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Investing in Implementation

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Regulatory governance and public enforcement of risk regulation in a generous welfare state: the case of Norway*

Jacob Kringen[1]

Abstract

Regulatory governance has included a number of recurrent strategies for improving the overall performance of regulatory regimes and for adapting and economising the use of regulatory resources. Varieties of *self-regulation* aim to mobilise regulatory resources within regulated organisations, and furthermore to transfer control functions from the regulator to the regulatee. *Risk-based* regulation aims to target limited public resources according to enterprise risk profiles. This paper explores challenges and impacts associated with these regulatory strategies in Norway, focusing in particular on risk regulation regimes related to the public enforcement of health and safety regulations. Whereas the economising potentials related to the reforms could lead to expected reductions in public enforcement, the paper demonstrates no such outcomes. On the contrary, institutional processes, public welfare ambitions and affluence appears to have shaped their rationales and trajectories to the effect of increasing the total amount of regulatory investment, including the size of public enforcement activity. These findings provide the backdrop for discussing how current theorising on regulation cope with normative as well as explanatory issues, addressing in particular the often unhappy fate

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of public interest perspectives. Risk regulation regimes exhibit mechanisms of different kinds, reflecting broadly defined goals and a plurality of interests, mediated in complex institutional processes, and involving normative as well as epistemological challenges, not always clearly distinguishable. It is argued that these considerations should cause some reservations in terms of providing caricatures of regulators as captured, rent-seeking, or otherwise normatively or cognitively biased. The challenge of defining a commonly accepted conception of what constitutes the public interest – in terms of optimal points of intervention – seems particularly problematic within the field of risk, with all its associated dilemmas, uncertainties, and contested issues. Using such imagined optimal points as explanatory benchmarks thus appears highly problematic. The understanding of public risk regimes needs to take account of the complexities involved in balancing between different regulatory goals, and approximating a level of intervention that reflects democratically and normatively legitimate considerations of proportionality in broad terms.

Introduction

The extent and intensity of regulation can be measured in different ways and be influenced by different shaping factors both inside and outside of government. From a normative point of view, the total of regulatory investments and interventions should match the extent and nature of the societal problems they are supposed to solve in a purposeful and proportionate manner, in which case, it is argued, regulations could be seen as properly serving the public interest (see e.g. Ogus 1994; Hood et al. 2001; Baldwin et al. 2012). From an explanatory point of view, deviances from such normative criteria may be used as points of reference in accounting for other mechanisms shaping the actual content of regulation, such as different institutional forces or stakeholder impacts. Determining a proportionate level of regulatory intervention is no simple and straightforward task however. Public interest perspectives on regulation involves a spectrum of normative as well as factual considerations not reducible to easily defined input or outcome indicators, notably related to how different populations and assets are exposed to the risks that the regulatory regimes are constructed to deal with. While taking account of the difficulties in establishing benchmarks for 'proportionality' in this respect, this paper will explore how different rationales and mechanisms contribute to shaping regulatory investments, and how these resonates against nationally and institutionally embedded welfare ambitions and collective interest.

As evident from the literature, such rationales and mechanism vary considerably between jurisdictions and policy sectors, and may also be substantially shaped by deeper national traditions, cultures and polities. The case of Norwegian regulatory policies will constitute the national vantage point in the following. Norway and the Nordic countries are variously categorised and labelled as representing, e.g. 'social democratic welfare regimes' (Esping-Andersen 1990), 'coordinated market economies' (Hall and Soskice 2001), or simply as the 'Nordic model'. Irrespective of the particulars determining membership in such taxonomies, there are still some common features associated with the models, such as large public sectors, universal and publicly financed welfare systems, proactive industrial policies and collaborative labour market relations. Much has been written on the varieties, characteristics, viability, and future prospects of these ambitious welfare models. How they contribute to shaping regulation and regulatory policies is much less studied however, and the few studies nominally dedicated to regulation in Norway have largely focused on organisational structure, such as the autonomy of regulatory agencies, rather than on the substance and content of regulatory policies and regimes (e.g. Christensen and Lægreid 2006).

The paper will focus on the extent and intensity of regulation primarily as measured in terms of public inspection and enforcement resources, but also by taking account of the broader rationales shaping regulatory strategies. Enforcement constitutes a key component – arguably the most critical – in any regulatory regime, given the well documented challenges involved in producing compliance from more or less able and

willing regulatees. The paper will examine the nature and extent of enforcement investments in Norway seen in conjunction with the development of two clusters of regulatory strategies designed for potentially disparate and even conflicting goals: on the one hand for promoting regulatory objectives, and on the other for economising the use of regulatory resources. The strategies in question have dominated both regulatory reforms and regulatory scholarship the last decades, under different headings, such as *self-regulation* and *risk-based regulation*. Focus in this paper is mainly on the former, but both strategies share the same double-edged and even paradoxical properties in that the implications for the size and nature of public enforcement investments can vary considerably.

