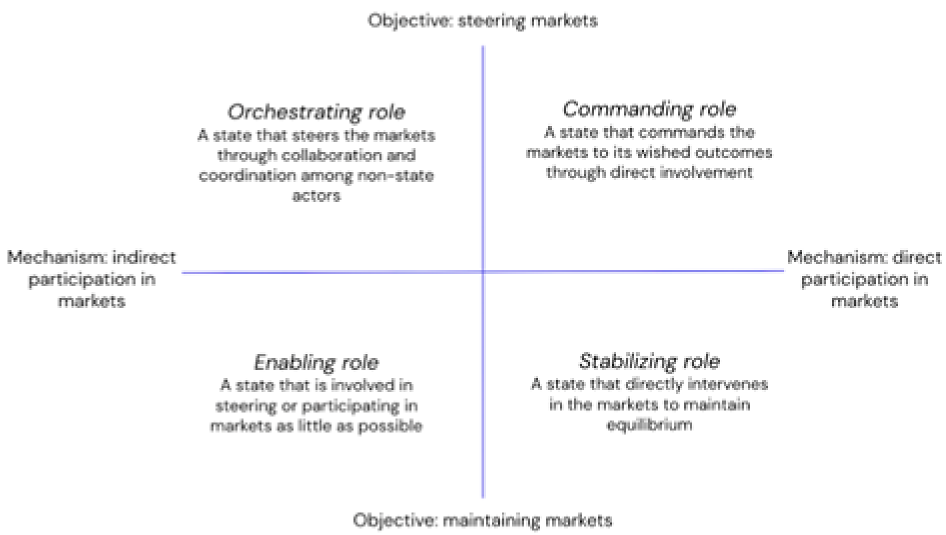
1 Throughout the report, we aim at using a fairly broad definition of markets and look at markets as systems in which supply and demand are balanced primarily through pricing. As such, the definition refers to both specifically definable markets (e.g., market for wind turbines) and broader conceptualisation (e.g., financial market or labor market).

towards a specific goal take a more active role in redefining the market based on societal objectives, while without a clear directionality of action, states tend to take the objective of fixing markets through their economic policy tools.

Second, the preferred level of participation within markets can be usefully seen as separating different types of economic policy stances. Some economic policy stances benefit from direct state participation in markets – this can take the form of e.g., state-owned companies or even price controls. On the other hand, many economic policies rely only on indirect market participation such as setting rules or creating necessary infrastructures for markets.

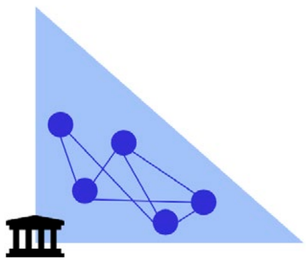
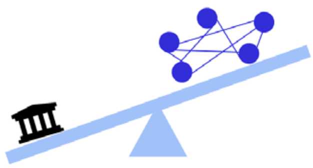
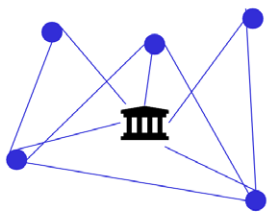
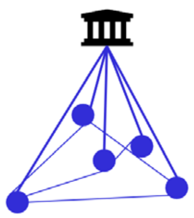
Based on the work of van Apeldoorn and Naná de Graaf, analysed through these two dimensions, we suggest a loose framework for capturing some key aspects of the state's role in markets through defining four simultaneously coexisting functions that a state takes in relation to economies.

Figure 1. Various roles of the state in steering the economy



Importantly, these four characteristics are to be seen as roles of the state in relation to markets. A "role", in this context, is best to be understood as a way of acting that brings coherence into how specific state policies are designed and implemented. They are ideal types that do not exist in any pure form but help us to grasp the essential characteristics of the state's roles in the economy. The four roles can exist, and in most cases, are present simultaneously: it is possible for some state agencies to be acting primarily as enablers of markets, when other actions can aim at stabilising other markets. It would also be a mistake to see the various functions only as historical phases, but rather as dimensions of complex economic policy: most modern states definitely can be seen as fairly commanding in relation to security-critical markets such as weapons, and stabilising in times of crisis (seen recently in interventions into the financial sector, or more broadly within the reactions to the COVID-19 pandemic), while taking a purely enabling position in relation to other markets. The usefulness of assessing the function of the state in relation to markets comes from considering which functions will grow in importance in the current historical moment.

Table 1. Four alternative roles for a state in relation to markets

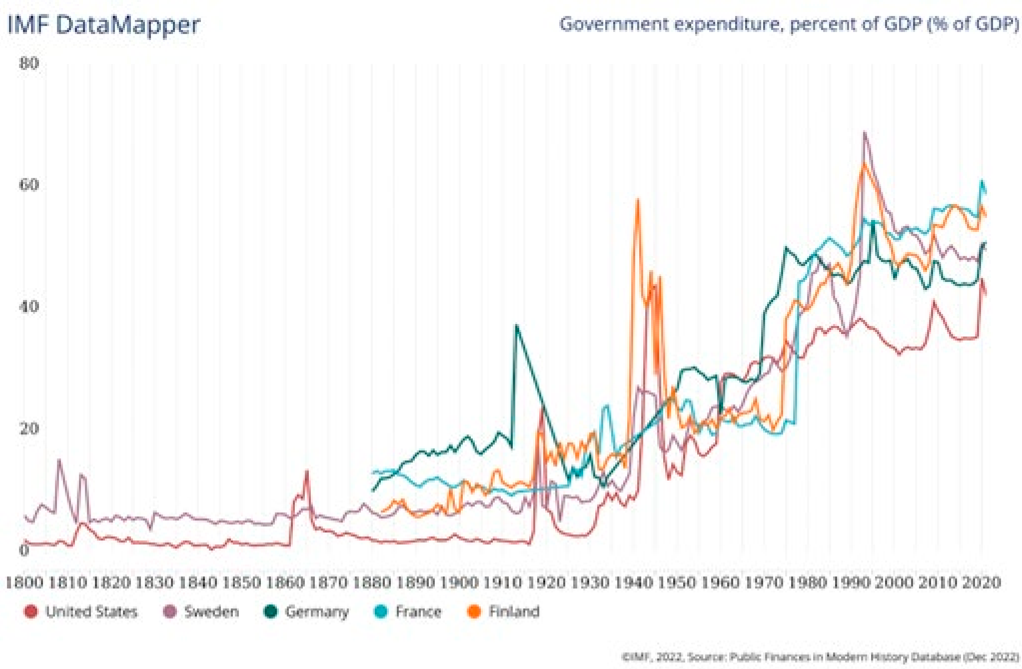
	**An enabling role** An enabling state refers to governmental actors aiming at creating a supportive environment for economic activity, and most oftenly, economic growth. Here governmental actors believe a "hands-off' approach works best in dealing with markets: the state's role is providing necessary infrastructure, services, and regulation to ensure the functioning of markets, and markets are seen as primary mechanisms for steering and incentivising wanted economic activity (through creative destruction).
	**A stabilizing role** A stabilizing state, in contrast to an enabling state, sees governments as more active within economies. In particular, a stabilizing state takes an explicit role in managing risks, shocks, and externalities: in times of crisis, a stabilizing state intervenes direclty in markets to smooth out potentially unwanted externalities or market reactions. Here, state action is seen as a balancing counter-weight for markets.
	**An orchestrating role** An orchestrating state conducts its economic policy in a manner, where it closely works with its key stakeholders to achieve explicitly stated goals. While the state has a more explicit view on the appropriate/hoped for objectives of economic action towards which the state aims at steering markets, it does not wield "hard power" towards other economic actors, but more aptly aims at integrating and coordinating actions within markets towards a governmentally defined hoped for direction.
	**A commanding role** A commanding state refers to a state that exercises a high degree of direct control over its economy and society. In a commanding role, the state takes an active position in directing economic action towards its aimed outcome. Here, the preferred tools for economic policy are highly centralized and require straight state intervention in markets to achieve economic (or social objectives). Typically, promoting national industries or regulating prices can be seen as forms of a commanding state.

2.2 Historical shifts in balance between state and market

Historically, each one of these dimensions has been present in state-market relations. The volume, depth and intensity of state involvement have, however, varied. As regards state-market relations in the 20th century, scholars routinely refer to a distinction between a Keynesian regime which emphasized the stabilising and commanding roles of the state, and a neoliberal regime where the state takes a different approach: in the neoliberal model, the state aims at fostering and enabling market dynamics through, for example, incentive structures, market design and the roll-out of state involvement.

There is truth in this well-established narrative. The emergence of Keynesian macroeconomics during the first half of the 20th century gave policymakers the tools to manage and plan their respective national economies (Mudge, 2018). At the same time, the experiences of World Wars and the Great Depression of the 1930s - combined with the ascent of mass politics - fed a paradigm shift where the stabilizing and commanding roles took the leading role in building public services, modernizing national economies and supporting full employment.

Figure 2. Public Spending as a Share of GDP (Oritz-Ospina and Roser, 2016)



Indeed, in many areas of the economy, state involvement has advanced. Various state-affiliated financial actors have become major players in the global financial market. In high-income societies, the economic role of government equity and investment funds has grown in the past two decades (Kim, 2022). For example, the sovereign wealth fund of Norway holds 1.5 percent of shares in the world's listed companies (Norges Bank Investment Management, 2023). In 2022 the World Economic Forum reported that the fund, with a market value of over one trillion dollars, "aims to have every company in its vast portfolio reach net-zero greenhouse gas emissions by 2050" (Feingold, 2022). This is illustrative of the ability of state-owned economics entities to facilitate economic change and influence markets.

Such notions go against simplistic statements about the role or size of the state in the economy. Indeed, instead of blunt statements about state involvement or lack thereof, it is more useful to analyze how the state-market relationship has evolved over time and what kind of qualitative and quantitative shifts have taken place. For example, one can argue that the commanding role of the state has decreased since the heydays of the Keynesian regime and activist industrial policy. In many industrial countries, the 1980s and 1990s witnessed a wave of privatization as many state-owned companies were privatized (Lähdemäki, 2020). Through the introduction of competitive elements, a market ethos was introduced into public services. Indeed, states have taken a more enabling role through creating markets to areas previously characterized by a bureaucratic or a political logic.

Also, the market stabilizing capabilities of the state have, to an extent, decreased as certain key areas of economic policy, such as monetary policy decisions, have been delegated to politically independent technocratic bodies, namely the central banks. Moreover, nation states have been curbing their fiscal policy capabilities through the introduction of fiscal rules and debt brakes. Sometimes, such rules are enshrined in law, effectively tying the hands of policy-makers in matters of fiscal policy. The counter-argument, however, is that since the Global Financial Crisis of 2008 and the COVID-19 pandemic, the stabilizing role of the state has gathered steam as active fiscal interventions from governments and monetary interventions from central banks have been central in tackling the economic downturns (Tooze, 2018).

There are, once again, multiple developments that are likely to shift the balance between the state and the markets, and the roles the state takes in the economy, also beyond short-term shocks such as the COVID-19 crisis. Chapter 3 discusses the various political and macroeconomic trends playing out in the economy and the state-market relations. The post-cold war world order is crumbling, fueling geopolitical battles and threatening the open world economy and causing substantial macroeconomic effects world-wide. Responding to the environmental crisis and moving to renewable energy systems will require more effective steering of both public and private resources. In economics, the decade after the Financial Crisis of 2008 and the Euro Crisis was filled with analyses on "secular stagnation" (Summers, 2016), a period where low-interest rates and stubbornly low inflation coincided with a lack of aggregate demand. Coupled with the challenge of an ageing population in many Western countries and the advancements in technologies making many jobs obsolete, it might be necessary for governments to adopt a more activist fiscal stance to support growth and investments. One should of course add that these dynamics have become even more complex as inflation has accelerated amid the Ukraine war and central banks are - after a long period of ultra-low interest rates - forced to rate hikes to bring down inflation.

3 Global change pressures redefining the relationship between the state and the market

Chapter 3 illustrates the main global pressures that challenge the prevailing economic thinking and practices in economic policy, and seem to be shifting the state-market relations again to a new position. It starts with describing the disintegration of the global economy into competing blocks and the end of international cooperation that characterised the post-Cold War world. This is followed by brief analyses of the accelerating environmental crisis and the transition to renewable energy systems, and the rapid technological as well as demographic changes.

3.1 The end of the post-Cold War order and a new era of globalization

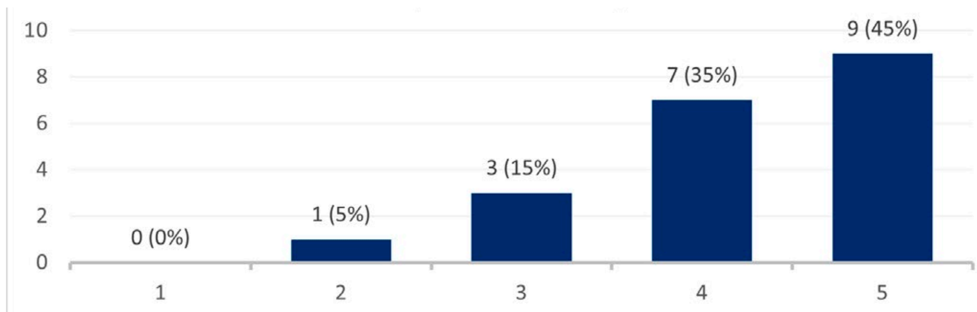
Since the end of the 1980s, the world economy has been characterised by growing economic ties under liberal-democratic hegemony. The post-war rise of global interconnectedness was driven by trade and investment flows, multinational enterprises, and later global value chains (GVCs). The post-Cold War surge of globalisation which stitched together the developed and developing world is now increasingly being stretched by geopolitical rivalry and hardening borders. The cracking of the global economy into competing blocks threatens to fracture supply chains, cut productivity, raise costs, and reduce growth.

Globalisation has brought about inevitable benefits, such as higher living standards across the world, spread of ideas, technologies and innovations, and access to new cultures. However, highly interconnected trade and investment have also acted as conduits amplifying the negative impacts of global crises. The trade collapse after the 2008 Financial Crises and the Great Recession show how financial markets and the real economy now interact more closely and quickly when a shock occurs in one part of the network. The 2008 Financial Crises and the Great Recession widened, in some cases, the income inequality between the richest 1% and the rest of society (Saez, 2020), increased poverty rates (Doemeland and Inchauste, 2016) and as such, questioned the belief that a world of free trade and investment would bring prosperity to all. More recently, the massive impact of COVID-19 vividly illustrates how vulnerabilities in one part of the economic system - the health sector - can lead to colossal economic losses and high human and social costs (NAEC, 2020).

The rapid pace of product and financial market integration at the global level and the relentless pursuit of efficiency gains has reinforced both logistical and policy risks. For example, GVCs have led to high levels of concentration in the production of critical components of many goods in a few countries, such as some forms of ICT equipment, semiconductors, and the sourcing of critical inputs such as rare earths and other critical minerals. Furthermore, these developments have led to questioning the assumption that global integration and increased economic interdependence are good for maintaining peace and restraining superpower rivalry.

US-Chinese relations are mired at their lowest level since the two nations normalised their diplomatic relations in 1979. Their renewed rivalry will shape the world's future in every dimensions. The Biden administration is framing it as a geopolitical battle between democracy and autocracy (Sanger, 2021). Furthermore, manifestations of Russia's increasingly aggressive behaviour signify a fundamental challenge to the rules-based world order. The Russian invasion of Ukraine in February 2022 marked the end of the post-Cold War world, albeit that cooperation with Russia was already strained because of its military intervention in Chechnya (1999), the war with Georgia (2008) and its annexation of Crimea (2014).

Figure 3. In the Delphi survey, respondents were asked to evaluate the following statement: "*In 2032, the world is divided into geopolitical blocs more clearly than currently*."



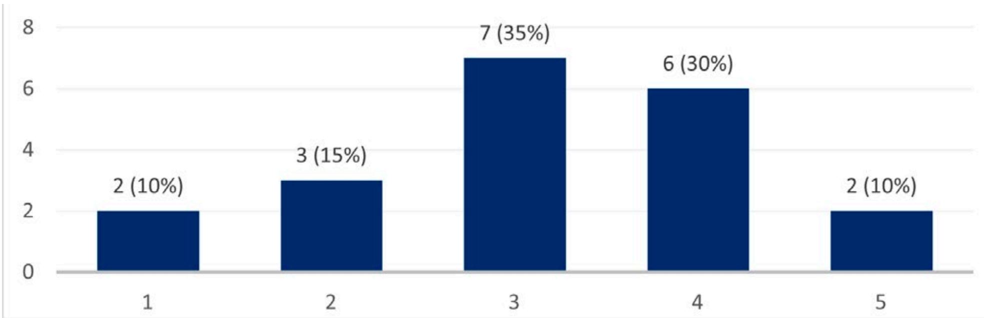
1=not at all likely, 5=very likely

The rise in geopolitical risks will have substantial macroeconomic effects in 2023 and beyond. Globally, business executives see geopolitical tensions as the most imminent threat to economic growth (McKinsey & Company, 2022). The adverse effects operate through higher commodity prices, tighter financial conditions, and lower business and consumer confidence. The war in Ukraine has reversed many factors that had spurred more than a decade of ultra-low inflation in most developed economies. At least in the short run, the era of cheap finance is most likely over. By the time of writing this report, as inflation grips the world economy, a cycle of monetary tightening is underway. Higher interest rates will expose highly indebted companies and countries. In the worst case scenario, this can result in defaults and financial crises, especially in emerging markets, and the catching up of poorer countries with the living standards of wealthier ones can stall after three decades of cheap finance and globalising production processes.

With the world shifting toward multipolar antagonism, geopolitical considerations and national security are once again becoming vital in the planning and operation, not just of nations but also of private corporations. US - Chinese rivalry and Russian aggression have further underscored the vulnerabilities of dependency on highly concentrated suppliers and national governments must think much harder about the economic and political cost of allowing supply chains to stretch across vast territories and rival blocs. This current era of what has been characterised as a 'perma-crisis' highlights the urgent need for introducing greater resilience in the production of critical components and inputs. As a result, states are now compiling lists of critical inputs, such as computer chips and raw materials, that are considered so vital to their national security that these must be produced or sourced domestically or at least in a friendly neighbouring state (European Commission, 2020; The White House, 2022b). The US and Europe are now talking about 'friend-shoring' - confining critical global supply chains to friendly networks (Atlantic Council, 2022).

The changing geopolitical landscape calls for a recalibration on many policy fronts. While military budgets will increase, states may also need to reassess their industrial policies. This would imply government intervention in ways considered unthinkable just a few years ago.