The concept of self-regulation has several meanings but will be used here as a common term for denoting different forms of purpose-based and management-based regulation. As a well known and documented trend in many jurisdictions over the last two or three decades, one expected and intended outcome has been the mobilisation of regulatory resources in organisations. Furthermore, one expected and/or desired result would in many cases also be a transfer of regulatory tasks from the regulator to the regulatee that would reduce the need for public control functions. As noted by Gunningham (2010: 135), the mobilisation of self-regulatory capacities seeks to minimise the hands-on enforcement role of the state, where 'regulation ceases to be primarily about government inspectors checking compliance with rules and becomes more about encouraging the industry to put in place its own systems of internal control and management which are then scrutinized by regulators'. In broader terms, self-regulation has been linked to policies for withdrawal of government intervention and reduction of regulatory burdens, and has been described as meeting demands for a new middle way between laissez-faire capitalism and state regulation (Gunningham and Rees 1997; Baldwin et al. 1998).

Risk-based regulation, however, seeks to improve and potentially economise the use of regulatory resources by more effective targeting of enforcement efforts according to the risk-scores of regulated organisations. Risk-based regulation has been a widely adopted strategy for prioritising enforcement resources (e.g. Black 2010). More broadly, risk-oriented policies have also been associated with a cluster of reform elements including deregulation, New Public Management, and governance oriented strategies for more decentred forms of regulation. In the same vein, the adoption of risk-based ideas and methods have served the purpose of justifying non-intervention and demonstrating that reasonable steps have been taken to reduce risk to acceptable levels (Hutter 2005; Baldwin and Black 2016). By establishing priorities for the allocation of scarce resources risk-based governance has become a framework for rationalising the limits of government interventions, although alternative rationales deeply embedded within in national politics may also shape the manner in which governments are made accountable for the protection of its citizens (Rothstein et al. 2013).

In the UK, the introduction of programmes for risk-based regulation, combined with reliance upon self-regulated compliance mechanisms, have served as powerful justifications for reducing governmental enforcement efforts. Trends and reforms prior to and following from the UK Hampton Report, provide a much cited case in point (Hampton 2005). The report strongly recommended a softer and more educational regulatory approach, a greater reliance on industrial self-regulation, and a more focused and risk-based targeting of inspections, to the effect of substantially reducing the total amount of enforcement efforts. It has been argued that a neo-liberal and business-friendly political context thus provided fertile ground for exploiting current regulatory fashion (and scholarship) in turning self-regulation, risk-based regulation, and responsive regulation into a deregulatory reform and even to 'regulatory degradation' (Tombs and Whyte 2013a).

However, the literature clearly documents a number of challenges encountered within decentred and risk-based forms of governance. These relates, inter alia, to the promotion of effective internal controls, to the evaluation of their performance against regulatory goals in the alignment of corporate risk management and frontline engagement at the operational level of organisational processes, and to the transformation of general purposes to acceptable compliance (e.g. Black 2008; Coglianese 2010; Coglianese and Mendelson 2010; Gilad, 2010; Almond and Gray 2016). The literature also discusses and documents the challenges involved in risk-based governance generally. These challenges include those related to systems for risk-based targeting of enforcement efforts (e.g. Baldwin and Black 2010, 2016). They are paradoxically also exacerbated by the very introduction of such programmes since the regulatory intelligence needed for risk-based targeting would in turn be substantially weakened if large portions of regulated organisations be exempted from public control (Tombs and Whyte 2013b).

Given these mixed and potentially contradictory effects, there is a need for examining more closely how the development of self-regulation and risk-based regulation relate to governmental rationales and how the reforms materialise in different domains. Of particular relevance will thus be their effects on regulatory enforcement investments, such as inspections and control functions. As indicated, the national context provides one important background for understanding such effects. The paper seeks to demonstrate how ability and ambition in a government-friendly welfare-state context shape regulatory investments in addressing the inherent ambiguities and challenges related to the reforms in question.

To briefly anticipate the following findings, no fall in the level of state monitoring and control can be observed to have followed from these regulatory strategies in Norway. The state has promoted various forms of decentring strategies through enterprise empowerment and self-regulation in several domains but appears at the same time to have strengthened public enforcement investments. The former instruments have been introduced in order to better facilitate the latter rather than as their substitute. In the same vein, risk-based regulation has been used for prioritising available – and

apparently expanding – resources, rather than for reducing inspections or for 'relieving burdens on business'.

The purpose of the paper is to examine these regulatory developments in Norway in some detail. It is based on overall accounts of regulatory reform processes and invested resources, as well as some more in-depth glimpses for illustrative purposes, in particular taken from the area of health and safety regulation.[2] A full account of domain specific details and trajectories are, of course, not possible within the scope of this paper, let alone of the related risk metrics within each regime. A general overview of main trends and patterns is still provided, sufficient for discussing possible explanations for the persistence of public enforcement commitments, and also for relating these to current theorising on regulation as such. Briefly put, the article will contradict the thesis that self-regulation and risk-based regulation implies a reduction of state control. It seeks rather to demonstrate and discuss how institutionally embedded beliefs in the critical importance of public monitoring combined with a generous welfare-based and citizen-oriented conception of the public interest appears to have strengthened public enforcement efforts. Public and political willingness and ability to pursue ambitious welfare goals have provided conditions necessary for approaching and appreciating regulatory challenges with a considerable amount of generosity and determination.