Figure 4. In the first round of the Delphi survey, respondents were asked to evaluate the following statement: *"In 2032, the share of imports from China will be smaller both at the level of EU trade and Finnish trade."* Their responses were split on the likelihood of this:



1=not at all likely, 5=very likely

The open-ended answer elaborated on this, for example:

" *This is impossible to predict, because it largely depends on how the US and China organize their great power competition. If China refrains from supporting the Russian invasion of Ukraine, competition can become more restrained and economized. However, if the current development towards blocks becomes stronger, the EU has to limit its dependence on China."*

Countries must also decide how best to soften the blow of the cost-of-living crisis, especially the higher energy and food prices. Central banks must balance their fight against inflation with the need to sustain aggregate demand in the face of decreases in real incomes. The European Central Bank is wrestling with more complex challenges than most other central banks because, not only does it have to reconcile the monetary situations of all the eurozone countries but also because the eurozone is bearing most of the brunt of the fallout from Russia's aggression. The concern with increasing inflation and the resultant monetary policy response is that it might well lead to a recession with attendant negative societal consequences. In fact, there is no "optimal" interest rate level that can be decided ex-ante, which calls for a continuous adaptation to the system's evolution rather than a strategy based on any specific economic ideology.

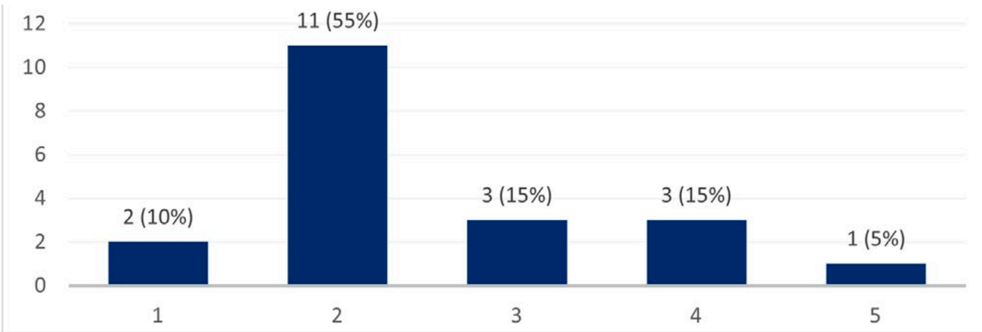
3.2 The accelerating environmental crisis and transitioning to renewable energy

Despite the real direct impacts of the end of the post-Cold War order on peoples' well-being, climate change, biodiversity loss, and the localised effects of disasters increased by the climate crisis pose an increasing existential threat to societies' economic and social resilience. The cumulative scientific evidence is unequivocal: changes in the climate are rapid, widespread, and intensifying. Human influence on these changes is beyond doubt. There is growing evidence that a number of "tipping points" in the climate system may be triggered sooner than previously thought. These "tipping points" could lead to cascading and irreversible effects that could greatly exacerbate the economic and social costs of climate change. Such shockwaves are likely to amplify inequalities across and within countries (IPCC, 2022).

With emissions still rising in 2022, a genuine shift toward a global net-zero carbon emission trajectory requires significantly ramping up policy ambitions and transforming business models and behaviour. Despite the widespread strengthening of long-term climate targets, most countries' trajectories continue to fall far short of the required transition pathway. Work by the Nobel laureate Parisi has shown that the situation is even more tenuous than thought (The Nobel Prize, 2021). Adaptation planning and implementation have continued to increase across all regions. However, most are fragmented, small in scale, incremental, sector-specific, and designed to respond to current impacts or near-term risks. Moreover, they focus more on planning than on implementation. More ambitious action is urgently needed to overcome vested financial, governance, institutional and policy barriers. At COP27 in Egypt, world leaders stressed the urgency of enhancing ambition and action on mitigation, adaptation and finance for developing countries and for ensuring a just transition to reach the goals of the Paris Agreement and the 2030 Agenda for Sustainable Development. As one of the outcomes of the meeting, COP27 agreed on setting up a loss and damage fund for developing countries (Harvey, 2022; UNEP, 2022). The ultimate objective is to achieve climate resilience by making inclusive development choices that prioritise risk reduction, equity, and justice.

Furthermore, biodiversity loss poses a great threat to ecosystems globally. More than 1 million species of animals are under threat of extinction, and 40% of the Earth's land surfaces are already degraded. Most of this biodiversity loss has been tracked to human economic activity (Torkington, 2023). Conversely, our economies are also at risk from biodiversity loss, with more than half of the world's total GDP at risk due to the dependence of business on nature and its exploitation (ibid.).

Figure 5. In the first round of the Delphi survey, the respondents were asked to evaluate the following statement: "*By 2050, decoupling has been successful internationally; the global economy is growing but natural resource use and greenhouse gas emissions are not.*" On a scale of 1–5, where one is "not at all likely" and five is "very likely", most saw this as unlikely:



The open-ended answers elaborated on this:

" *In light of historical evidence, absolute decoupling is either impossible or very difficult."*

" *It is possible and there are examples pointing at this, but effort and technological know-how to reach decoupling are insufficient."*

Any further delays in concerted global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all. A rapid global transition to net-zero carbon emissions is the most effective way to reduce the risks and severity of climate shocks. Renewable energy sources are more reliable and less destructive than fossil energy from non-democratic, unstable countries. Efforts to decarbonise and meet net zero emissions pledges imply a fundamental and far-reaching transformation affecting almost all economic sectors. This must be carefully managed to avoid a disorderly transition that could undermine economic and social resilience. However, such a comprehensive makeover of the economy can also create substantial economic opportunities (IEA, 2021).

Employment in clean energy could become a dynamic part of labour markets, with growth more than offsetting a decline in traditional sectors of fossil fuel supply. Beyond creating jobs in renewables and energy network industries, transitions will also increase employment in related sectors such as construction, manufacturing, and infrastructure. The clean energy transition is expected to create 10.3 million net new jobs globally by 2030, offsetting the 2.7 million jobs lost in the fossil fuel sectors. Most of the anticipated job gains will likely be in electrical efficiency, power generation and the automotive industry (IEA, 2022).

However, the transition to renewable energy comes with dislocation: new jobs are not necessarily generated where old ones are lost. Also, skill sets are not necessarily transferable; new skills will be needed. This holds both within and among countries. This calls for governments to manage the impacts in a coordinated way. They need to find transition pathways that maximise opportunities for decent, high-quality work and mobilise support for workers and communities where jobs are lost. Support for the transition to net zero carbon emission is about more than behavioural change and consumer buy-in, vital though they both are. Societal support for change involves difficult trade-offs — those concerned need to be engaged in the debate to assuage their concerns. For example, introducing carbon pricing to incentivise changes in energy consumption patterns could provoke a backlash in the absence of measures to manage the distributional consequences. The rise of the 'gilets jaunes' protests in France vividly illustrates this problem (Martin and Islar, 2020). Indeed there has been a significant move away from carbon taxes which, although theoretically efficient have produced a backlash in several countries

Accepting net zero carbon emissions is also crucial for siting and permitting new infrastructure. Energy transitions do not imply an end to large infrastructure projects; on the contrary; successful transitions need them. For instance, droughts in Europe in 2022 highlight the danger that the waterborne infrastructure of global trade itself will dry out or shut down as climate change intensifies. Thus, an honest and engaged societal debate on the case for and consequences of the transition to net zero carbon emission is vital. Introducing incentives to move to renewables is most effective when the overall energy system is relatively stable. Currently, this is far from the case. The immediate reaction of governments to reopen old plants and use fossil fuels to offset energy shortages will negatively affect the emissions targets that are already largely unmet.

3.3 An ageing population and the future of work

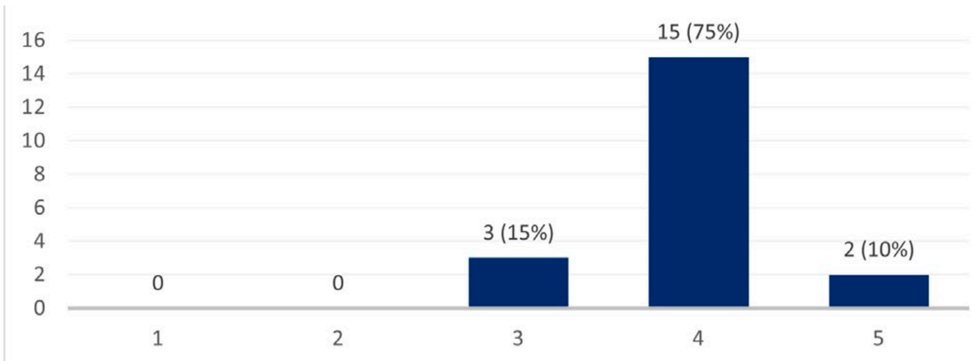
Population ageing has far-reaching implications for economic growth, productivity levels, inequality within and between generations and the sustainability of public finances. Rising old-age dependency ratios will put pressure on the financing of adequate pensions, health, and long-term care. Older and fewer workers risk reducing growth in living standards. Ageing-related expenditures would add to the already high public debt in many countries in the next decades or require steep tax revenue increases or severe cuts in public spending.

The growth of aggregate demand is expected to decline as the growth of the total population slows down. This slowdown will be compounded by the relative expansion of labour-intensive services such as health and personal care that are in high demand by the elderly and are not easily amenable to automation. While the ageing of the world's population is expected to result in higher capital per worker, higher wages and lower marginal returns to capital, not all countries are experiencing demographic change simultaneously and quickly.

In open economies with mobile capital, global rather than national ageing determines the extent to which factor prices and capital deepening adjust. Countries ageing faster than the rest of the world tend to invest more abroad, which may partially offset the expected decline in returns to capital. Ageing also creates opportunities for innovation and new markets and industries. Moreover, information and tele-communication technologies - in which Finland has a solid knowledge base - can help the elderly stay autonomous, which would contain long-term health care costs and improve well-being. According to the Eurobarometer, more than half of the Finnish respondents consider that the ageing population is the main challenge in Europe. This is double the EU average.

In the Delphi survey sent out to Finnish experts, the respondents were asked to evaluate the long-term development of the ageing of the Finnish population (Figure 6) and selected policy alternatives that have been proposed partly in the context of the ageing population (Figure 7.) These policy alternatives were related to cutting public services or increasing immigration as ways to improve the long-term fiscal sustainability of the welfare state.

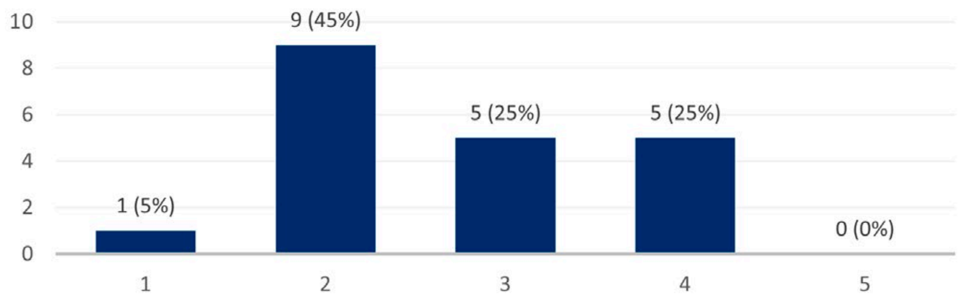
Figure 6. In the Delphi survey, Finnish experts were asked to evaluate the following statement: *"Finland will have a smaller working age population in 2050 than now."* This was seen as likely (below) and undesirable.



1=not at all likely, 5=very likely

The open-ended answers highlighted the role of specific policies in this development, particularly immigration policy.

Figure 7. In the Delphi survey, the respondents were asked to evaluate the likelihood and desirability of the following statement: *"By the year 2032, many EU member states – including Finland – have signif-icantly reuced their public services."* On a scale of 1–5, where one was "not at all likely" and five was "very likely", their answers were split:



However, when asked to rate the desirability of the statement, eight out of 20 rated this as "not at all desirable".

The so-called "Fourth Industrial Revolution" brings a confluence ranging from digital applications (e.g., 3D printing, the Internet of Things, advanced robotics, quantum computing) and new materials (e.g. bio- or nano-based, genetic modification) to new processes (e.g. data-driven, artificial intelligence, blockchain, synthetic biology). Machine-to-machine communications, supported by big data analytics and machine learning, boost productivity, improve capital utilisation, and reduce operational costs on the shop floor. Outside the factory, these technologies support supply-chain coordination, logistics and interaction with final consumers.

Already, these new technologies have far-reaching effects on employment, skills, income distribution, productivity, trade and investment, well-being and the environment. New technologies are also playing key roles in determining the availability and nature of work. Inevitably, they will disrupt today's industries by redefining the terms of competitive success of incumbent firms. Innovation will reshape how businesses operate, what new markets are created and what new products are produced.

New technologies and methods hold the promise of safer jobs, new and more customised goods and services, and accelerated productivity growth. But there is also the danger that some new jobs may be less secure. The changes in skills demand brought about by new technologies create opportunities for some workers while making others vulnerable. High-skilled workers are more likely to benefit as they can perform non-routine tasks and their skills complement technology. Conversely, those with low skill levels are more likely to be employed in jobs vulnerable to automation and face increasing competition from middle-skilled workers whose jobs have been most affected by technological transformation (OECD, 2019). While new productivity-raising technologies will benefit the economy overall, the associated adjustment costs could be quite substantial. Thus, the diffusion of new technologies must be complemented by intangible public investments. This implies more active government interventions to promote product market competition, remove disincentives for firm exit, facilitate growth for successful firms, reduce rigidities in labour markets, and facilitate the redeployment of labour (OECD, 2023b).

Data will become key to production in the 21st century. For firms in many sectors, the quality of digital infrastructure, including access to high-powered computing, will become critical. Sound science and R&D policies are essential, and many challenges are multidisciplinary. Because their complexity exceeds the capacities of most firms, they require a range of public-private R&D partnerships. Also, data governance frameworks need to address privacy and security considerations.

The current economic landscape is one of much uncertainty and flux. One of the most pressing questions is whether, in the near future, the world economy will move towards more convergence or greater divergence. This has important implications for the direction of the broader government strategies employed to enhance resilience and efficiency. Nationally, demographic, and economic forces, such as technological advances will be determinant. Internationally, geopolitical developments, such as the shifting of global power dynamics, polarisation and the adoption of protectionist policies will be defining. Taken together these factors suggest that, in the short term at least, the world economy is likely to move towards greater divergence as regions pursue distinct economic strategies. Countries with similar political and economic interests will increasingly look to "friend shore" to enhance their resilience. This could further fragment global trade and investment flows as countries move to protect domestic industries and markets.

4 The premises of Finnish economic policy

This chapter describes the premises of Finnish economic policy. To understand how global economic pressures, described in Chapter 3, affect the relationship between the state and the market in the Finnish context, it is first necessary to briefly outline the starting points of Finnish economic policy. We argue that in Finland, economic policy has, during the past decades, been based on a set of shared premises. By premises we refer to the economic policy ideas, goals and guidelines that are relatively widely shared among the political parties, other policy-making elites and even the general public. At the same time, it must be stated that these premises should not be addressed as clear-cut ideas or goals but as sedimented historical practices containing different, and often contradicting, elements. Indeed, many of the premises described above are being politically contested amid a turbulent global environment, and we do not state that an unambiguous consensus prevails on these premises. We do, however, argue that the below-described premises have played a fundamental role as regards the history of Finnish economic policy in the late 20th and early 21st century. Thus, they provide a tool with which to analyse the interplay between Finnish economic policy and the global change pressures.

The structure of this chapter is as follows. We will analyze the premises of Finnish economic policy making in the following economic policy domains: fiscal and monetary policy, trade policy, labour policy and industrial and innovation policy. This list is by no means a comprehensive account of economic policy domains and fundamental economic policy decisions. However, we argue that these are the domains where questions about the role of the state in steering the economy are the most acute.

4.1 Fiscal and monetary policy

Fiscal policy deals with government incomes and expenditures. The central tools of fiscal policy include, for example, taxation and government spending decisions. One of the central premises of Finnish economic policy has been a somewhat conservative attitude towards fiscal spending. The aim of the government has, traditionally, been to curb the rise of public spending and aim for balanced budgets in the long-term. Indeed, one of the economic policy goals of Prime Minister Marin's coalition, sworn into office in 2019, was to achieve a balance in public finances by 2023 (Valtioneuvosto, 2019). This aim has been nullified by the COVID-19 pandemic as well as other economic shocks, such as the war in Ukraine, which have led to ballooning public deficits on a global level (Gaspar, Medas and Perrelli, 2022).

To combat rising debt levels, the Finnish Ministry of Finance (MoF) has stated that during the next two parliamentary cycles, public finances should be strengthened by nine billion euros (Valtiovarainministeriö, 2022a). The Finnish Economic Policy Council , which is responsible for providing academic expert analysis on the government's economic policy decisions, states in its latest report that "[t]he next government term should start with a credible, transparent, and ambitious fiscal adjustment plan" (Talouspolitiikan arviointineuvosto, 2023, p. 10). According to the council, the size of the plan should be in the range of 0,4–0,6 percent of GDP annually, for the duration of two government terms.

A disciplined line on fiscal spending and public deficits has, no doubt, worked to serve the interests of Finnish economic policy. In the eyes of international credit rating agencies, Finnish government debt is a stable investment, collecting high grades from international credit rating agencies. In Finland, the government debt to GDP ratio stands below the Euro area average (see Figure 9). Maintaining sound public finances has helped Finland to create fiscal buffers that can be used to combat economic downturns.

Moreover, the ageing of the Finnish population creates long-term fiscal challenges. Regarding the share of people aged 65 or older in the total population, Finland has one of the highest shares (23,1%) alongside Italy (23,8%), Portugal (23,7%) and Greece (22,7%) (Eurostat, 2023). Such a development adds to the budget constraint of the Finnish economy. Indeed, Finland (24%) and France (23.9%) spent the largest share of their GDP on social protection. In Finland, an increasing and large share is spent on old age pensions.

Figure 8. Government expenditure by function in selected countries and areas in 2019 (OECD, 2021)

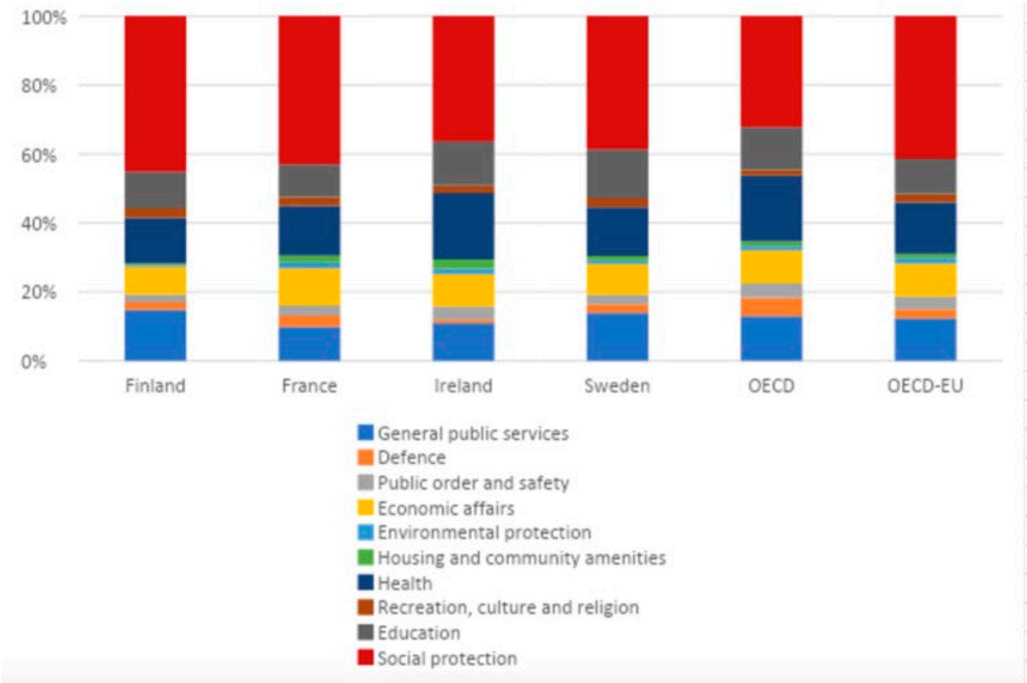
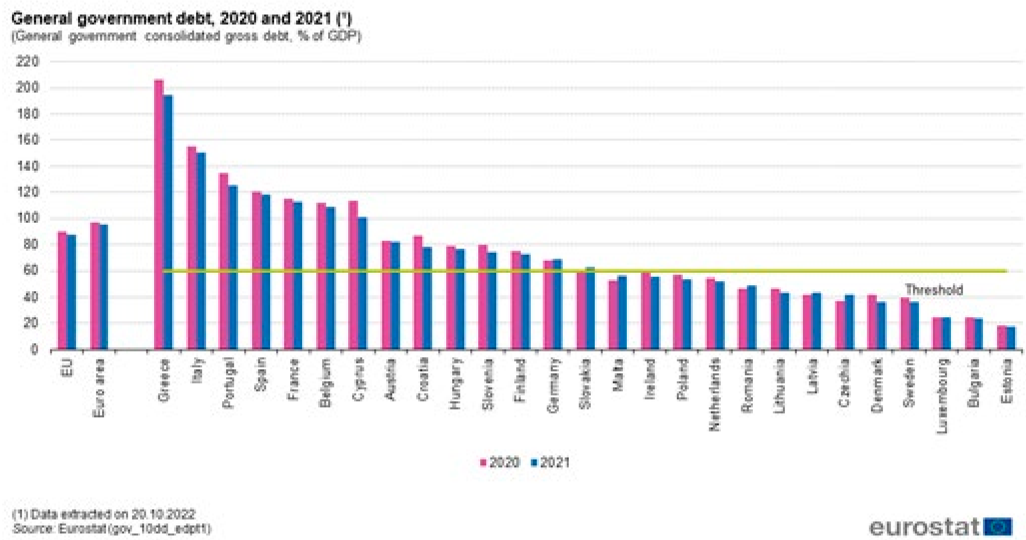


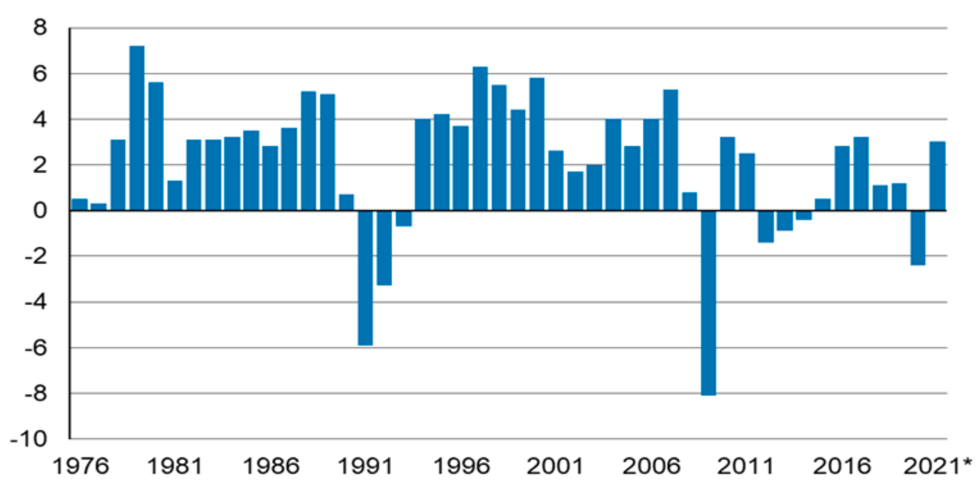
Figure 9. General government debt in Europe (percent of GPD) (Eurostat, 2022a)



One can identify various reasons behind the Finnish fiscal stance. First, the history of Finnish macroeconomic policy (and macroeconomics) has certainly played a role. In the first half of the 20th century, Keynesian ideas on the role of the central government as an active macroeconomic agent did not have the same political effect they had in neighbouring Nordic countries, such as Sweden (Pekkarinen, 1989). Despite the fact that the economic responsibilities of the state and other public authorities rose significantly during the war years 1939-1944 and in the following decades, Keynesianism was never wholeheartedly accepted as the dominant economic policy line. (Pekkarinen and Vartiainen, 1993.) Thus, Finland has been more reluctant to use deficit spending as a policy tool to combat economic downturns than Sweden, for example. Finnish fiscal policy has often been pro-cyclical (Kettunen, 2008). Finnish policy-makers have often resorted to spending cuts or tax-hikes, even during recessions, due to budget balance goals.

Second, the experiences of the economic recession of the 1990s have certainly left their mark on Finnish fiscal policy and other economic policy decisions. The steep economic depression of the 1990s (Figure 10) followed a credit-led boom of the 1980s. It has been argued that the reasons behind the depression of the 1990s are manifold: a credit bubble fed by the rapid deregulation of the financial markets and consumer credit, the collapse of the neighbouring Soviet Union and the stubborn willingness to guard the peg of the Finnish mark to the ECU (European Currency Unit) despite rising unemployment (Kiander, 2001).

Figure 10. Annual change in the volume of gross domestic product in Finland (percent) (Statistics Finland, 2023a)



The depression of the 1990s led to drastic changes in the Finnish welfare state. The expansion of the welfare state was brought to a halt by the economic crises and the cuts to public spending and entitlements (Julkunen, 2001). During the depression of the 1990s, the Ministry of Finance (MoF) took on the role of drafting major cuts to public spending. It has been argued that the austerity approach deepened the depression and increased unemployment. The depression further strengthened the role of the MoF as the powerhouse of Finnish economic policy as the politicians let the MoF shoulder the responsibility for designing the austerity measures (Kantola and Kananen, 2013).

Moreover, the 1990s witnessed the implementation of the government spending limits procedure with the aim of creating a ceiling for public spending for each parliamentary term (Valtiovarainministeriö, 2023a). Such developments have strengthened the position of the MoF. The upside has been that Finnish fiscal policy has remained stable and predictable. However, critics have pointed out that the downside has been a lack of fundamental debate and policy options regarding fiscal policy options (Virtanen and Wass, 2022).

The conservative fiscal policy stance has characterised Finnish policy decisions regarding European economic policy, too. Unlike other Nordic countries, Finland is a member of the Eurozone. During various European economic crises, Finland has been reluctant to argue for reforms that would address the fundamental problems of the Eurozone, such as the lack of a political or a fiscal union that would supplement the common currency and shared monetary policy (De Grauwe, 2015). Instead, Finland argued for the strengthening of market discipline and simplifying the European rules regarding public debt levels (60 percent of GDP) and public deficits (three percent of GDP) (e.g. Valtiovarainministeriö, 2015; Sutinen, 2022).

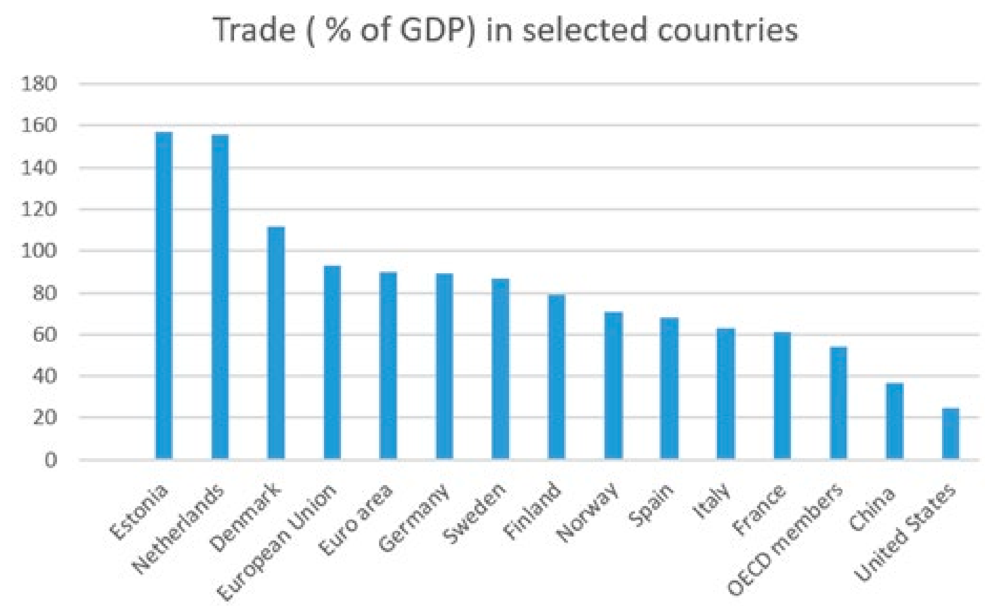
Finland adopted the euro in 1999, and euro coins and bills were introduced in Finland in 2002. Thus, monetary policy is not a part of the Finnish economic policy toolkit. In the decades preceding the membership, regular devaluations of the Finnish mark were used to boost the competitiveness of Finnish exports. By the 1990s, however, a monetary policy rationale emphasizing sound money and the inflation-inducing nature of currency devaluations had gained a strong foothold in the Finnish Central Bank (Kantola, 2002). Although devaluations were seen as a thing of the past, Finland was forced to resort to devaluating the mark in 1991 to ease the pressure on the economy amid a harsh depression. In 1992, Finland let the mark float, allowing for lower interest rates as well as an economic recovery.

As it stands, Finland is a robust eurozone member. According to the 2022 Eurobarometer study, Finns are more supportive of the common currency than EU citizens on average (European Commission 2023). This is despite the fact that the euro has been something of a mixed blessing for the Finnish economy. In 2016, a majority of Finnish economists polled by the newspaper *Helsingin Sanomat* argued that the cons of the common currency outweigh the pros (Sajari, 2016). Indeed, the lack of a national currency with a floating exchange rate has made it more difficult for Finland to adjust to economic shocks. At the same time, however, the Finnish mark could possibly experience turbulence in the foreign exchange markets. Moreover, the eurozone crisis as well as the COVID-19 pandemic have transformed the euro system, although without any formal changes in the mandate of the European Central Bank (van 't Klooster, 2022). Indeed, the exceptional monetary policy measures adopted by the ECB have de facto meant that the ECB provides financing for member states. This has created more leeway for Finnish fiscal policy as well, as interest rates on Finnish debt have remained low.

4.2 Trade policy

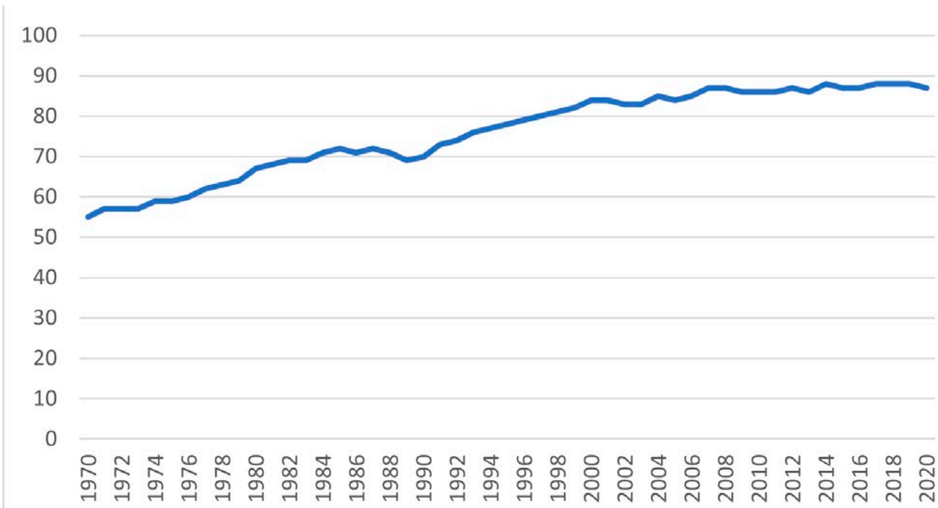
Foreign trade is a central part of the Finnish economy. It is commonplace to state that Finland is a small, open economy dependent on the incomes generated by the Finnish export industry. This is, to an extent, true. In 2021, the ratio of exports to the Finnish GDP was 39 per cent (Confederation of Finnish Industries, 2023). In an international comparison, Finland is, however, not an outlier when it comes to the share of trade in the economy. Measured by the share of foreign trade to GDP, Finland stands above the OECD but below the European union average (Figure 11).

Figure 11. Share of trade of the economy in Finland and in selected countries (The World Bank, 2023)



Still, Finland is a very globalized economy. Since the 1970s, the Finnish economy has been profoundly integrated into the global economy, with an export portfolio ranging from forest industry products to ICT products and, increasingly, services. In the Economic Complexity Index, Finland ranks among the 15 most economically complex countries in the world (Harvard Growth Lab, 2020). The KOF Globalisation Index ranks Finland in the top ten of the list which is topped by Switzerland (KOF Swiss Economic Institute, 2023). While Finland's integration into the global economy has fueled its economic growth, created well-paid jobs, raised living standards, and provided affordable goods and services, it has also raised its vulnerabilities to global shocks, as will be discussed later on in this report.

Figure 12. Globalization Index for Finland (data from KOF Swiss Economic Institute, 2023)



The elemental role of trade has also been reflected in Finnish economic policy making. In a globalized economy, the bulk of trade policy is conducted via international organizations, such as the European Union and the World Trade Organization, founded in 1995. The European Union is founded on the premises of free movement of people, goods, services and capital, leaving individual member countries with limited space for manoeuvres regarding, for example, protecting domestic industries through tariffs or state subsidies. As an EU member state, Finland is committed to supporting and enhancing a rules-based system of global trade.

Historically, Finnish policymakers have attempted to ensure the competitiveness of Finnish exports vis-a-vis international competition. Various policy tools have been used to advance this goal. From the 1960s all the way to the 1990s, currency devaluations were regularly used to improve the competitiveness of the Finnish export industry – at the cost of Finnish consumers who saw their purchasing power decrease. For a eurozone member state, currency devaluations are no longer in the economic policy toolkit. Therefore, since the 1990s, a common claim has been that internal devaluations in the form of wage cuts or at least wage growth restraint are needed to ensure the competitiveness of Finnish exports.

4.3 Labour policy

Centralised forms of collective bargaining and wage-setting played a central part in the Finnish economic model during the post-war decades. A tripartite incomes policy system – where the government was involved in wage setting – served as a tool to develop the welfare state and to keep a lid on wage growth and inflation. The system also worked to enhance the competitiveness of Finnish exports and mitigate class conflict.

The tripartite incomes policy system has been crumbling as the representatives of the Finnish industry have found the centralized system of corporatist wage-setting too rigid for the globalized economy. The Confederation of Finnish Industries officially withdrew from centralized bargaining in 2016.

International competitiveness, however, remains a central issue in Finnish economic policy. In 2016, the then Prime Minister Juha Sipilä from the traditionally agrarian Centre Party made a deal with the labour market institutions to improve Finnish competitiveness. The "Competitiveness Pact" (Valtioneuvosto, 2016) signed with various labour unions and employee organizations aimed to decrease Finnish labour cost through, for example, cutting back the obligatory insurance contributions paid by employers.

As it stands, the future of Finnish labour market policy seems blurry. While keen to reject the tripartite, centralized system of wage-setting as outdated, Finnish employer organizations are eager to implement an export-led wage-setting model. In this model, the results of the wage negotiations between the export industry and respective unions would set the national maximum for wage increases. However, the institutional settings for such a model are fragile and the willingness of individual labour unions to commit to such a system remains somewhat unclear. This might spur instability in the labour market relations. Moreover, if forms of collective bargaining get considerably weaker in the future, elected politicians might be tempted to regulate the labour market in novel ways. Thus far, there are no laws regarding, for example, minimum wages as collective labour agreements have had a law-like status. Judicial regulation on minimum wages might be, however, on the horizon.

As regards supply side issues, Finland has implemented various structural reforms to increase the supply of labour. Such reforms have included, for example, reforming the early-age retirement system and tightening the conditions for receiving unemployment benefits. Additional reforms are, however, needed. At the moment, it is possible to combine unemployment benefits with studying which should help jobseekers to develop their skills. However, the jobseekers that are most in need of reskilling and adult education are underrepresented among adult students. In the future, such problems will need to be addressed to ease the shortage of labour felt acutely in many economic sectors (Ministry of Economic Affairs and Employment, 2022).

In international media, Finland is often characterized as an educational superpower, However, Finland is gradually experiencing an educational decoupling from its OECD peers. Whereas the number of highly educated younger adults is on the rise in OECD countries, Finland is experiencing stagnation and is being left behind in the education race (Valtioneuvosto, 2022a). This creates further challenges for Finland in increasing the amount of skillfull workforce and in boosting competitiveness.

4.4 Industrial and innovation policy

The history of Finnish industrial and innovation policy can be described as a mix of various policy tools aimed to modernize the Finnish economy. During the postwar era, direct forms of state involvement - such as subsidies and state-owned companies - were used to develop the backwards Finnish economy and support economic growth. During the last decades of the 20th century, a paradigm shift in industrial and innovation policy, however, emerged as direct state involvement made room for an approach where the main goal of the state is to enable a competitive environment for private investment and actors.