Section 2 clarifies some conceptual and analytical distinctions and relates these to theoretical frameworks, providing a preliminary argument for the relevance of combining institutional and public interest perspectives in understanding risk governance and regulation. Section 3 outlines some general institutional features of the Norwegian politico-administrative system and its implications for regulatory policies. This section also provides a first broad account of the rationales behind the reforms and their outcomes. Section 4 presents and elaborates the (second) explanandum of the article; facts, figures, and rationales indicating a continuous devotion of resources to public enforcement functions within most regulatory domains. Section 5 provides a discussion of how and why regulation in Norway appears to have embraced the mobilisation of both private and public resources in promoting regulatory goals and reducing regulatory gaps, most notably due to a combination of ability and ambition. The closing sections provides a brief summary and a discussion of implications for regulation theory, including suggestions for a better appreciation of public interest perspectives.

[2] Sources for this paper are firstly, databases and cited documents on the size and amounts of regulatory resources; secondly, policy documents, regulations and research demonstrating rationales and justifications for regulatory policies; thirdly, the author's participation in a number of regulatory arenas during the last three decades, primarily related to different positions within the state administration. Furthermore, previous drafts of this paper have read and commented by key policymakers and officials who have both shaped and observed the reforms in question. These include the former director-general of the Occupational Health and Safety Department in the ministry (of labour) responsible for the internal control reforms, former deputy director of the Norwegian Board of Health, and former head of the industrial safety department at the Directorate for Civil Protection.

Conceptual and theoretical preliminaries

The concept of self-regulation refers broadly to a cluster of regulatory inventions, often applied in contrast to their terminological counterparts, such as command-and-control regulation or prescriptive regulation. Self-regulatory regimes can vary along several dimensions, one importance being the extent to which they involve legally binding rules and public enforcement schemes. Enforced self-regulation refers to such publicly sanctioned systems, which also characterise the Norwegian regulatory model. For the purpose of this paper, it may further be useful to follow a distinction provided by Baldwin and Black (2010) between regulations addressing inherent risks and management or control risks. Regulations addressing the former deal directly with the hazards and risks as such (e.g. substances, constructions, equipment, work processes), whereas the latter address the organisational capacities to cope with them (e.g. management systems).[3] In the following, the term 'purpose-based regulation' will be used in addressing the first level of inherent risks, meaning that such regulation refers to the substantial risk-issues as defined in terms of overall goals (somewhere in the middle range between performance-based and principles-based regulations). The second-tier level of systems-based rules is referred to as internal control or management-based regulations. As both of these forms of regulation represent varieties of self-regulation, this term will be used as a generic denominator.[4]

The concept of risk-based regulation, despite its apparently straightforward reference to the effective targeting of enforcement efforts, can materialise and be understood in a number of different ways (e.g. Black 2010; Baldwin and Black 2016). As evident from the United Kingdom's health and safety regimes, the concept and practice of risk-based regulation has encompassed a range of different values and agendas that requires a contextual understanding along several dimensions (Almond and Esbester 2017). These include even some foundational conceptions of risk and the role of the state in its governance, thus also reflecting changing political climates. As noted, one implication and outcome has been a substantial reduction in enforcement efforts.

Following the analytical framework provided by Hood et al. (2001), the *functional* elements of regulation addressed here refers primarily to *standard-setting* (the rules) and to *behaviour-modification* (notably by way of enforcement). More specifically, it is the combination of the two which is of interest. Investments in both functions at the same time increase regulatory efforts, which in the terminology of these authors aligns best with their concept of regulatory *size*. Regulatory size refers to overall governmental investments made in reducing risks and is a key content component in the regulatory anatomy of any given regime, and which in turn represent one important explanandum

[3] The distinction is not clear-cut, because regulations addressing management and control risks typically also involve the responsibility of the regulatee to deal directly with inherent risks, without reliance on legally defined criteria for risk tolerance.

[4] Using the framework provided by Coglianese (2010), one would categorise both regulatory approaches as 'macro-oriented', referring to 'means-based' or 'ends-based' respectively.

in regulatory analysis. It can be measured in two related but also distinct ways. The first is in terms of 'policy aggression', that is the strength of the regulatory ambitions, the scale of intervention in reducing risk and how much risk is tolerated, thus reflecting the regulators' risk appetite. The second refers to the total of regulatory resources (skills, attention, costs, etc.) which is provided by and required from the parties involved. The former is clearly the most difficult dimension to measure, depending also on the nature of the risks in question since regulatory size within this perspective requires some estimates on just how much risk reduction is achieved by the invested resources. We are concerned here – in part for pragmatic reasons – with aspects of regulatory size primarily in the latter sense.