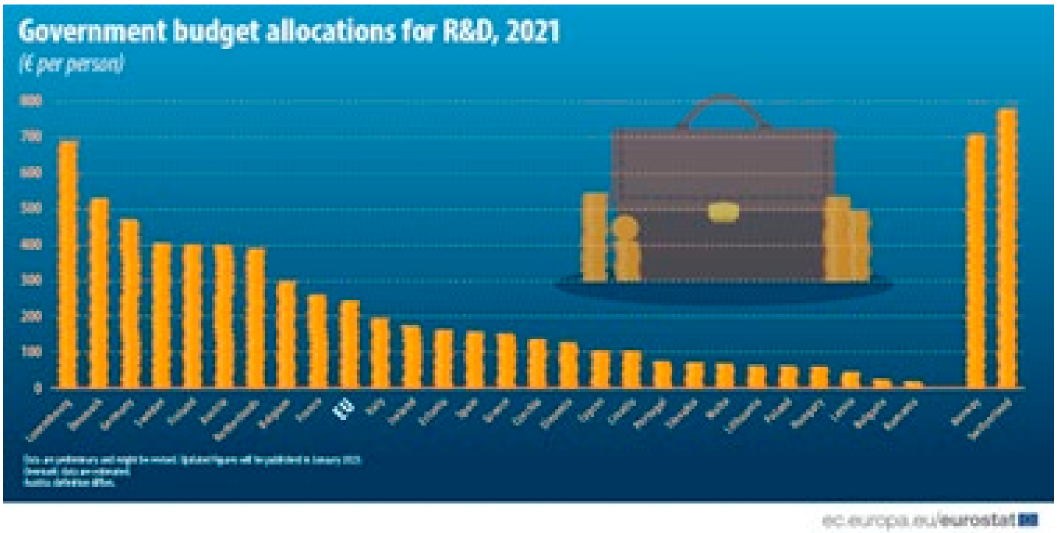
The heydays of state-led Finnish industrial policy were in the 1960s and 1970s. The implicit goal was to use industrial policy to improve the competitiveness of Finnish industries and reform the structure of the Finnish economy (Jääskeläinen, 2001). Direct state involvement played a central role especially in sectors characterized by high risks and considerable research and development costs. Industrial policy was combined with social and regional policy goals. In addition to creating economic growth, the state aimed to level out regional differences and mitigate social and political tensions (Moisio, 2012).

A gradual paradigm shift, however, emerged in the 1980s and 1990s. The shift was partly fueled by deepening economic globalization and European economic integration. The gradual emergence of common European markets – ultimately leading to the 1992 Maastricht treaty and the founding of the European Union – had an impact on industrial policy goals. The competitiveness of Finnish industries could no longer rely on heavy-handed state involvement. It was argued that in a globalizing economy characterized by footloose capital, the state should not pick the winners but invest in maintaining a well-educated workforce and a lucrative milieu for private investments. The old forms of industrial policy were deemed as antiquated: an industrial policy where the state worked as the primary planner was seen as a hindrance in terms of the necessary industrial reforms brought on by economic globalization (Jääskeläinen, 2001). On the other hand, changing ideas about the appropriate state-market relationship may in some cases have been more significant than EU requirements. The Finnish state has, indeed, retreated from many traditional state-owned firms and has become, at most, a minority shareholder. At the same time, however, the state has retained a significant ownership in some strategic sectors and businesses such as energy and aviation.

Indeed, the state has not retrieved from the sphere of industrial and innovation policy. Business Finland (formerly known as "TEKES", The Finnish Funding Agency for Technology and Innovation) was formed in 1983. In terms of government budget allocations for R&D, Finland stands well above the European Union average (Figure 13). On the other hand, after the Financial crisis, Finland saw both public and private R&D plummeting while in most European countries, more funding was channelled towards research and development (Ali-Yrkkö et al., 2021). To tackle the lack of funding, a parliamentary consensus on the need to raise the level of research and development spending was achieved in 2023.

Innovation policy, undoubtedly, intertwines with various labour market issues, such as immigration policy and education reforms (Ali-Yrkkö et al., 2021). Some scholars argue that Finnish innovation policy should be combined with climate and development goals (Alaja and Lemola, 2023). The interest towards "mission-oriented" (Lankinen and Järvensivu, 2022) industrial policy thinking has been on the rise in Finland as well. The rationale behind mission-oriented industrial and innovation policy is that the government would take a leading role in creating and coordinating large-scale coalitions, consisting of, for example, private industry and other stakeholders. These coalitions could work as a tool to channel economic resources into future growth sectors, such as hydrogen based industries.

Figure 13. Government budget allocations for R&D in Europe, 2021 (Eurostat, 2022b)



The premises of Finnish economic policy (summarized in Table 2) are a result of various phenomena: historical developments, ideological shifts and trends as well as political decisions creating self-enforcing path-dependencies. Many of the premises are, undoubtedly, being politically contested, and we do not want to state that an unambiguous consensus prevails on these premises. However, we argue that these premises do underpin the reality of Finnish economic policy and have been a central part of the Finnish economic success story. Thus, they must be analyzed and mapped to understand the relationship between global economic change pressures and the Finnish economy. Following the Second World War, Finland was transformed from a poor agricultural society into a social and economic success story, characterized by an advanced industrial base, high life expectancy and a developed welfare state. Indeed, one of the key components of the Finnish model has been the ability of the political elite to coalesce around a shared set of political and economic goals, rendering economic policy-making - and politics in general - predictable, stable and consensus-driven.

One should not, however, be lulled into complacency by this well-known and often-repeated success story. With the global policy environment in flux, it is necessary to take a critical view towards the sustainability of the Finnish economic policy premises to see whether the fundamentals are in need of a shake-up or reform.

Table 2. Premises of Finnish economic policy in three policy domains

Policy domain	Premise(s)
Fiscal and monetary policy	• Balanced budgets in the long-term • The need to curb spending through government spending limits • Commitment to the euro currency
Trade policy	• Commitment to rules-based international trade and globalization • Maintaining the international competitiveness of Finnish labour
Labour policy	• Towards a decentralised forms of wage-setting from a corporatist tripartite system • Supply-side reforms to increase the supply of labour
Industrial and innovation policy	• Shift from a state-led model towards a more market-based policy approach • Maintaining an attractive investment environment with, for example, competitive levels of corporate taxation • Public investments to education and research and development

5 Rethinking the role of the state - how the change pressures interact with Finnish economic policy premises

This chapter discusses the dynamics between global economic change pressures and the premises of Finnish economic policy. We argue that the change pressures will force Finnish decision- and policy makers to reconsider some of the established ideas and practices of economic policy. We describe the implications of the above discussed change pressures in the context of fiscal and monetary policy, trade, labour policy and innovation and industrial policy.

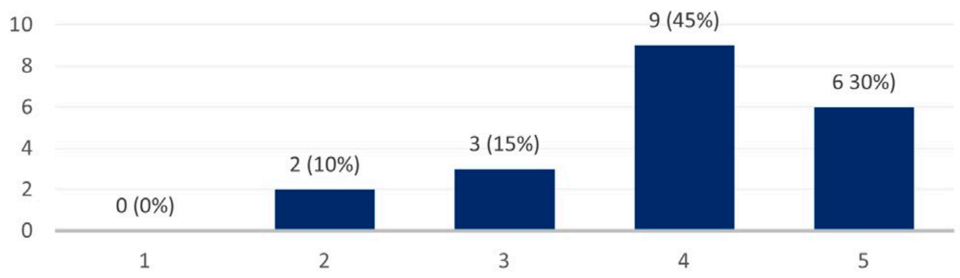
5.1 Fiscal and monetary policy: from rules towards common forms of policy amid geopolitical tensions

Various developments challenge established European and Finnish notions regarding fiscal policy. As the rules-based Post-Cold War Order is making room for intensifying tensions between geopolitical blocks, fiscal policy is taking steps towards an approach where fiscal decisions interact with geopolitical dynamics. As the US ramps up its industrial policy to support not only a green transition but an investment and geopolitical race with China, European rules and practices regarding fiscal policy are in flux. It is foreseeable that in the near future, the EU will attempt to further deepen its economic integration and, for example, introduce additional forms of common debt to fund the investment race with the U.S. and China (Allianz, 2023) and support European industrial autonomy on critical segments of the economy, such as green technology and data.

Such a development will have ramifications for Finnish policy premises as well. Traditionally, as stated, Finland has been a firm believer in the rules-based framework where nation states are the main fiscal actors, forms of common European fiscal policy are limited and the "no bail-out" principle prevails. Finnish policymakers as well as the general public have been critical towards any further integration in European fiscal policy. Fiscal policy and other fields of economic policy lie at the heart of democratic decision-making and national political sovereignty. Thus, a substantial relocation of economic policy capabilities and mandates will, undoubtedly, be politically difficult. It is therefore likely that a further integration of European economic policy will happen through exogenous developments, such as sudden crises.

During the next few years, Finnish policy-makers are confronted with questions on further deepening European fiscal and other forms of economic policy. For example, it is to be expected that the European Union will have to continue supporting Ukraine not only in its war effort but to help to rebuild the war-torn nation. This will further increase the pressure to utilise EU borrowing (Rahman, 2023).

Figure 14. In the Delphi survey, respondents were asked to evaluate the following statement: ”*By the year 2032, the current policy tools – for example national spending limits and the EU's fiscal rules – emphasise, for example, investment needs related to climate crisis*.” The respondents mostly agreed that this was likely:



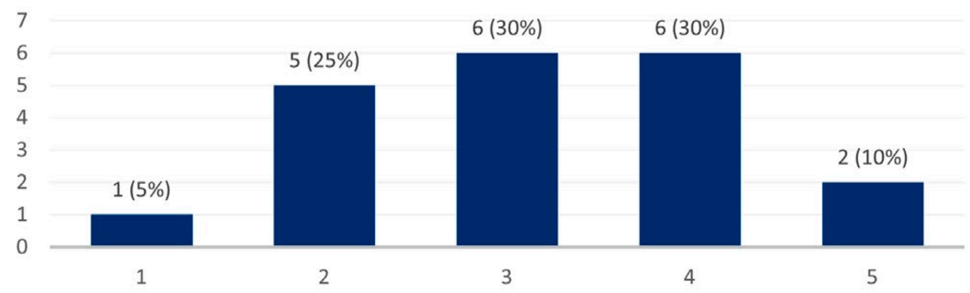
1=not at all likely, 5=very likely

The respondents also saw this development as desirable, with nine out of 20 respondents rating it ”very desirable” on a scale of 1–5, where one represented ”not at all desirable” and five ”very desirable”. The open-ended answers included, for example:

”It needs to be ensured that economic policy rules do not prevent solving the biggest global problem of our time.”

”Presumably the effects of the climate crisis can already be felt in Europe so much that we can no longer close our etes to the need for investment.”

Figure 15. In the Delphi survey, respondents were asked to evaluate the following statement: "*In 2032, common debt has become a permanent part of the economic policy of the European Union, and the EU's budget has grown considerably. (Right now the EU's budget is equivalent to approximately one percent of the total GDP of its member states.)*" On a scale of 1–5, where one was "not at all likely" and five was "very likely", the responses were split:



The open-ended answers included, for example:

"There are clear pressures and partly good reasons on both sides. It is also likely that the EU budget will grow in relation to the size of the economy of the EU. It is also believable that new common debt will be taken during new major shocks. The scale is however open."

"For the EU to act stronger to reach strategic goals, a larger budget and some kind of financial policy capacity are needed."

Any significant reforms of the European fiscal framework are, undoubtedly, difficult. Northern European countries have been reluctant to loosen the fiscal rules and advance integration. The European debt crisis of the 2010s created a divide within European states that pitted the "frugal" northern eurozone countries against the Southern member states.

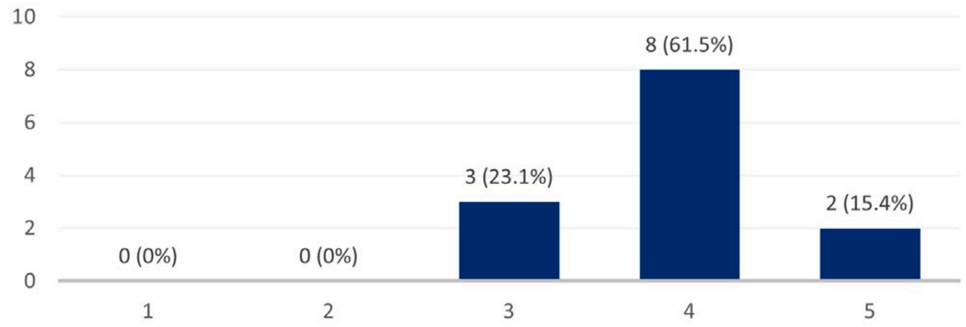
However, one should also take into consideration the opportunities provided by the development of European economic policy. Allowing for more space in the EU's fiscal rules could advance the public investments needed to combat climate change and biodiversity loss. Indeed, the danger is that European climate goals are rendered ineffective by the fiscal rules that force the indebted countries to austerity. Reforming the framework in a manner that would be more suited to the investment needs of individual member states would serve climate and net-zero goals too (Odendahl and Baccianti, 2022). Here, policy-makers should aim for a balance between managing fiscal pressures caused by, for example, demographics and, on the other hand, the investment needs fueled by the green transition and common security concerns.

The structures that condition Finnish fiscal policy are in flux at a national level, too. The COVID-19 pandemic as well as the energy crisis caused by the Russian attack on Ukraine have accelerated the debate about the future of central government spending limits. The MoF has raised concerns about the credibility of the spending framework as politicians have reacted to the economic shocks through activist fiscal policy (Valtiovarainministeriö, 2022b). A credible fiscal framework is needed to ensure the stability of economic policy as Finland is struggling with demographics and the sustainability of public finances. On the other hand, a spending framework that emphasises the stability of public finances might render fiscal policy ineffective when it comes to investment pressure caused by the ecological crisis as well as the ascent of geopolitical competition. Thus, a credible 21st century spending framework should take into account not only the state of public finances but also the nature of the polycrisis that calls for a proactive and flexible attitude on fiscal policy. Here, clinging on to too rigid a rules-based fiscal framework entails risks.

Policymakers are confronted with the problem of balancing various fiscal policy goals. Long-term fiscal challenges brought on by an ageing population add pressure to public finances. Here, prioritising public services, trimming public spending and increasing taxation are the policy tools at hand. At the same, there are pitfalls in committing to overly strict fiscal consolidation goals. If the global economic conditions take a turn for the worse, fiscal consolidation might be pro-cyclical, deepening the economic downturn and accelerating the debt-to-GDP ratio.

In addition to the risks caused by a procyclical policy stance, other pitfalls loom in the future too. Long-term R&D and education investments are the foundations of economic growth. Therefore, the inability to commit to such investments is in danger of eroding the foundations of economic success. Indeed, short-term budgetary discipline runs the risk of causing long-term harm to the Finnish economy. Indeed, the dilemma is that investments that are necessary to secure long-term growth are, to an extent, contradictory with fiscal goals. For example, tackling the problem of stubbornly high long-term unemployment through education and supporting an intermediate labour market (SOSTE, 2019) necessitate budgetary decisions too.

Figure 16. In the Delphi survey, respondents were asked to rate the likelihood of the following statement: ”*The level of taxation will be raised to maintain and develop the welfare state.*” The respondents mainly saw this as likely:



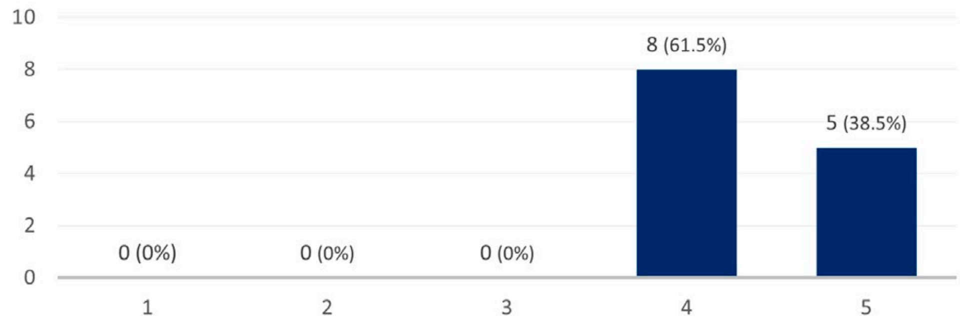
The open-ended answers elaborated on this:

”There has not been proper discussion on priorisation in Finland and it has a bad reputation. However, it would be useful to properly reflect on how to develop public services. Sometimes it seems that different multi-professional joint services are developed, but people are not properly met by the services.”

”'Efficiency' often means cuts. Desirability depends on what is counted as part of the 'welfare state'. Are business support funds part of it, for example?”

”As funding weakens and spending pressures increase, the welfare state will be weakened on the one hand, while the role of the state will increase in other areas (e.g. defense and energy). However, the welfare state has already been trimmed so much that there is no longer any justification for weakening it, but rather for strengthening it in some areas.”

Figure 17. In the Delphi survey, the respondents were asked to rate the likelihood and desirability of the following statement: ”*In the future, the welfare state will be made more efficient by prioritising its functions*.” On a scale of 1–5, where one was ”not at all likely” and five was ”very likely”, most saw this as likely:



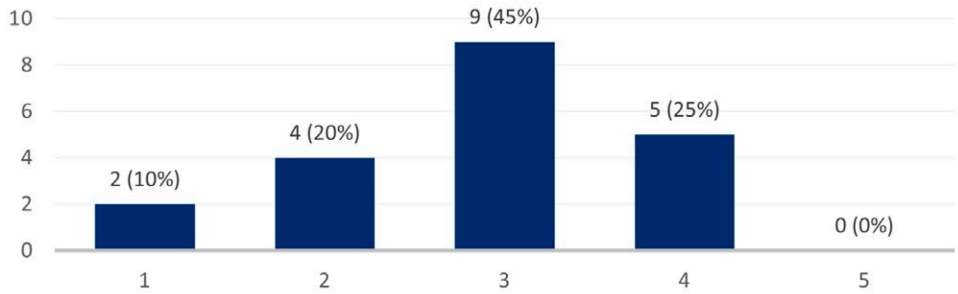
The open-ended answers elaborated on this:

”There has not been proper discussion on priorisation in Finland and it has a bad reputation. However, it would be useful to properly reflect on how to develop public services. Sometimes it seems that different multi-professional joint services are developed, but people are not properly met by the services.”

”'Efficiency' often means cuts. Desirability depends on what is counted as part of the 'welfare state'. Are business support funds part of it, for example?”

”As funding weakens and spending pressures increase, the welfare state will be weakened on the one hand, while the role of the state will increase in other areas (e.g. defense and energy). However, the welfare state has already been trimmed so much that there is no longer any justification for weakening it, but rather for strengthening it in some areas.”

Figure 18. In the Delphi survey, respondents were asked to evaluate the following statement: *"In 2032, economic policy steering (for example, the EU's fiscal rules and national budgetary spending limits) emphasise the reduction of public sector debt."* On a scale of 1–5, where one was "not at all likely" and five was "very likely", answers to this were split:



When asked to rate the desirability of this development, answers were, likewise, split. The open-ended answers elaborated n the various viewpoints:

"This is likely and desirable. Room for manouevre in economic policy is important, and going beyond fiscal limits should be avoided."

"The debt ratio should not be a primary economic policy objective. For example in the Commission's proposals for new regulations, the debt ratio plays a smaller role, while investment has a larger role. This is probably also the direction in which Finland is moving. The governance framework should work to achieve social goals, not to contain the debt ratio."