Regulatory size is arguably the one aspect of regulatory content which have been most subjected to explanatory efforts and related theoretical approaches, regularly distinguishing between endogenous and institutional or exogenous and contextual/external variables respectively. The latter is furthermore characterised and categorised according to the explanatory weight put on private versus public interests (Baldwin et al. 2012; Hood et al. 2001). The relative weight and explanatory power of these strands of theory is much debated and far from settled. Most regimes will exhibit traces of several mechanisms participating in shaping their actual content. It is also argued by leading scholars in the field that the complexity of regulation requires that explanatory attempts be sensitive to issue and context, and that the explanatory skill lies in contextualising the composition of shaping elements (Baldwin et al. 2012: 65–66). This modesty in explanatory ambition is reflected in the following: that is to provide one such contextualised composition by combining some conception of the public interest with institutional perspectives, and in part, by seeing the political and institutional context as the (certainly less than perfect) mediator of the public interest. Evidently, neither the concept of 'public interest' nor that of 'institutional perspective' appears particularly precise. Nevertheless, they will serve here as broad frameworks for understanding the rationales that appears to account for the continuous and sustained public efforts devoted to realising the goals of regulation in Norway. Some further reflections on the possibility of explanatory rigour in this respect is provided in the final section of the paper.

National context for regulation

This section gives a brief outline of the development and character of regulatory policies in Norway and its place within the politico-administrative system. This institutional framework provides a background for understanding regulatory trends and developments in general and enforcement practices in particular. These contextual features also provide some explanatory indications for how institutional factors contribute to shaping regulatory developments, and have implications for the very existence and scope of regulatory policies.

The politico-administrative system and regulatory policy

Norwegian government structures are typically decentred and specialised due to the constitutional and cultural strength of ministerial rule where the individual minister has direct responsibility towards the parliament (Storting); it is legally defined as the constitutional responsibility of the minister. Sector-based regulations thus rest with the individual ministries as part of their overall policy responsibilities. A number of coordinating mechanisms are in place but centralised rule in government is relatively weak. The cabinet office of the Prime Minister is small and not configured for actively promoting cross-sectorial programmes or policies. Indeed, such programmes and policies are for the most part integrated in the exiting sector-based ministerial structure (representing only an additional task for the ministries in question).

The adoption of generic regulatory policies is vulnerable to such institutional structures in the sense that regulation – from the perspective of one given policy domain – is but one of several instruments for policy implementation. From a purely sectorial perspective, the incentives for addressing regulatory policy as such will generally be meagre. Bits and pieces of general and cross-sector regulatory policy are currently distributed among at least four different ministries. This includes coordination of legislative processes and technical/legal aspects of the laws and regulations (Ministry of Justice and Public Security), impact assessments of regulations affecting private sector industries (Ministry of Trade, Industry and Fisheries), general public management policy and reform (Ministry of Local Government and Modernisation), and economic effectiveness and performance management systems (Ministry of Finance). The most important governmental rules regarding regulations are laid down by royal decree and include generic requirements for *ex ante* assessment of economic and administrative consequences and impacts of all reforms and proposals.[5] Although quite ambitious in substance and intent, no centralised control system exists for enforcing the regulations, and compliance is the responsibility of the individual ministries. They are also variably practised, and strict compliance, such as the provision of quantified impact assessments, is in fact rare (Difi 2012; Office of the Auditor General of Norway 2013). There is thus no evidence that regulatory decision-making is subject to rigorous risk-cost-benefit testing, or furthermore, that market failure considerations in a restricted sense have been salient in risk governance processes. On the contrary, overall welfare goals and challenges seem to have justified regulatory interventions in rather general and unrestricted terms with little reference to more systematic impact assessments. In the OECD Regulatory Indicators Survey, Norway typically ranks low on impact assessment and *ex post* evaluation but averages on stakeholder engagement (OECD 2015).[6]

[5] These regulations are referred to as 'Instructions for Official Studies and Reports' and concern impact assessment, submission and review procedures in connection with official studies, regulations, propositions and reports to the Norwegian parliament.

[6] These reviews have recently been criticised for not taking into account the collaborative and emergent nature of Norwegian regulations and regulatory processes, e.g. making it difficult to provide *ex ante* impact assessments (Nordrum 2017).

Regulatory policy and reform

Although regulatory policies are to some extent fragmented and reflect the sector-based politico-administrative system, several trends have pervaded regulatory developments the last two or three decades. Of these, the adoption of purpose-based, management-based, and risk–based regulation is the most salient, in particular within the health and safety domains.

Starting briefly with the latter, the issue of prioritising enforcement resources has certainly been on the agenda long before the explicit introduction of risk-based regulation. Different systems have existed, for the most part based on inherent risk indicators (such as amounts of dangerous substances in industrial plants or the number of residents in nursing homes). Management risk indicators are arguably more difficult to record and analyse, as they will require continuously produced data on organisational performance. Definitions of risk-based regulation have been harmonised to some extent within the health and safety domains but vary still according to how outcome oriented they are (e.g. definitions that imply a ranking based on inherent risk only, versus definitions that imply a ranking based on expected net outcomes of enforcement measures). It still appears that risk-based regulation primarily serves as a general principle for optimal distribution of existing enforcement resources rather than for reducing the total amount.

A recent review and evaluation of risk-based regulation in the Nordic labour inspectorates showed for instance that all the inspectorates had systems in place, although variations in design was considerable (Dahl et al. 2018). Main challenges were related to clear definitions, validity in measuring consistency between definition and applied methodologies, and access to reliable data and analytical resources. Some, like the Norwegian labour inspectorate, experienced increased political pressure for developing systems for risk-based regulation, but no evidence was found that these were supposed to justify exemptions or reduced inspection efforts.[7] In all the countries the rationale thus appears to be effectiveness in the deployment of existing resources.