"The Commission has already raised other themes alongside debt in the renewal of the EU budgetary rules. These include digitalisation, the green transition, and developing defense."

As regards monetary policy, global change pressures have implications too. It remains to be seen whether the dynamics that have accelerated inflation especially after the Russian attack on Ukraine are a temporary phenomenon driven mostly by supply-side problems. Alternatively, if globalization slows down and the entry of cheap labour into the global workforce declines, the global economy might experience long-term inflationary pressures.The persistence of higher-than-usual inflation entails risks. While aiming to tackle inflation with interest rate hikes, the independent central banks run the risk of causing a recession and fueling political and economic turmoil. Moreover, should interest rates and borrowing costs remain high, the space for climate and energy investments might diminish.

As it stands, central banks operate with price stability in mind. However, the era of intertwining change pressures calls for a debate regarding macroeconomic coordination and the relationship between monetary policy and other policy goals. Monetary policy geared for crisis-fighting should serve not only price stability but wider socio-economic goals too. Monetary policy should support a financial regime that allows for policy goals that strive towards the green transition.

5.2 Trade policy: "re-globalization" challenges open markets

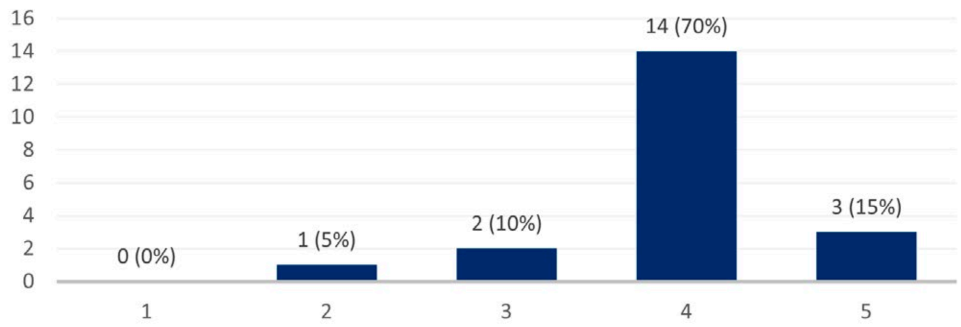
Finland has prospered throughout the period of a broadly stable and global trade regime – trade being inherently global and based on common rules negotiated and implemented through the WTO. As a part of the EU, Finland has acted to strengthen its access to markets. There has been a general consensus among governments and mainstream commentators on the benefits of a free flow of goods and services across national borders.

Recently, this has been at least partially questioned in light of three developments. First, the COVID-19 pandemic revealed the fragility of highly complex global production networks. Second, the increasing geopolitical tension between, namely, the US and China has strengthened arguments for strategic autonomy in particular on key digital technologies and assets. Third, the Russian attack on Ukraine has repositioned trade within the context of geopolitics and led to realignment of especially trade of energy between Europe and the rest of the world. In 2022, Europe was the main destination of US-based liquefied natural gas, with US LNG exports to Europe increasing 141 percent compared to 2021 (EIA, 2023).

While these developments and change pressures have put into question the stability of the current trade regime, it is important to not overinterpret the current development. As a proportion of global GDP, the volume of trade has, indeed, stagnated since the financial crisis of 2008 (Shin, 2023). However, a straightforward deglobalization is hardly the most likely outcome, given the complex and interdependent nature of the global economy. One might rather talk about "re-globalization", where globalization takes a new form. Western countries have been able to cut down their trade with Russia but decoupling from China seems implausible, as the EU, for example, is highly dependent on Chinese raw materials and technologies essential in the green transition. Similarly, China is also strongly dependent on trade with European countries and the US (Sinko and Kyrölä, 2022). It is thus difficult to argue that there will be significant and rapid disruption to trade on a broad scale, but it seems plausible that subtle yet fundamental changes in trade policy and trading relationships can take place within the 2020's.

As an export-oriented nation, Finland is highly reliant on a stable trading environment, and significant disruptions in the trading environment have historically translated into strong economic shocks such as the early 1990's depression. Therefore it serves Finland well to be highly sensitive to potential shifts in trade policy among key trade partners and their implications.

Figure 19. In the Delphi survey, respondents were asked to rate the likelihood of the following statement: "*In 2032, global trade policy is more protectionist than currently.*" This was widely seen as likely:



1=not at all likely, 5=very likely

Some of the open-ended answers included:

"Deglobalisation began with the financial crisis, which broke down the mutual dependence between the US and China. This has later been sped up by trade wars, the COVID pandemic, and the sanctions enforced by the G7 against Russia."

"The gloval political situation seems to point in a direction where relations between global super powers are becoming more strained. The EU has realized that it is not very self-sufficient (e.g. new technology) and that it is therefore very vulnerable. More protectionist trade policy can be a good thing, if it means that the EU does not externalize environmental problems to developing nations, and seeks to become more self-sufficient. On the other hand, despite the fact that self-sufficiency does not bring about or maintain peace, protectionism may increase tensions and does not necessarily lead to a meaningful way of using limited planetary resources."

Despite the obvious risks that come with re-globalization, Finland is, at the same time, rather well positioned within this momentous realignment, and there is clear upside potential for Finland to maintain and strengthen its strong nature as an export-oriented economy. Investments on solar and wind energy have strengthened Finland's position in the common energy market. Second, Finland has been able to incubate a strong ecosystem of green transition know-how with export potential within its traditional strong export sectors. Third, Finland has upside potential in mining of rare minerals critical for the green transition.

Capturing the benefits (and mitigating the negative impacts of e.g., mining) are ultimately questions of successful industrial and innovation policy and smart coordination between stakeholders, but ensuring a supportive trade regime in the long-term remains critical for both the government and companies acting within a shifting trade policy environment.

A key question for Finland will be, how strongly will the EU and Finland be affiliated with a US-led trade framework. The crossover effect of two simultaneous and relatively rapid geoeconomic developments – heightened tensions between the United States and China, and the exclusion of Russia from global trade via sanctions – have the possibility of leading into a strengthening of EU–US relations. The United States has a clear interest in establishing strong ties to key trade partners to form a geopolitical rival 'bloc' to China. Currently this is done under the auspices of value-based trade policy (or friendshoring referring to preferential treatment for partners with a similar value-base). Further, it is likely that the short-term EU excess demand of energy will bring the EU even closer to the United States, but it is unclear how much can the US be seen to leverage energy relations to impose bloc barriers to hamper EU-China trade relationships (particularly in high technology).

Another relevant consideration is: What will be Finland's relative trading position within the European Union? The United States has taken steps towards a more activist industrial policy to reel in green energy investments and curb the ascent of China, the European Union is following suit. Both the COVID-19 pandemic and rising green industrial competition are leading to more fluid interpretations of EU regulations on state aid to national business. EU rules regarding state aid have been temporarily loosened to create room for national state subsidies, and the European Commission has proposed a common "sovereignty fund" to support European industrial policy, sparking a political debate on the best way to organize public funding for European businesses (Matthews, 2023).

If bigger European countries such as Germany are seen to continue direct support for their industries (e.g., energy and automotive), it can be seen to rapidly shift the status quo of limited state aid within EU countries. Paired with possible the broad green reindustrialisation of European industries, geopolitical decoupling and the linked growing importance of EU as the primary market for Finnish industries, it is possible that Finnish trade policy within the EU single market will become an evermore important part of Finnish policy consideration. If such a realignment of EU internal markets and countries' relative positions within it takes place, it seems that Finland is poised to be in a relatively strong position within the EU (due to strong green energy investments and favorable conditions in both technology and raw materials). Here a coordinated green transition across the EU is a key policy priority for Finland.

5.3 Industrial and innovation policy: re-globalization and the green transition usher in a more activist state

The current regime of Finnish innovation and industrial policy can be described as a mix of market-led approaches and public sector involvement. Direct forms of state interventionism - characteristic of the post-World War II regime - have gradually been making room for a more market liberal approach where the role of the public sector is to invest in research and development and provide the private sector with a competitive operational milieu.

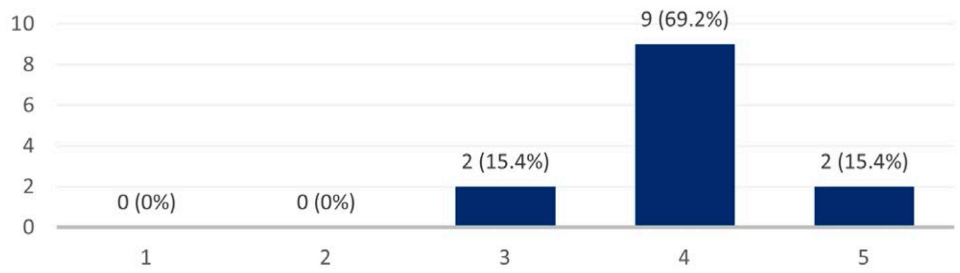
The loosened EU state aid regime has raised concern about European market disruption: the states with the biggest coffers are able to support their national champions, disrupting competition and fracturing the level playing field.

From a Finnish perspective such concerns are reasonable. For a globalised economy, access to an even playing field is of the utmost importance. However, there are also arguments that support a more activist industrial policy. First, industrial policy should be better equipped to support the transition towards fossil-free energy. Already in 2022, it was argued that annual investments adding up to 1,7-2 percent of GDP are needed in Europe to meet Europe’s climate goals of net zero emission by the year 2050. Even such numbers can prove to be an understatement (Odendahl and Baccianti, 2022). Moreover, the current geopolitical environment calls for a pragmatic approach towards industrial policy. Some forms of state aid that support European industries are needed to support autonomy in such critical fields as data and energy. Indeed, in the 2020s, trade and industry are being increasingly weaponized to serve the interests of competing power blocks.Thus, Europe and its member states must recalibrate their attitudes towards industrial policy to mitigate the risks caused by geopolitical rivalry.

In industrial policy, the European Union can strike a balance between openness to trade and selected forms of protectionism that support European capabilities for production in critical economic areas. Here, Finland - instead of categorically dismissing initiatives regarding industrial policy - should work proactively to ensure that such industrial policy works for the benefits of smaller EU states too. Common resources aimed at supporting European business should be allocated in a manner that supports, for example, climate goals and structural reforms that modernize European economies. Here, an obvious pitfall lies in the ability of the biggest and most powerful EU states to disrupt the common market through overly generous state subsidies.

Smart EU industrial policy should also address the power of major digital companies, such as Google, Apple, and Meta. The European Union has already implemented regulation - such as the Digital Services Act - that improves data security and requires service providers to moderate online content. Such a regulatory role is in line with the EU’s ability to work as a regulatory superpower, setting global industry standards (Bradford, 2021). In addition to regulatory reforms, industrial policy should support the emergence of European-based service providers. Rethinking state aid, for example, could ease European data-dependency on US and Asian-based service providers. This would complement EU strategies that aim to support the European semiconductor industry (see Cota, 2022).

Figure 20. In the Delphi survey, respondents were asked to rate the likelihood and desirablity of the following statement: "*In the future, the EU will aim to support European industry and exports more strongly than now, at the expense of rules related to free trade and state aid if needed*." On a scale of 1–5, where one was "not at all likely" and five was "very likely", the respondents rated the statement as follows:



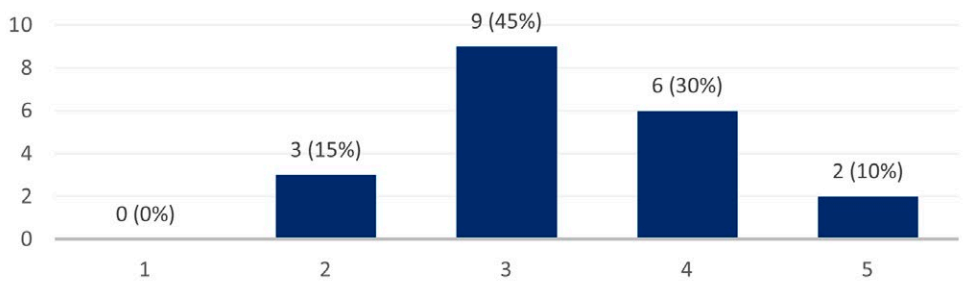
In the open-ended answers, the respondents said, for example:

"The EU needs its own industrial policy. The change of policies towards a protectionist and supporting direction seems likely, but the scale of the EU budget is very small in this type of protection does not necessarily mean active industrial policy."

"Possible as a reaction to the actions of the United States, but if this happens, France, Germany and other bigger EU states will be the ones benefiting."

"Assuming the rise of protectionism, support is beneficial. At the same time there is a possibility to direct production, for example towards supporting the green transition."

Figure 21. In the Delphi survey, respondents were asked to evaluate the following statement: "*In 2032, EU countries – including Finland – practice more state-led climate policy. (State-led policy can mean, for example, public investment policy, mission-led climate policy or industrial planning.)*" The respondents were split on the likelihood of this:



1=not at all likely, 5=very likely

The open-ended answers emphasised the complexities involved, as well as the role of the European Union:

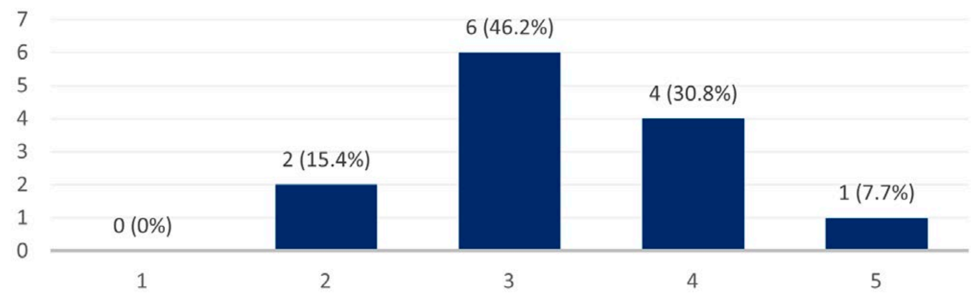
"It is crucial that this happens within agreed-upon institutions. 'State-led' policy can also be organised on a European or global level."

"Public investments and mission-led policy have their place, but they are definitely not enough to reach climate targets, unless private production and investments changing the industrial structure can be directed to the right action with the right incentives. At their worst, public investments and missions waste scarce resources."

Despite the challenges of reglobalization and the fragmentation of trade, Finland is well-equipped for the industrial challenge and the green transition. The Nordic welfare model has proven to be resilient in the face of economic and political shocks and transition. In the Finnish private sector, there is potential for productivity leaps (Maliranta, 2022). Moreover, the Finnish energy supply and natural resources are essential in the green transition, even on a European level (Sajari, 2023). To make use of these advantages, Finland could, for example, make use of mission-oriented industrial strategies (Demos Helsinki, 2022) that would see the state coordinating industrial clusters around identified growth areas.

As regards innovation policy, various policy responses must be looked into to combat challenges brought on by the polycrisis. The agreed parliamentary consensus on the need to significantly raise R&D spending is, no doubt, a positive sign (Valtioneuvoston kanslia, 2023). However, funding is only one part of a successful innovation policy tool kit. Here, reforms that address, for example, the ability of foreign research and development personnel to locate in Finland should be looked at (see Ali-Yrkkö et al., 2021).

Figure 22. In the Delphi survey, respondents were asked to evaluate the following statement: *"In the future, Finland will respond to the increase of trade protectionism by supporting its own production and industry with stronger public funding."*



1=not at all likely, 5=very likely

In the open-ended answers, the respondents for example:

"Not desirable, but if the EU turns in this direction, then we must react."

"The Finnish line has, for too long, been to defend "free" and rules-based trade. In that regard, Finland may not necessarily change very quickly. In an ideal situation, supporting production is not desirable, but assuming the rise of protectionism, it is. At the same time, it opens up an opportunity to steer production strategically, for example to the green transition, which is positive."

5.4 Labour policy: coordination and supply side reforms

The recent decades have seen a gradual deterioration of centralised incomes policy as the major employer organizations - especially the Confederation of Finnish Industries - have actively distanced themselves from centralized bargaining to create space for a more decentralized approach. Individual labour unions and their employer counterparts play a leading role in wage-setting. Such a development has fueled a debate regarding the future of the Finnish wage-setting model. As it stands, the business and labour unions representing Finnish export industries aim to strike deals that would effectively set the roof for wage increases for other industries and the public sector, too.

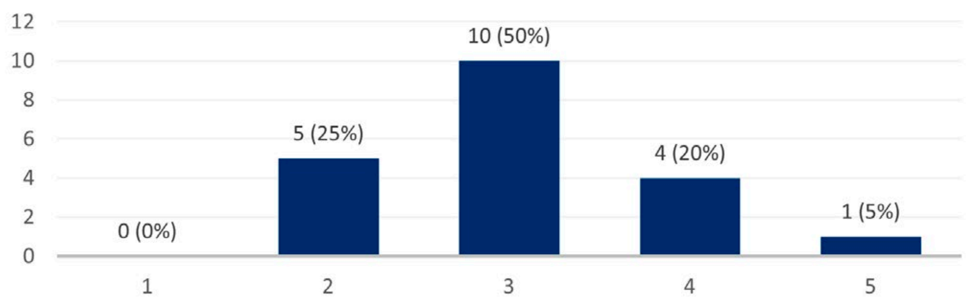
Amidst rising inflation, caused partly by the Ukraine war and soaring energy prices, Finland has experienced strikes and other forms of industrial action. This has been, in part, due to the weaknesses of the current wage-bargaining system that lacks institutionalized mechanisms for coordination. A wholesale return to the former system of centralised incomes policy seems unlikely as employers have detached themselves from the system. There is no pressure from labour unions to return to large-scale incomes policy settlements either.

However, this is not to say that developing the current system would be out of the question. On the contrary, strengthening coordination would decrease turbulence in the labour market. Amid inflationary pressures and a turbulent economic environment prone to shocks, developing mechanisms of coordination would help Finland to become more resilient.

One could, for example, examine the possibilities to foster trust in the legitimacy and impartial nature of the National Counciliator (Ministry of Economic Affairs and Employment). Second, issues regarding supply-side labor policies must be taken into account too. Various sectors of the economy - such as health care services - are suffering from an acute shortage of professional staff (Ministry of Economic Affairs and Employment, 2022). Low wages and difficult working conditions are a major part of the problem and this should be tackled through collective bargaining and providing sufficient resources to the newly-launched wellbeing services counties. However, supply side reforms are needed too. For example, making it easier to combine unemployment benefits with adult education could help in professional relocations. Investments in adult education and other forms of reskilling are needed. Further developing the intermediate labour market could support the ability of people with partial work ability to gain employment. Addressing physical illnesses and mental health issues in a proactive and preventive manner would ease the pressure on public finances and increase the supply of labour. Increasingly, people who must resort to disability pensions are under 60 years old. Immigration is, no doubt, part of the policy tool kit to address the problems caused by an ageing population and a growing demand for welfare services.

An active labour market policy approach would put an emphasis on re-education, public employment services and incentives that would make it easier for jobseekers to move into trades where labour is needed. Labour market organizations could, potentially, play a part in ambitious education policy that would provide jobseekers with skills necessary in the green transition. No doubt, immigration is needed too. According to Etla Economic Research, a yearly net migration of 44 000 people is needed to stabilise Finnish demographics (Alho et al., 2023). This would mark a significant increase in migration. In recent years, net migration has hovered around 15 000 people (Statistics Finland, 2023b). While increasing immigration is essential for the Finnish economy and society, exploitation of immigrants in the Finnish labour market should also be addressed. Finnish legislation should be brought up to date to deal with, for example, cases where immigrant workers are getting underpaid (see SAK, 2022). Moreover, among immigrants, the employment rate is often lower than within native Finns (Saukkonen, 2022). An increase in the employment rate of immigrants would add to the supply of labour and work to improve public finances.

Figure 23. In the Delphi survey, respondents were asked to evaluate the following statement: ″*Finland's yearly net migration rate (lately +15 000 people per year) has grown to at least +30 000 people per year by 2032*.″ On a scale of 1–5, where one was ″not at all likely″ and five was ″very likely″, the answers were split:



However, the respondent agreed more on the desirability of the development, with 14 out of 20 rating it ″4″ or ″5″ on a scale of 1–5, where one was ″not at all desirable″ and five was ″very desirable″.

The open-ended answers illustrated a variety of views on this:

″Immigration is not a solution to permanent economic deficit, neither in practice nor ethically.″

″Finland is unlikely to attract people here more or in a better way than other countries, and the political climate does not seem to support this.″

What could the growing role of the state mean for economic growth, taxation and income disparities?

When considering the changing role of the state in the economy, a justified question is what are its impacts on economic growth, taxation and income disparities? As the following text aims to show, there are now umambiguous anwers to these interrogations.

If the role of the state increases, will this have a negative impact on economic growth? Or is it possible to think that a greater role for the state in the economy, for example as an investor, will actually accelerate economic growth? Moreover, it is asked if a greater role for the state in the economy will inevitably mean higher taxation and hence possibly less private economic activity. Furthermore, in recent years also the issue of income and wealth disparities has become a prevalent political question. These three issues – the changing role of the state and its impact on the economic growth, taxation and income disparities – are at many times linked to each other.

The growing role of the state in the economy and economic governance can manifest itself in many different ways. It is therefore impossible to give an unambiguous answer to the question of what a change in the role of the state means for taxation, income disparities or economic growth. In addition to the content and articulation of the state change, this is also influenced by the circumstances in which the state change takes place, which are not exhaustively defined by the state change itself.

For example, in the current context of polycrisis, it is possible to imagine situations in which the state (government) is forced to take measures that limit economic growth and lead to increased taxation. On the other hand, other equally necessary measures – for example from the perspective of the ecological crisis – may be such that they create conditions for increased economic activity and reduction of tax burden in certain areas of the economy. Income inequality and changes in it are also directly associated to these developments.

Take, for example, a situation in which the Finnish society and state begins to respond simultaneously to the major societal challenges arising from the change pressures identified in this study. At the same time it would be necessary to implement the energy transition, respond to the increasingly complex geopolitical situation, fight climate change and the biodiversity loss, create a new industrial base, find new markets for the commodities produced in Finland and find solutions to the problems of the dependency ratio following from ageing population.

Addressing such a combination of challenges simultaneously means that the state should be able to redirect economic resources from one place to another, upscale new types of industry and socio-technic systems, and correspondingly dismantling old societal structures that time has left behind. What is needed in practice is a huge investment project that is likely to lead to a wide range of practical challenges. Changing the resource base creates bottlenecks, too much aggregate demand from time to time and different kinds of adjustment needs that lead to concrete economic problems: unemployment, inflation and resource under-utilisation. This happens despite the fact that, in the longer term, the investment project is likely to be a growth-boosting project.

Indeed, when in the given context the state gets a greater role in the economy, the result can be both slowing and accelerating economic growth, depending on the time span that we are looking at. Similarly, taxation is needed to guide and to support such an investment project in so many ways and at so many different stages of the project that sometimes taxation is likely to be tightened and when circumstances change taxes may even autonomously become lower. At some point the income disparities may be vanishing but at some other there would be a lot of pressure for increase of economic inequality.

The aim of the preceding examples has been to show that the nature of state change, but also the wider social context, matters in terms of what will happen to economic growth, income inequality and taxation in the future if and when the role of the state in society changes. If policy objectives are set, for example, for a particular economic growth rate, decreasing of income inequality or for a particular tax rate, it may be necessary to be flexible in terms of timing when trying to achieve these objectives. In an era of polycrisis, surprises are bound to occur and managed state change must also be flexible - including in terms of its objectives.

5.5 Summary: an active state does well in a decade of uncertainties

A brief investigation into the various policy areas of economic policy shows that the long-term global change pressures have a potentially foundational impact on how economic policy is conducted in the 2020's. Global changes, namely the required responses to climate change and new geopolitical constellations, pose a significant challenge on the established premises of economic policy. This has at least two distinctive implications for the role of the state. First, economic policy based on the premise of an enabling state (e.g. an idea that the state shouldn't intervene significantly with, for instance, markets) (Elvidge 2012) does not optimally open opportunities for responding to the changes pressures such as climate change. Second, there are growing examples of governments across the world already showcasing new types of policy responses, and as such paving a way to an economic environment in which states take new types of roles.

No new, coherent set of responses for changes in the premises of economic policy, fit for the challenges we are facing, have yet emerged. If nothing else, the on-going decade seems riddled with high levels of uncertainty. Questions, such as 'how strong a role will the EU take as steering industrial investments across its nation states and as a standalone geopolitical actor', 'how persistent will the high-inflationary environment be and what will be its ripple effects on green transition investments', and 'how will the rising geopolitical tensions – namely between the US and China – play out and translate into a new trading regime', are simultaneously critical for the appropriate economic policy responses of Finland and highly uncertain.

Yet, some learnings can be distilled from the uncertainty. First, based on the above analysis, Finland as a nation state is rather well equipped to emerge as a relative winner from the transition, and there is no reason to consider Finland adrift in the larger global shifts. While Finland is a small nation with only limited leverage on global economic regimes, through a well considered and active approach to economic policy within its own country, within the EU, and within the globe (both through and beyond the EU), Finland has the potential to both steer discussions and be adaptive when new economic policy premises become visible.

Therefore, it seems clear that the economic issues and uncertainties Finland faces requires an active state. Without an active state, there is a clear risk of a future where our larger trading partners (e.g., Germany and France within the EU and the US and China beyond Europe) take decisive stances on how they support their respective industries and small countries such as Finland remain purely reactive to new rules and practices formed. This will lead to a hard-to-manoeuvre business environment for Finnish companies and industries.

Second, the above assessment shows that there are clear needs to create mechanisms of cohesion of economic policy. This seems true across the policy areas visited. Within industrial and labor policy, it is critical to maintain a clear, shared understanding of the direction of a (green) industrial transition, and what investments and reskilling efforts they require to succeed. For a successful Finnish trade policy, creating alignment with key trading partners and international forums remains increasingly important. Within the context of fiscal and monetary policy, ensuring coherent policy responses across the EU can at best guarantee a strong investment environment required. More importantly, there is a need to build cohesion between policy areas to create an integrated economic policy with potential to actually both respond to and steer the global economic changes happening through the next decade.

Third, economic policy will be a critical policy area to manoeuvre Finland and its citizens through the uncertainties described in chapter 3. As highlighted above, the uncertain economic environment poses opportunities but also risks for maintaining the level of welfare in Finland. Further, fairly divergent policy responses throughout the globe show that no clear blueprint for an appropriate economic policy can be identified. Economic policy aiming at manoeuvring the large-scale changes happening must be fairly adaptive and iterative. Therefore linking Finnish economic policy to broader, overarching "strategic policy goals" can show a way forward. On one hand, strategic policy goals link economic policy to broader policy objectives and highlight the linkage to the overall wellbeing of Finnish society. On the other hand, a broad level policy goal gives the room to adapt and iterate the exact policy mix needed in new and rapidly changing global circumstances. As such, economic policy aligned with strategic policy goals can be seen as an appropriate compass to navigate economic and societal uncertainties.

How can this be successfully translated into state action in Finland? Respecting the requirements of an active state while embedding strategic policy goals into Finnish economic policy, hints towards an overall need to emphasise functions of actively steering the Finnish economy. Further, we argue that Finland should highlight and develop functions of an orchestrating state – a state that actively steers its national economy through coordination and collaboration among both public and private actors in Finland and beyond (see also Chapter 2.).

Orchestration is closely connected to the notion of coordination. There's a long continuation of a debate on which coordination mechanisms are the most effective in regards to economic development. While the notion of an orchestrating state implies a more active steering role for the state, it also tries to capture the nuance needed to fit the context of where societies are today. No state is able to know what exactly works, for instance, in how to successfully ramp up green hydrogen industries. Yet, leaving this only for the markets leaves a risk of not identifying fundamental bottleneck (e.g. gaps in infrastructure) early enough.

There are reasons why added emphasis of the state’s orchestrating functions would be beneficial in light of the current economic environment. First, compared to more traditional Finnish economic policy stances of an enabling or stabilizing state, an orchestrating state takes an active role in making sense of uncertainty and trying new types of policy responses to advance in fluctuating circumstances while ensuring that policy outcomes are ultimately accountable to the broader society. This is done by aligning different actors and resources towards a common objective rather than relying on a traditional hierarchical structure of commanding or directly having its own public companies as primary market actors. By doing so, the orchestrating state suggests a governance approach that is different both from the purely “top-down” approach of the commanding state and the purely “bottom-up” approach of the enabling state. Relative to the former approach, it prompts and supports the autonomous initiative of private stakeholders to allow for experimentation and innovation to flourish within and across markets. Yet, relative to the latter, it also ensures that private initiative feeds into the solution of democratically chosen societal challenges. As a result, the orchestrating state aims to navigate the ‘decade of uncertainty’ by achieving a balance between equally relevant needs for top-down coordination and bottom-up experimentation.

Such functions within the state also serve the purpose of creating alignment and agreement among key economic stakeholders. Taking e.g., private companies along in identifying appropriate routes towards the democratically steered economic goal ensures the acceptability of and alignment with the stated policy goals increasing the amount of actors and resources leveraged towards these goals. This is particularly important in the current situation, where (as stated in chapter 3) demographic changes pose an increasing pressure on state budgets in Finland. Orchestrating means that not all costs of transition investment need to be public, but the state can create incentives to attract other forms of financing that feeds into the stated goals. In some policy areas (such as industrial policy), it is likely that increased public investments are needed, and recalibrating the fiscal framework (and its timeframe) to be adaptive in a transformational period can be beneficial. But being able to steer action and resources beyond the states direct own agencies and institutions remains an evermore important function of coordination.

Complementing current economic policy with an orchestrating role for the Finnish state can be seen as beneficial in order to appropriately grasp the contemporary global changes happening now and most likely exacerbating through the decade. This, however, requires developing some key capabilities of the state further. The next chapter looks at these capabilities and how developing them would happen in practice for the Finnish government.

6 Core capabilities for an orchestrating state

An orchestrating state conducts its economic policy in a manner where it closely works with its key stakeholders to achieve explicitly stated goals. While this can be seen as different from more traditional policy stances of an enabling or stabilising state within economic policy, many orchestrating roles are already taken by the Finnish state. The Finnish state, as an example, has traditionally been active in orchestrating action through research and innovation agencies, or incentivizing collective labour agreements through taxation. Chapter 6 looks at what kind of skills and capabilities would a growing role require and how could they develop. In other words, the following chapter tries to identify some areas of needed increased focus that would unlock the state's ability to orchestrate the Finnish economy towards strategic policy goals within an uncertain global environment.

Before considering needed capabilities within Finland, it's important to note three things. First, an orchestrating role within economic policy does not radically alter key economic policy mechanisms (e.g., regulation, taxation, subsidies and public goods). However, it aims to govern them in a more integrated approach by identifying strategic policy goals that can help the country navigate a highly uncertain environment and thus sustain collective welfare. To do so, a more holistic perspective on the design and implementation of economic policy mechanisms is needed: one that is capable of identifying i) how the effective orchestration of actors and resources can be achieved; and ii) what capabilities are needed in order for the state to do so in the face of considerable uncertainty.

Second, there are broad and complex discussions related to the direction of the Finnish economy. Most recently, for example, the Future of the Finnish economy project (Työ- ja elinkeintoministeriö, 2023) led by Sixten Korkman identified different actions to increase productivity and labour input in the Finnish economy. There is a degree of productive overlap between the thinking presented in this report and the Future of the Finnish economy project. Here, the aim is to focus on the needed capabilities of the Finnish state and its public administration to be able to orchestrate an economic transition and we do not thoroughly cover capabilities needed in the economy or society as a whole.

Third, the Finnish state is a highly complex constellation of multiple actors: agencies, ministries, units and individuals all with intersecting interests and relationships among them. While the state is a meaningful actor and unit of analysis within this research, it is important to acknowledge that capabilities always need to be embedded in a more specific institutional context (e.g., a ministry, a unit, a local authority or a governance process). While we try to open possible institutional considerations through some examples, it is impossible through this research to exhaustively uncover these institutional settings.

What could then be the capabilities required from an orchestrating Finnish state?

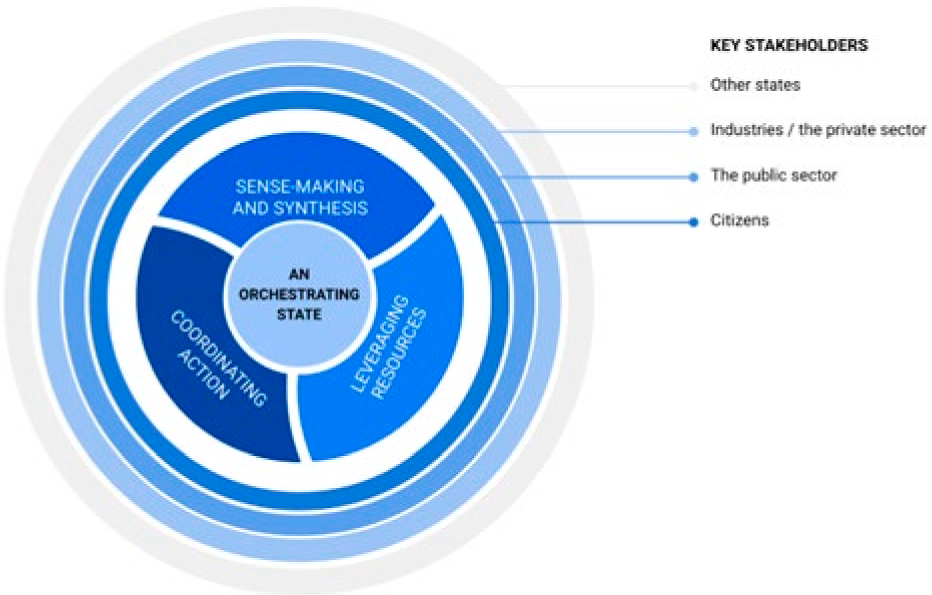
Building on Rainer Kattel's (2022) conceptualisation of dynamic capabilities within the state, we are most interested in dynamic capabilities, i.e., capabilities "that are directed at renewing state capacities" (Kattel, 2022). As such, dynamic capabilities within the state can be seen as critical to maintaining policy delivery capacity in a complex, and rapidly changing environment. Kattel (ibid) identifies three constituent elements for dynamic capabilities: a) sense-making, which refers to a state's capabilities to constantly gather information and evaluate paths forward, b) connecting, which refers to state capabilities to create and lead coalitions of stakeholders, and c) shaping, which refers to state capabilities to discover new action an attract resources towards new initiatives.

To contextualize these insights into the realm of economic policy, we suggest the following capabilities for an orchestrating state:

1. Sensemaking and synthesis.
2. Leveraging resources
3. Coordinating action

These capabilities are elaborated on in following sections, after which we consider some of the required steps to achieve those capabilities.

Figure 24. Dynamic capabilities of an orchestrating state



6.1 Sensemaking and synthesis

As described in chapters 3 and 5, changes in the global geo-economic environment are highly unpredictable: multiple entangled phenomena create interdependencies that can produce unpredictable and indirect effects. For this reason, a key component of smart contemporary economic orchestration is ensuring that actions are based on the best possible information available. This requires taking efforts to understand the multiple developments creating pressure on the economic policy environment. Without thorough and continuous processes of sensemaking and synthesis, economic policy can be disengaged from global changes and developments.

While sensemaking can be usefully seen as gathering information and knowledge on topics such as changes in macroeconomic dynamics, industrial development, and geopolitics, synthesis can best be seen as a mechanism for steering through showing direction. Furthermore, one can identify a productive feedback loop between sensemaking and synthesis in which directionality of synthesis creates new needs for insight, while insights gathered inform the direction communicated. Here, the benefits of including a wide array of both internal (to the state) and external stakeholders in defined processes of sensemaking and synthesis are multiple. First, gathering information on a complex and multilevel economic environment requires a combination of inputs from various and heterogeneous perspectives. Second, including stakeholders is an effective method for disseminating the insights and syntheses created, which in turn contributes to the wider utilization and acceptability of outputs. This ultimately builds trust among stakeholders that is critical for any orchestration effort to be successful.

The actual role of the state in sensemaking and synthesis can take different forms depending on context. The Finnish state already has multiple existing institutions and mechanisms devoted to sensemaking and synthesis among economic policy, and illustrative examples include:

- The Economic Council within the Prime Minister's Office acts as a sensemaking body on the big picture of Finnish economic policy that brings together political decision-makers and key stakeholders
- Strategic research instruments that are used to directly commission research to inform on knowledge gaps identified.
- Governmental programmes. The government programme is, by far, the most comprehensive documentation of a strategic policy goal for economic policy as well. While they can be seen as relatively static (iterated only rarely during governmental terms apart from budgetary allocations), they are a key mechanism for synthesis.

Pathways forward: how to develop the sensemaking and synthesis capabilities of the Finnish state

1. *Developing skills of combining various heterogeneous data into coherent synthesis.*

Creating a coherent and nuanced situational view of the various shifts that have an impact on Finnish economic policy requires strong abilities to integrate various data: evolving understandings of geopolitical realities, global value chains, and national industries' plans can, as an example, be highly complicated. While the state typically has access to, or gathers itself, a wide array of situational insights, combining them and making sense of the whole remains a challenge. This can be done through creating a cross-ministerial synthesis of the global changes in the economic environment as a published preparatory document for the budgetary review process of the government.