As for purpose-based and management-based regulations, although somewhat incremental and piecemeal in nature, the trajectories within the area of health and safety can still be traced back to some common origins and to some extent also concerted efforts. They emerged in the late 1970s, largely originating in the petroleum sector, aiming to mobilise regulatory resources and to promote prophylactic, prudent and self-corrective mechanisms within all managerial and operational facets of the industry. Prescriptive requirements have gradually been removed and replaced with principles, overall goals, and more specifically formulated objectives for different health and safety domains. Provisions are supplied with non-statutory guidelines that refer to a large number of more prescriptive industrial standards that serve as optional templates for

[7] The research design was not explicitly set up for examining this issue, but the fact that it was virtually absent in the report indicates that it was not high on the agenda in any of the Nordic countries. Subsequent communication with the participating researchers confirms this interpretation.

regulatory compliance (Bang and Thuestad 2013). Statutory provisions also require the implementation of systems for risk management, including requirements for risk analysis, systematic risk reduction (e.g. ALARP processes) and even the promotion of safety culture (Engen et al. 2013; Kringen 2009; Lindøe et at. 2013). Privatisation of safety monitoring was explicitly proposed and discussed in the early years of petroleum production and regulatory development but was rejected; government control was seen as the most assuring and legitimate solution. (Ryggvik and Smith-Solbakken 1997; Ryggvik 2000). Strict regulations and taxing regimes were also introduced for securing state control of windfall profits (Hanish and Nesheim 1993; Kindingstad and Hagemann 2002).

Within this regulatory domain, the development of self-regulation can be seen as a long term orchestrated governmental strategy, gradually adopted also for land-based industries, and extending to most health, safety, and environmental regulations (HSE) during the 1990s. This started several processes involving key HSE authorities, including the formulation of common principles, vocabularies, and guidelines for coordinating inspections and audits. These reforms also activated a consorted initiative from industry associations calling for more well tuned and coordinated public inspection practices (Statskonsult 1999). The cross-agency initiatives also resulted in a coordinated legislative reform that harmonised and strengthened inspectorial access to regulated objects, indicating the key role ascribed to the public enforcement functions.

A shift in government after the 2001 elections, won by the centre-right parties, brought renewed attention to regulatory policies. Headed by a high profile economics professor representing the conservative party, the Ministry of Labour and Administration drew comprehensive and ambitious scenarios for the importance and future role of regulation and enforcement. A mixture of theoretical, political, and ideological justifications were provided, largely to be understood against the backdrop of EU-driven liberalisation reforms where reliance on regulation constituted a new rationale for state intervention. The reform proposals were presented to the Norwegian parliament in a White paper in 2003 and covered virtually all areas of economic and social regulation (Ministry of Labour and Government Administration 2003). The report argued for the importance of regulation and enforcement as a condition for efficient markets, fair competition, the provision of public goods, and the protection of public and private interests (such as environment, health, and safety). It called for greater independence for the agencies, greater transparency, removal of conflicting goals (following the principles of single purpose and single task organisation), and increased focus on their competence and professionalism. As it happened, the White paper included a proposal to decentralise a large number of the agencies, relocating them in various regional city centres throughout the country. As could be expected, the issue of location/localisation attracted almost the entire spectrum of public and political attention, and in sum, the reform largely ended up as regional policy more than as regulatory policy. Paradoxically then, rather than strengthening enforcement functions, the result was a substantial degeneration (at least in the short term) of the agencies due to the massive turnover of

personnel that accompanied the re-localisation process (Kringen 2015). The 2003 White paper also proposed increased privatisation of inspections in some areas but no major reforms to that effect followed.

Two implications can be noted for our purposes from this process. Firstly, the sustained importance and legitimacy attributed to public enforcement functions in policy-making processes (despite the inadvertent short-term deterioration due to the re-localization process). This observation applies across policy domains as well as political affiliations, albeit in the most generic terms, since the substantial interest in the enforcement functions as such appeared to have drowned in the politics of regionalisation. Secondly, and combined with this relative absence – in regulatory terms – of substantial positive effects, the uniqueness of generically addressing enforcement functions as a policy domain in its own right, reflect also the general lack of a consistent and durable regulatory policy: an exception that proved the rule. Subsequent initiatives and reforms have largely been sector-based or otherwise restricted in scope and impact. Although cross-sector policies exist for reducing red tape and business burdens, focus has been on administrative burdens related to reporting regimes, not on enforcement regimes.