6.2 Leveraging resources

A key capability for an orchestrating state is steering resources that are beyond its direct control. Without ensuring resources for economic transitions, orchestration becomes an empty promise. This is particularly true in light of the green transition: in Finland alone, the estimated investment needed for the country to reach climate goals is 242 billion euros worth of private and public investments (excluding investments into biodiversity) (Valtioneuvosto, 2022b). Such a scale of investments is unlikely to be mobilized exclusively through public investments, but a hands-off approach of waiting for private investment to be attracted to green solutions has proven too slow. Therefore added focus on capabilities of leveraging resources towards economic transitions can be seen as key.

When the state wants to attract resources into areas in line with strategic policy goals without being able to directly mandate resource-use, the state needs to develop its skills to design effective incentives. Incentive design can take the form of e.g., public-private risk-sharing for transition initiatives, building financial rewards for wanted resource allocation (such as tax breaks for reskilling initiatives), or ensuring international markets for new solutions developed by the private sector. An integral part of incentive design is building continuously adaptive incentives based on effective incentive regimes. Here, integrating Finnish policy responses to EU level initiatives is critical as the European Commission can be seen as a key avenue for investment, and monetary policy conditions that directly influence investment conditions are designed through the European Central Bank.

Finally, while many of the resources required for transitions are financial (i.e. money), it is crucial to expand the notion of resources to include non-financial resources such as human capital. Therefore identifying both needed and available resources becomes a key skill for the state and constantly forming a cohesive view of resource needs and assets becomes critical for a well-functioning orchestrating state.

Leveraging resources can naturally happen on multiple levels of economic policy from the micro to the macro. There are existing practices and policy initiatives in place that can be credibly seen as leveraging resources towards economic transitions:

- The Finnish Climate Fund. The Climate Fund acts as a publicly owned investor into climate solutions. It never invests the full amount and never gives out grants with the idea of attracting private investors into climate solutions where markets are not adequately mature.
- Electric vehicle subsidies. The state has designed mutually supportive subsidies for electric vehicle purchasing and building the charging infrastructure needed with the overall objective of rapid electrification of the

Finnish vehicle fleet. Most of the investment is, nevertheless, private, with only a fraction of investments coming from the state.

- Long-term R&D plan. The Finnish parliament published a long-term R&D plan (built through parliamentary consensus) to create clarity on Finnish R&D policy in coming years. While the plan commits to an incremental annual increase in public R&D funding, at its core is to leverage private resources towards R&D. In addition, the plan was developed tightly with key stakeholders to create commitment to stated targets.

Pathways forward: how to develop capabilities for leveraging resources of the Finnish state

2. *Creating processes for experimenting with incentive design*

The Finnish government has embedded experimentative policymaking into its policymaking processes. This, however, is not explicitly tailored for economic policy or incentive design. Integrating experimentative policymaking into incentive design would expedite learnings of appropriate and effective incentives for leveraging resources for economic transitions.

3. *Building mechanisms for integrating a long-term assessment of budgetary balance to public investments*

Leveraging resources is based on the premise that the state can steer resources beyond its centralised control through intelligent policy. This does not mean that public investment is not needed where other investment is challenging to attract. Considering mechanisms for long-term or anticipatory public budgeting in such cases (such as already done in military investments) can make sense in the long-run.

6.3 Coordinating action

The overall objective of orchestration of economic policy is to steer markets towards strategic (democratically defined) policy goals. Consequently, ensuring appropriate actions towards these stated goals is a critical capability of the state. Simply ensuring resources and high-level direction is typically not enough for ensuring economic transitions, but a more hands-on and high-resolution approach to ensure synchronised action among stakeholders involved is needed. This capability is again highly contextual: while in some contexts the state needs to actively take a coordinator role within the context in question, in other contexts it is possible for a non-state actor to act as the coordinator. Nevertheless the state needs to ensure that coordination happens irrespective of the actual entity responsible for it.

Two key skills can be associated with coordination capability. First, stakeholder management is critical to ensure that actors involved are both aligned and work in collaboration where needed. Identifying the appropriate stakeholders that need to be involved can be seen as primarily the role of the coordinating body. Subsequently, coordination involves stakeholder management which includes creating consensus among stakeholders and mediating possible conflicts involved. This is easy to see in complex, infrastructure-heavy industrial transition projects, but the role is not limited to industrial policy. More importantly, coordinating action also refers to coordinating policy coherence among economic policy areas to ensure the efficient implementation of stated policy goals.

Second, coordinating action requires skills for advanced policy delivery. Maintaining a coherent understanding of bottlenecks for policy delivery (and addressing them) and creating feedback loops are critical tasks for delivery. Mediating and translating the learnings, successes, and failures of economic policy across different scales and sectors remains a key task for an orchestrating state: economic policy happens through the local, regional, national, and international levels.

There are well-functioning mechanisms for coordinating economic policy and its delivery already in place in Finland:

- Regional councils. Regional councils play a key role in coordinating economic policy delivery within regions in Finland.
- Economic policy coordinator within the Ministry of Finance. While a single post, there is a newly established dedicated resource among the MoF to ensure coordination of economic policy and its delivery.
- Industrial low-carbon roadmaps. The Ministry of Economic Affairs and Employment has been responsible for initiating various sectoral, low-carbon roadmaps to provide clarity on the scale of changes needed to achieve

Finland's objective of being carbon-neutral in 2035 (Ministry of Economic Affairs and Employment, 2021). These are prepared in cooperations with industries, and are meant to act as tools for coordinating among key stakeholders across economic policy areas.

Pathways forward: how to develop capabilities for coordinating action of the Finnish state

4. *Strengthening ability to make decisions and deliver on complex, cross-functional policy issues (e.g., through missions-approach).*

Solving challenges in which the possible ways forward are uncertain and have possible uncertain consequences is hard. Innovative ways of ensuring decision-making and action are needed. These can be e.g., ways for building alignment among stakeholders, or practices for learning and iterating policy choices based on gathered experiences.

As illuminated strongest through assessing coordinating capabilities, the three capabilities defined can only be meaningfully seen as strongly interrelated, and as such, they cannot be understood without highlighting the relationship between the three capabilities: while sensemaking creates direction and provides an iterative feedback mechanism, resources are critical to be leveraged for meaningful coordinated action to happen.

6.4 For Finland to lead, public administration needs new capacities

Throughout the report, we have stated that Finland has the potential to do well in the economic transition brought about by global change pressures. For this potential to be realised, however, we need an active and capable state able to orchestrate economic transitions, which is not a simple task in a highly volatile environment and extremely tight timeframe.

The notion of orchestration is based on the assumption that not all of the required capabilities for an economic transition are needed to be within the Finnish state. This is important especially for a small country like Finland as it is not feasible to exponentially expand the resources of the state for e.g., sensemaking or coordination, and leveraging capabilities from other societal stakeholders efficiently is key for successful orchestration. Yet, not all capabilities can be externalised to non-state actors (Mazzucato and Collington, 2023): without core capabilities required for orchestration within the public administration, the Finnish state is at risk of losing credibility and accountability. This, simply put, requires strengthening the capacities of the state for orchestration.

How can we ensure that the Finnish state and its administration is up for the challenge?

First, it is clear that state capacities need to reflect new roles of orchestration, and this requires resources. Finnish public administration has been streamlined through the past decades (Kantola and Kananen, 2013), and in its current form it is tuned to fill enabling and stabilising roles: introducing new roles and accountabilities requires dedicated resources for sensemaking and synthesis, incentive design, and coordinating action. While this requires public funds, it is important to note that the scale of costs is confined and can be more than compensated by public sector productivity increases or cost-savings from public procurement reform (see e.g., Valtiovarainministeriö, 2023b or Työ- ja elinkeinoministeriö, 2023). In addition, Finland as a small nation has a benefit of scale particularly in coordination (compared with larger countries) as institutions for coordination are already in place and trust between key stakeholders is already stronger due to relative proximity.

Second, ensuring the appropriate competences within public administration in Finland is critical to deliver on an orchestrating model for economic steering. Finns have the best opportunity to develop their skills at work (CEDEFOP, 2021). This clear vantage point should be captured to develop skills for orchestration as well. Building a competence development programme on skills derived from orchestration capabilities could be an effective way of increasing competencies to orchestrate economic transition within Finland. In addition to providing tangible skills, such competence development would provide two additional benefits: on one hand, well-communicated new roles and responsibilities of the state can help in attracting new talent into the government. On the other, competence development is a useful tool for shifting the mindsets of civil servants, and creating a stronger understanding and belief in the government's ability to appropriately orchestrate economic transitions. Communicating a purpose beyond enabling economic action to civil servants is key for orchestration to succeed.

Finally, it is clear that strengthening the capacities of the Finnish state to orchestrate economic transitions does not come without risks. Being accountable for orchestration without sliding into too strong a state direction is a challenging balancing act. In addition, strengthening state capacities without ensuring appropriate democratic accountability of the direction of steering risks calcifying a technocratic governance model. Both risks are mitigated by doubling down on the openness of orchestration: orchestration relies on democratic accountability through political ownership and heavy stakeholder involvement throughout. Ultimately, the risk of inaction is that Finland misses the opportunity unlocked by current global change pressures. The Finnish state as a whole needs to take accountability of orchestrating a Finnish economy fit for the future.

Appendix 1: Delphi-survey for Finnish experts - methodology

As part of the project, a Delphi survey was conducted. Delphi surveys consist of several rounds – in this case, two – studying the views of selected individuals who hold expertise relevant to the study The purpose of conducting several rounds is to gain structural anonymous insight on the views of the selected individuals, and to allow for reflection and a level of dialogue among the experts. In this research project, the first round of the survey was mainly based on the analysis of global pressures for change, produced by the OECD. The second round built on the answers from the first round, and focused more on policy and the Finnish context.

The Delphi survey was sent to 39 Finnish experts. They were identified based on relevant expertise in Finnish macroeconomic dynamics, as well as the identified global change pressures. Approximately half of the chosen panellists were economists, and approximately half represented other fields, such as other social sciences and environmental science. In total, twenty respondents submitted answers for the first round of the survey, and thirteen respondents for the second round.

To ensure an appropriate variety of views, experts were invited from a wide range of relevant organisations. These included public and private research institutes, banks, universities, and interest groups. Some of the organisations included:

- the VATT Institute for Economic Research (Valtion taloudellinen tutkimuskeskus),
- ETLA Economic Research (Elinkeinoelämän tutkimuslaitos)
- the Labour Institute for Economic Research LABORE
- the Finnish Institute for Health and Welfare (Terveyden ja hyvinvoinnin laitos),
- the Finnish Institute for International Affairs (Ulkopoliittinen instituutti)
- the University of Helsinki
- the University of Turku, and
- the Finnish Environment Institute (Suomen ympäristökeskus).

The final list of panellists was also evaluated based on gender balance.

The Delphi survey was presented as future statements on global change pressures and the state's role in steering the economy. During both rounds, the respondents were asked to evaluate the likelihood and desirability of each statement on a scale of 1-5, where one was "*not at all likely" or "not at all desirable", and five was "very likely*" or "*very desirable"*. In addition, they were asked to elaborate on their answers with open-ended questions following each statement. The respondents were also given an opportunity to only evaluate some of the statements and to not evaluate the ones they were less certain of. Selected responses have been integrated into the report as graphs and open-ended answers.

SOURCES

Ajala, A. and Lemola, T. (2023) *Minne menet tutkimus- ja innovaatiopolitiikka?* Teollisuuden palkansaajat TP ry. Available at: https://www.tpry.fi/uutisartikkelit/minne-menet-tutkimus-ja-innovaatiopolitiikka.html (Accessed: March 31, 2023).

Ali-Yrkkö, J. et al. (2021) *Yritysten T&K-toiminta ja T&K-investointien kasvattamisen edellytykset*. Valtioneuvoston kanslia. Available at: https://julkaisut.valtioneuvosto.fi/handle/10024/163266 (Accessed: March 31, 2023).

Alho, J. et al. (2023) *Maahanmuutto ja työvoiman riittävyys – taloudellisten vaikutusten arviointia*. rep. ETLA. Available at: https://www.etla.fi/julkaisut/raportit/maahanmuutto-ja-tyovoiman-riittavyys-taloudellisten-vaikutusten-arviointia/ (Accessed: March 31, 2023).

Allianz (2023) *A Faustian bargain: Europe's answers to the US IRA*. Available at: https://www.allianz.com/en/economic_research/publications/specials_fmo/inflation-reduction-act.html (Accessed: March 31, 2023).

Antràs, P. (2020) *De-globalisation? Global Value Chains in the post-covid-19 age*. National Bureau of Economic Research. Available at: https://www.nber.org/papers/w28115 (Accessed: March 30, 2023).

Atlantic Council (2022) *Transcript: US Treasury secretary Janet Yellen on the next steps for Russia sanctions and 'friend-shoring' supply chains*. Available at: https://www.atlanticcouncil.org/news/transcripts/transcript-us-treasury-secretary-janet-yellen-on-the-next-steps-for-russia-sanctions-and-friend-shoring-supply-chains/ (Accessed: March 30, 2023).

Baldwin, R. (2020) *The globotics upheaval: Globalisation, Robotics and the future of work*. London: Orion Publishing Group.

Biebricher, T. (2018) *Political theory of neoliberalism*. Stanford: Stanford University Press.

Bradford, A. (2021) The Brussels Effect: How the European Union Rules the World. Oxford: Oxford University Press.

Brady, S.R. (2015) "Utilizing and adapting the Delphi method for use in qualitative research," *International Journal of Qualitative Methods*, 14(5), pp. 1–6. Available at: https://doi.org/10.1177/1609406915621381.

CEDEFOP (2021) *European skills index*. Available at: https://www.cedefop.europa.eu/en/tools/european-skills-index?y=2020 (Accessed: March 31, 2023).

Confederation of Finnish Industries (2023) *Ulkomaankauppa*. Available at: https://ek.fi/tutkittua-tietoa/tietoa-suomen-taloudesta/ulkomaankauppa/ (Accessed: March 30, 2023).

Cooper, M. (2017) *Family values: Between neoliberalism and the new social conservatism*. New York: Zone Books.

Cota, J. (2022) *The European Chips Act: A strategy to expand semiconductor production resiliency: Perspectives on Innovation*. CSIS. Available at: https://www.csis.org/blogs/perspectives-innovation/european-chips-act-strategy-expand-semiconductor-production (Accessed: March 31, 2023).

Cox, M. (2017) "The rise of populism and the crisis of globalisation: Brexit, trump and beyond," *Irish Studies in International Affairs*, 28(1), pp. 9–17. Available at: https://doi.org/10.1353/isia.2017.0010.

De Backer, K. and Flaig, D. (2017) "The Future of Global Value Chains: Business as Usual or 'New Normal'?," *OECD Science, Technology and Industry Policy Papers*, pp. 1–58. Available at: https://doi.org/10.1787/d8da8760-en.

De Grauwe, P. (2015) "Design failures in the eurozone: Can they be fixed?," *European Economy. Economic Papers*, 491. Available at: https://doi.org/10.2765/43.

de la Maisonneuve, C. (2014) "The Economic Consequences of ageing: The case of Finland," *OECD Economics Department Working Papers*, No. 1120, pp. 1–35. Available at: https://doi.org/10.1787/5jz2qt1dtnlt-en.

Demos Helsinki (2022) FIMO – *A framework for a Finnish model of mission-oriented innovation policy*. Available at: https://demoshelsinki.fi/referenssit/mission-oriented-innovation-finland/ (Accessed: March 31, 2023).

Doemeland, D. and Inchauste, G. (2016) *A fresh look at the global financial crisis and Poverty Trends in the EU*. World Bank Blogs. Available at: https://blogs.worldbank.org/europeandcentralasia/fresh-look-global-financial-crisis-and-poverty-trends-eu (Accessed: March 31, 2023).

EIA (2023) *Europe was the main destination for U.S. LNG exports in 2022, Today in Energy*. U.S. Energy Information Administration (EIA). Available at: https://www.eia.gov/todayinenergy/detail.php?id=55920 (Accessed: March 31, 2023).

Elvidge, J. (2012) *The Enabling State: A discussion paper*. rep. Carnegie UK Trust. Available at: https://d1ssu070pg2v9i.cloudfront.net/pex/pex_carnegie2021/2012/11/09203847/pub14550116191.pdf (Accessed: March 31, 2023).

European Commission (2020) *Critical Raw Materials for Strategic Technologies and Sectors in the EU: A Foresight Study*. Available at: https://rmis.jrc.ec.europa.eu/uploads/CRMs_for_Strategic_Technologies_and_Sectors_in_the_EU_2020.pdf (Accessed: March 30, 2023).

European Commission (2022) *Key Challenges of our Times - The EU in 2022: Finland*. Available at: https://europa.eu/eurobarometer/surveys/detail/2694 (Accessed: March 30, 2023).

European Commission (2023) Standard Eurobarometer 98. Public opinion in the European Union. Winter 2022 - 2023.

Eurostat (2022a) *Government finance statistics.* Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Government_finance_statistics (Accessed: Match 30, 2023).

Eurostat (2022b) *How much money does your government allocate for R&D?* Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220803-1 (Accessed: April 11, 2023).

Eurostat (2023) *Population structure and ageing, Eurostat Statistics Explained*. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing#Slightly_more_than_three_persons_of_working_age_for_every_person_aged_65_or_over (Accessed: March 30, 2023).

Feingold, S. (2022) *Norway's massive sovereign-wealth fund sets net-zero goals*. World Economic Forum. Available at: https://www.weforum.org/agenda/2022/09/norways-massive-sovereign-wealth-fund-sets-net-zero-goal/ (Accessed: March 30, 2023).

Fleming, S., Hancock, A. and Espinoza, J. (2023) "Can the EU keep up with the US on green subsidies?," *Financial Times*, 1 February. Available at: https://www.ft.com/content/85b55126-e1e6-4b2c-8bb2-753d3cafcbe5 (Accessed: March 29, 2023).

Gaspar, V., Medas, P. and Perrelli, R. (2022) *Riding the Global Debt Rollercoaster*. IMF Blog. Available at: https://www.imf.org/en/Blogs/Articles/2022/12/12/riding-the-global-debt-rollercoaster (Accessed: March 30, 2023).

Gerbaudo, P. (2021) *The great recoil: Politics after populism and pandemic.* London: Verso Books.

Gertz, G. and Evers, M.M. (2020) "Geoeconomic competition: Will state capitalism win?," *The Washington Quarterly*, 43(2), pp. 117–136. Available at: https://doi.org/10.1080/0163660x.2020.1770962.

Harvard Growth Lab (2020) *Country & Product Complexity Rankings*. The Atlas of Economic Complexity. Available at: https://atlas.cid.harvard.edu/rankings (Accessed: March 31, 2023).

Harvey, F. (2022) "What are the key outcomes of Cop27 climate summit?," *The Guardian*, 20 November. Available at: https://www.theguardian.com/environment/2022/nov/20/cop27-climate-summit-egypt-key-outcomes (Accessed: April 5, 2023).