Policies for risk-based regulation and self-regulation have for the most part also been sector-based, but have nevertheless pervaded most regulatory domains, despite variations in scope and design. Overall justifications for these reforms – resonating also with the literature on regulation - can be summarised as follows. Firstly, rules should not exceed the scope of their purpose, thereby granting the regulatees the freedom to choose different solutions. Secondly, the regulatees are often in the best position to implement knowledge-based solutions adapted to their specific operational contexts, assuming that the regulatory purpose is adequately met. Thirdly, purpose-based rules sustain and underscore the responsibility of the regulatee. Fourthly, rules cannot be updated with sufficient pace in accordance with technological and other advancements in different areas, and must therefore have sufficient flexibility to be able to absorb change (Haugland 2015). The guiding rationales for the reforms have not been related to a need for reducing public oversight or control but rather to the requirement for mobilising regulatory resources and investments at the organisational/corporate level. They are ‘business-friendly’ then primarily in appreciating and recognising the critical importance of local organisational knowledge and engagement for meeting overall regulatory goals. Pragmatic effectiveness in the service of these goals has been the primary agenda.

The fact that self-regulation from the very start was supposed to be government mandated and ‘enforced’, and not a second option on the regulatory pyramid if voluntary programmes did not work (i.e. Ayers and Braithwaithe 1992), indicates the governmental ethos within which the reforms were launched. The same can be said about the general reliance on public regulation, which despite the somewhat fragmented picture, share commonalities across regulatory domains. This reflects also some level of coordinated governmental orchestration of the reform programmes. The general lack of

regulatory evaluations and more stringent cost-benefit analyses are certainly also part of this picture, which makes it difficult to measure regulatory effectiveness (in CBA-terms). But it also reflects a reluctance to subjugate public policies and welfare goals to what would be considered as expert-based 'technical' calculations.[8]

The current institutional structure

At the level of central government, all enforcement and inspection tasks have been delegated to semi-independent regulatory agencies. Apart from the Ministry of Foreign Affairs, all ministries have one or more subordinate regulatory agency. Using enforcement tasks as a demarcation criterion they currently amount to more than 30 agencies (Kringen 2015). The majority of these have 'safety' in some form as their major objective, including transport safety (road, railway, aviation, maritime safety), occupational health and safety, societal safety/civil protection, industrial safety, fire safety, electrical safety, patient safety, food safety etc. A second group of regulatory agencies has oversight of societal infrastructures such as telecommunication, postal services, power supplies among others, and have often more composite objectives relating to technical integrity, service provision, market regulation as well as safety. A third group constitutes more or less purely economic regulators, most notably the Competition Authority and the Financial Supervisory Authority. Lastly, there is a residual category comprising e.g. the Data Protection Authority and the Media Authority, with 'ideal' objectives relating to privacy, (mis)use of digital information, public service broadcasting obligations etc.

In addition to inspections carried out by nationwide governmental agencies, several regional and local authorities have extensive enforcement tasks. At the regional level, the county governors have state oversight of local government (municipalities) as their main objective. Regulatory tasks – and increasingly also audits/inspections – represent the bulk of their portfolio and include all key municipal services such as health and social care, education, environmental issues, planning and building regulations, and civil protection (societal safety). Furthermore, the municipalities themselves are also assigned several enforcement tasks, such as fire- and chimney inspections.

Monitoring and measuring regulatory resources

Research on regulation is sparse and fragmented in Norway and there is no continuous and systematic monitoring or analysis of public enforcement in terms of size, resources, principles, philosophy or actual practices. The exact amount of resources spent on inspections are simply unknown, nor are developments over time. Measuring regulatory resources by counting the number of agencies (although it occasionally occurs) is

[8] In addition to arguments about them being time-consuming, expensive, and to some extent inadequate due to the difficulties involved in ex ante assessments of regulatory processes with emerging rather than fixed impacts (e.g. Nordrum 2017).

obviously not very accurate, as they vary greatly in size and scope. Some agencies are quite small and specialised whereas others hide within them a large number of quite distinct regimes. Total funding and expenditures will provide a more accurate indication of regulatory size. A review of 23 agencies in the period 2003–2011 was conducted by the Agency for Public Management and eGovernment in 2013 (Difi 2013). Measured in terms of total expenditures no signs of crumbling budgets appear from this report. Rather, the majority (18) of the examined agencies had a substantial increase in budgets and expenditures in the period, amounting to more than 75 percent increase for some. However, the number of full time equivalents (FTEs) would be a more direct measure of resources available for inspection tasks than even the number of inspections since these vary a lot in terms of invested resources. Based on FTE figures from the Norwegian Centre for Research Data (NSD), the development for the period 2003–2014 shows a considerable increase (see figure 1).[9]