IEA (2021) *World Energy Outlook 2021*. Available at: https://iea.blob.core.windows.net/assets/4ed140c1-c3f3-4fd9-acae-789a4e14a23c/WorldEnergyOutlook2021.pdf (Accessed: April 4, 2023).

IEA (2022) *World Energy Employment*. Available at: https://www.iea.org/reports/world-energy-employment (Accessed: March 30, 2023).

IPCC (2022) "Summary for Policymakers," in H.-O. Pörtner et al. (ed.) *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Cambridge, New York: Cambridge University Press (Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change), pp. 3–33. Available at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (Accessed April 4, 2023).

Julkunen, R. (2001) *Suunnanmuutos: 1990-Luvun Sosiaalipoliittinen Reformi Suomessa*. Tampere: Vastapaino.

Jääskeläinen, J. (2001) *Klusteri tieteen ja politiikan välissä: Teollisuuspolitiikasta yhteiskuntapolitiikkaan*. Helsinki: Taloustieto.

Kantola, A. (2002) *Markkinakuri ja managerivalta: Poliittinen hallinta Suomen 1990-luvun talouskriisissä*. Helsinki: Loki-kirjat.

Kantola, A. and Kananen, J. (2013) "Seize the moment: Financial crisis and the making of the Finnish Competition State," *New Political Economy*, 18(6), pp. 811–826. Available at: https://doi.org/10.1080/13563467.2012.753044.

Kattel, R. (2022) "Dynamic capabilities of the public sector: Towards a new synthesis," *UCL Institute for Innovation and Public Purpose, Working Paper Series*, 07, pp. 1–34. Available at: https://doi.org/10.38116/dp267.

Kettunen, P. (2008) *Globalisaatio ja Kansallinen me: Kansallisen Katseen Historiallinen Kritiikki*. Tampere: Vastapaino.

Kiander, J. (2001) "1990-luvun talouskriisi. Suomen Akatemian tutkimusohjelma: Laman opetukset. Suomen 1990-luvun kriisin syyt ja seuraukset," *VATT-julkaisuja*, 27(5), pp. 1–143.

Kim, K. (2021) "Locating new 'state capitalism' in advanced economies: An international comparison of government ownership in economic entities," *Contemporary Politics*, 28(3), pp. 285–305. Available at: https://doi.org/10.1080/13569775.2021.2022335.

KOF Swiss Economic Institute (2023) *KOF globalisation index*. ETH Zürich. Available at: https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html (Accessed: March 31, 2023).

Lankinen, V. and Järvensivu, P. (2022) "Missiolähtöisyys Suomessa – katsaus nykytilaan, haasteisiin ja mahdollisuuksiin," *Politiikasta*, 2 September. Available at: https://politiikasta.fi/missiolahtoisyys-suomessa-katsaus-nykytilaan-haasteisiin-ja-mahdollisuuksiin/ (Accessed: March 31, 2023).

Lähdesmäki, S. (2020) *Vaikuttiko yksityistäminen valtion yritysten suorituskykyyn?* Työn ja talouden tutkimus LABORE. Available at: https://labore.fi/t&y/vaikuttiko-yksityistaminen-valtion-yritysten-suorituskykyyn/ (Accessed: March 30, 2023).

Maliranta, M. (2022) *Tuottavuuskasvun tekijät ja näkymät*. Työn ja talouden tutkimus LABORE. Available at: https://labore.fi/t&y/tuottavuuskasvun-tekijat-ja-nakymat/ (Accessed: March 31, 2023).

Martin, M. and Islar, M. (2020) "The 'end of the world' vs. the 'end of the month': Understanding social resistance to sustainability transition agendas, a lesson from the yellow vests in France," *Sustainability Science*, 16(2), pp. 601–614. Available at: https://doi.org/10.1007/s11625-020-00877-9.

Matthews, D. (2023) "Proposed European Sovereignty Fund faces opposition from meps," *Science Business*, 9 February. Available at: https://sciencebusiness.net/news/Sovereignty/proposed-european-sovereignty-fund-faces-opposition-meps (Accessed: March 31, 2023).

Mazzucato, M. (2018) "Mission-oriented innovation policies: Challenges and opportunities," *Industrial and Corporate Change*, 27(5), pp. 803–815. Available at: https://doi.org/10.1093/icc/dty034.

Mazzucato, M. (2021) *Mission economy: A moonshot guide to changing capitalism*. New York: Harper Business.

Mazzucato, M. and Collington, R. (2023) *The big con: How the consulting industry weakens our businesses, infantilizes our governments and warps our economies*. London: Allen Lane.

McKinsey & Company (2022) *Economic conditions outlook during turbulent times, December 2022*. Available at: https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/economic-conditions-outlook-2022#section-header-Dec (Accessed: March 30, 2023).

Ministry of Economic Affairs and Employment (no date) *National Conciliator's Office*. Available at: https://tem.fi/en/national-conciliator-s-office (Accessed: March 31, 2023).

Ministry of Economic Affairs and Employment (2021) *Summary of sector-specific low-carbon roadmaps*. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162851/TEM_2021_9.pdf?sequence=1&isAllowed=y (Accessed: April 5, 2023).

Ministry of Economic Affairs and Employment (2022) *Occupational barometer: Number of occupations suffering from labour shortage has risen to pre-covid level*. Available at: https://tem.fi/en/-/occupational-barometer-number-of-occupations-suffering-from-labour-shortage-has-risen-to-pre-covid-level (Accessed: March 30, 2023).

Moisio, S. (2012) *Valtio, alue, politiikka: Suomen tilasuhteiden sääntely toisesta maailmansodasta nykypäivään*. Tampere: Vastapaino.

Mudge, S.L. (2018) *Leftism reinvented: Western parties from socialism to Neoliberalism*. Cambridge: Harvard University Press.

NAEC (2020) *A systemic resilience approach to dealing with covid-19 and future shocks, OECD*. Available at: https://www.oecd.org/coronavirus/policy-responses/a-systemic-resilience-approach-to-dealing-with-covid-19and-future-shocks-36a5bdfb/ (Accessed: March 30, 2023).

The Nobel Prize (2021) *The Nobel Prize in physics 2021: Giorgio Parisi Facts*. Available at: https://www.nobelprize.org/prizes/physics/2021/parisi/facts/ (Accessed: March 31, 2023).

Norges Bank Investment Management (2023) *The fund*. Available at: https://www.nbim.no/en/ (Accessed: April 11, 2023).

Odendahl, C. and Baccianti, C. (2022) *How to make EU Fiscal Rules compatible with net zero*. Centre for European Reform. Available at: https://www.cer.eu/publications/archive/policy-brief/2022/eu-fiscal-rules-net-zero (Accessed: March 31, 2023).

OECD (2015) *Workers receiving employment-based training as a share of total employment: Jobs indicators*. OECD Going Digital Toolkit. Available at: https://goingdigital.oecd.org/indicator/44 (Accessed: March 31, 2023).

OECD (2019) OECD *Skills strategy 2019*. Available at: https://doi.org/10.1787/9789264313835-en (Accessed: March 30, 2023).

OECD (2021) *Government at a Glance 2021*. OECD Publishing. Available at: https://doi.org/10.1787/1c258f55-en (Accessed: April 11, 2023).

OECD (2022) OECD *Economic Outlook, volume 2022, issue 2*. Paris: OECD Publishing.

OECD (2023) *The rise and fall of public social spending with the COVID-19 pandemic, Social Expenditure (SOCX) Update 2023*. Available at: https://www.oecd.org/els/soc/OECD2023-Social-Expenditure-SOCX-Update-Rise-and-fall.pdf (Accessed: March 30, 2023).

OECD (2023) *What is the Future of Work, OECD*. Available at: https://www.oecd.org/future-of-work/#what-is-the-future-of-work (Accessed: March 30, 2023).

Ortiz-Ospina, E. and Roser, M. (2016) *Government spending*. Our World in Data. Available at: https://ourworldindata.org/government-spending (Accessed: April 11, 2023).

Pekkarinen, J. (1989) "Keynesianism and the Scandinavian Models of Economic Policy," in P.A. Hall (ed.) *The Political Power of Economic Ideas. Keynesianism across Nations*. Princetown: Princetown University Press, pp. 311–347.

Pekkarinen, J. and Vartiainen, J. (1993) *Suomen Talouspolitiikan pitkä linja*. Helsinki: WSOY.

Polanyi, K. (1944) *The Great Transformation: The Political and Economic Order of Our Time*. Boston: Beacon Press.

Rahman, M. (2023) "The fiscal debates set to dominate European politics," *POLITICO, 7* February. Available at: https://www.politico.eu/article/eurasia-european-union-ira-the-fiscal-debates-set-to-dominate-european-politics/ (Accessed: March 31, 2023).

Saez, E. (2020) *Striking it Richer: The evolution of top incomes in the United States*. UC Berkeley. Available at: https://eml.berkeley.edu/~saez/saez-UStopincomes-2018.pdf (Accessed: March 31, 2023).

Sajari, P. (2016) "Ekonomistit HS:n laajassa kyselyssä: Euro on epäonnistunut, haitat Suomelle hyötyjä suuremmat," *Helsingin Sanomat*, 30 December. Available at: https://www.hs.fi/talous/art-2000005025886.html (Accessed: March 30, 2023).

Sajari, P. (2023) "Lapista paljastui maailmanlaajuisesti merkittävä harvinaisten maametallien esiintymä," *Helsingin Sanomat*, 16 February. Available at: https://www.hs.fi/talous/art-2000009395994.html (Accessed: March 31, 2023).

SAK (2022) *Alipalkkauksen kriminalisointi ja neljä muuta keinoa kitkeä työntekijöiden hyväksikäyttöä*. Available at: https://www.sak.fi/ajankohtaista/uutiset/alipalkkauksen-kriminalisointi-ja-nelja-muuta-keinoa-kitkea-tyontekijoiden-hyvaksikayttoa (Accessed: March 31, 2023).

Sandbu, M. (2022) "A political backlash against monetary policy is looming," *Financial Times*, 23 October. Available at: https://www.ft.com/content/6f70bbcd-72b7-4518-be6b-401adba7cc34 (Accessed: March 31, 2023).

Sanger, D.E. (2021) "Biden defines his underlying challenge with China: 'prove democracy works'," *The New York Times*, 26 March. Available at: https://www.nytimes.com/2021/03/26/us/politics/biden-china-democracy.html (Accessed: March 30, 2023).

Saukkonen, P. (2022) *Ulkomaalaistaustaiset pääkaupunkiseudulla: asuminen, työllisyys ja tulot vuonna 2020*. rep. Helsingin kaupunki, kaupunginkanslia, kaupunkitieto. Available at: https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/22_12_15_Tutkimuksia_3_Saukkonen.pdf (Accessed: March 31, 2023).

Schneider, E. (2023) "NextGenerationEU and the future of the European Monetary Union: Shifting interests and new fractures in the german power bloc," *JCMS: Journal of Common Market Studies*, pp. 1–20. Available at: https://doi.org/10.1111/jcms.13465.

Shin, H.S. (2023) "Global value chains under the shadow of Covid," *Columbia University CFM-PER Alternative Data Initiative virtual seminar*, 16 February. Available at: https://www.bis.org/speeches/sp230216.htm (Accessed: March 31, 2023).

Sinko, P. & Kyrölä, A. (2022) "Laskelma geotaloudellisten blokkien merkityksestä Suomen taloudelle," Taustamuistio talousneuvoston 27.4.2022 kokoukseen.

SOSTE (2019) *Välityömarkkinat*. Available at: https://www.soste.fi/valityomarkkinat-ja-tarvelahtoiset-tyollisyyspalvelut/valityomarkkinat/ (Accessed: April 5, 2023).

Stahl, R.M. (2021) "Neoliberalism with Scandinavian characteristics: The slow formation of neoliberal common sense in Denmark," *Capital & Class*, 46(1), pp. 95–114. Available at: https://doi.org/10.1177/03098168211029001.

Statistics Finland (2023a) *National Economy*. Available at: https://tilastokeskus.fi/tup/suoluk/suoluk_kansantalous_en.html (Accessed: April 11, 2023).

Statistics Finland (2023b) *Migration*. Available at: https://www.stat.fi/tup/maahanmuutto/muuttoliike.html (Accessed: March 31, 2023).

Summers, L.H. (2016) "The Age of Secular Stagnation," *Foreign Affairs*, 15 February.

Sutinen, T. (2022) "Ministeri Saarikon mukaan EU:n taloussääntöjen 'on pakko palata,'" *Helsingin Sanomat*, 7 November. Available at: https://www.hs.fi/politiikka/art-2000009171014.html (Accessed: March 30, 2023).

Szabó, H. and Szatmári, P. (2021) "The Geopolitical Dimensions of the Strategic Culture of China as a Civilization State," in A. Zoltai (ed.) *Recent Geopolitical Trends in Eurasia*. Budapest: Eurasia Center, John von Neumann University, pp. 27–43.

Talouspolitiikan arviointineuvosto (2023) *Talouspolitiikan arviointineuvoston raportti 2022*. Valtion taloudellinen tutkimuskeskus VATT. Available at: https://talouspolitiikanarviointineuvosto.fi/wp-content/uploads/2023/03/Talouspolitiikan-arviointineuvoston-raportti-2022-Epavirallinen-kaannos.pdf (Accessed: March 30, 2023).

Tooze, J.A. (2018) Crashed: *How a decade of financial crises changed the world*. London: Penguin Books.

Torkington, S. (2023) *50% of the global economy is under threat from Biodiversity loss*. World Economic Forum. Available at: https://www.weforum.org/agenda/2023/02/biodiversity-nature-loss-cop15/ (Accessed: March 31, 2023).

Työ- ja elinkeinoministeriö (2023) *Suomen suunta - tuottavuuden ja työpanoksen kasvu turvaavat tulevaisuuden hyvinvoinnin*. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164768/TEM_2023_17.pdf?sequence=1 (Accessed: March 31, 2023).

UNEP (2022) *COP27 ends with announcement of historic loss and Damage Fund*. Available at: https://www.unep.org/news-and-stories/story/cop27-ends-announcement-historic-loss-and-damage-fund (Accessed: April 5, 2023).

Valtioneuvosto (2016) *Kilpailukykysopimus sai nimet alleen*. Available at: https://valtioneuvosto.fi/-/10616/kilpailukykysopimus-sai-nimet-alleen (Accessed: March 30, 2023).

Valtioneuvosto (2019) *"Ekologisesti ja sosiaalisesti kestävää talouskasvua, korkeaa työllisyyttä ja kestävää julkista taloutta": 2 Kestävän talouden Suomi, Valtioneuvosto*. Available at: https://valtioneuvosto.fi/marinin-hallitus/hallitusohjelma/kestavan-talouden-suomi (Accessed: March 30, 2023).

Valtioneuvosto (2022a) *OECD-Vertailu: Suomalaisten nuorten koulutustaso laskenut keskitason alapuolelle*. Available at: https://valtioneuvosto.fi/-/1410845/oecd-vertailu-suomalaisten-nuorten-koulutustaso-laskenut-keskitason-alapuolelle?languageId=en_US (Accessed: March 30, 2023).

Valtioneuvosto (2022b) *Vihreä siirtymä vaatii mittavaa rahoitusta – ja luo merkittäviä mahdollisuuksia suomalaisille yrityksille*. Available at: https://valtioneuvosto.fi/-//10623/vihrea-siirtyma-vaatii-mittavaa-rahoitusta-ja-luo-merkittavia-mahdollisuuksia-suomalaisille-yrityksille (Accessed: March 31, 2023).

Valtioneuvoston kanslia (2023) *Suomalainen Tki-järjestelmä Uuteen Vauhtiin – Parlamentaarinen Työryhmä Linjaa tutkimus- ja Kehittämisrahoituksen Suuntaamisesta, Valtioneuvoston kanslia*. Available at: https://vnk.fi/-/suomalainen-tki-jarjestelma-uuteen-vauhtiin-parlamentaarinen-tyoryhma-linjaa-tutkimus-ja-kehittamisrahoituksen-suuntaamisesta (Accessed: March 31, 2023).

Valtiovarainministeriö (2015) *Vakaampi talous- ja rahaliitto*. Available at: https://valtioneuvosto.fi/documents/10623/1096506/Vakaampi+talous-+ja+rahaliitto+-raportti/b6f7ccd5-2d20-407f-866c-7b79d171ab67 (Accessed: March 30, 2023).

Valtiovarainministeriö (2022b) *Julkisen talouden ohjauksen kehittäminen: Talouspolitiikka*. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164415/VM_2022_71.pdf?sequence=1&isAllowed=y (Accessed: March 31, 2023).

Valtiovarainministeriö (2022a) *Uudistuva ja kestävä Suomi : Valtiovarainministeriön virkamiespuheenvuoro 2022*. Available at: https://julkaisut.valtioneuvosto.fi/handle/10024/164480 (Accessed: March 30, 2023).

Valtiovarainministeriö (2023b) *Julkisista hankinnoista on mahdollista säästää yli 500 miljoonaa – mutta se edellyttää isoja muutoksia*. Available at: https://vm.fi/-/julkisista-hankinnoista-on-mahdollista-saastaa-yli-500-miljoonaa-mutta-se-edellyttaa-isoja-muutoksia (Accessed: March 31, 2023).

Valtiovarainministeriö (2023a) *Valtiontalouden Kehykset*. Available at: https://vm.fi/valtion-talouden-kehykset (Accessed: March 30, 2023).

van Apeldoorn, B. and de Graaff, N. (2022) "The state in global capitalism before and after the COVID-19 crisis," *Contemporary Politics*, 28(3), pp. 306–327. Available at: https://doi.org/10.1080/13569775.2021.2022337.

van 't Klooster, J. (2021) "Technocratic keynesianism: A paradigm shift without legislative change," *New Political Economy*, 27(5), pp. 771–787. Available at: https://doi.org/10.1080/13563467.2021.2013791.

Virtanen, J. and Wass, H. (2022) "Kestävän talouspolitiikan tulee myös vahvistaa demokratiaa," *Helsingin Sanomat*, 16 December.

The White House (2022a) *Biden-Harris Administration releases Inflation Reduction Act guidebook for Clean Energy and Climate Programs*. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2022/12/15/biden-harris-administration-releases-inflation-reduction-act-guidebook-for-clean-energy-and-climate-programs/ (Accessed: March 30, 2023).

The White House (2022b) FACT SHEET: *Securing a Made in America Supply Chain for Critical Minerals*. Available at: https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/22/fact-sheet-securing-a-made-in-america-supply-chain-for-critical-minerals/ (Accessed: March 30, 2023).

Whiting, K. and Park, H. (2023) *This is why 'polycrisis' is a useful way of looking at the World Right Now.* World Economic Forum. Available at: https://www.weforum.org/agenda/2023/03/polycrisis-adam-tooze-historian-explains/ (Accessed: March 30, 2023).

The World Bank (2023) *Trade (% of GDP), Data*. Available at: https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?end=2021&start=1960&view=chart (Accessed: April 11, 2023).

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