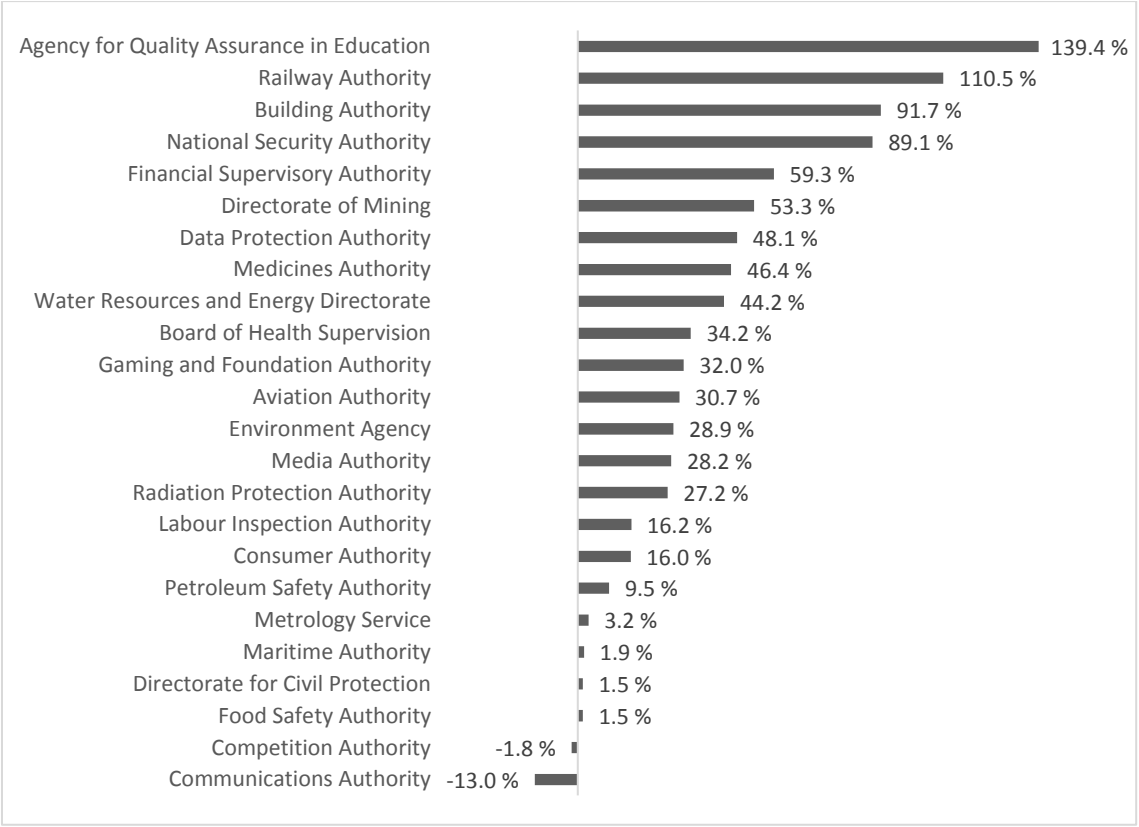

Figure 1 Changes in FTEs from 2003 – 2014 (percent).
Source: Norwegian State Administration Database (NSAD)

[9] The data cover the period 2003–2014, and are extracted by the author from the Norwegian State Administration Database (NSAD) for the purpose of this article.

More than half of the agencies have had an increase in FTEs of more than 25 percent.[10] Excluded from this picture are some regulatory areas where both regulation and inspections are known to have expanded greatly. This is particularly the case for certain public services and functions, such as education, where inspections are carried out by the county governors. Also excluded from the list is the Road Supervisory Authority, established in 2012, responsible for enforcing safety regulations for the state road infrastructure. However, since most regulatory agencies also have a number of non-regulatory roles, and that regulatory roles in themselves comprise several distinct tasks (such as standard-setting and advisory functions), we need more precise estimates of agency task distribution.

The most detailed account of internal task-distribution within the agencies dates back to a survey conducted in 2002 (Statskonsult 2002), showing that the proportion of inspections varies greatly between agencies. In some 10 percent of the agencies, inspections amounted to less than 10 percent of their total resource use, whereas the corresponding proportion for the upper one-third amounted to 50 percent or more. The average proportion for all agencies amounted to 37 percent. A more recent review of inspectorates conducted by the Office of the Auditor General included numbers for task-distribution in 2011 (Office of the Auditor General 2014). Calculating the average proportion for all agencies in fact provide virtually similar results: 35,6 percent. In sum, there is reason to believe that the magnitude of enforcement and inspection resources is fairly well reflected in the total resource measure.

An in-depth analysis of the regulatory responsibilities of the Directorate for Civil Protection (DSB) provides more precise indications of the relative amounts of inspection resources (DSB 2018). It covers 15 to 20 different supervisory regimes (depending on categorisation criteria), within the range of this one legal-administrative system. The data represent a selected family of quite diverse regulatory domains, addressing individual and organisational as well as societal risks. They represent in this respect, a micro cosmos of safety regulations and may thus serve tentatively as indications of national trends. They follow from four different acts but still have their own specific characteristics in terms of inspection prevalence, target group characteristics etc. The average proportion of resources spent on inspections, relative to the amount of regulatory tasks, is about 50 percent. As shown in figure 2, the distribution varies widely between different regulatory domains, depending on a number of factors, such as target group structure and the role assigned to inspections in the overall regulatory strategy.

From the fire and explosion legislation follows seven distinct inspection regimes covering chimney safety, high-risk fire venues (hospitals, nursery homes, hotels etc.), municipal fire departments, dangerous substances/chemicals (including Seveso sites),

[10] Among the largest increases, at more than a doubling of resources, is the Norwegian Railway Safety Authority. FTEs in this agency increased considerably prior to 2003 following a major accident in 2000 that incurred 19 fatalities.

the transportation of dangerous goods, handling of explosives and pressure equipment. Of these, only the latter has been subject to substantial privatisation of inspections. These are now carried out by certified technical bodies, who in turn are subject to state audits, but in sum with substantially reduced use of public inspection resources. In terms of organisation, the bulk of inspections within fire safety are conducted by municipally organised fire departments – who in turn are inspected by the directorate.

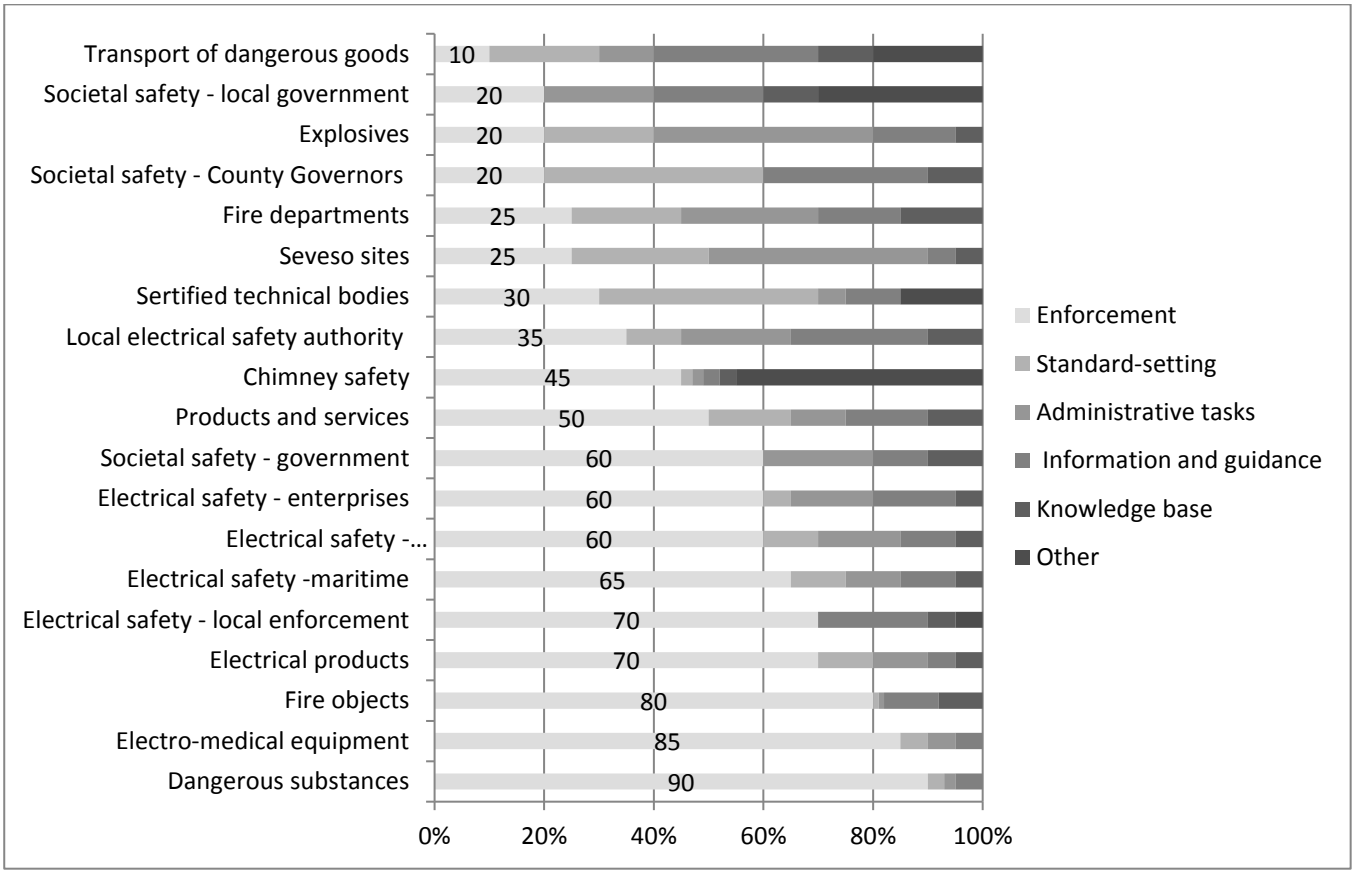

Figure 2 Distribution of tasks within 19 inspection domains (percentage).

A recently implemented reform of preventive fire safety regulations may influence resources spent on inspections by the municipal fire departments as these allow for more risk-based local priorities. Due to the fact that serious and fatal fires predominantly take place in private dwellings/households, the new regulations stipulate a broader spectrum of instruments (such as assistance, advice and information), most probably at the cost of inspections, which the fire departments formerly were obliged to conduct according to specified frequencies. Reductions of inspections is thus not a goal in itself but will rather be an 'incidental' and expected outcome of a more risk-based allocation of resources overall.

The area of electrical safety also comprises a number of distinct inspection regimes, including market control of electrical products, electro-medical products used in health services, electrical safety on maritime vessels, safety in the production and distribution of electrical power, electrical enterprises/electricians and electrical installations. The latter two are subject to inspections from local electrical safety authorities organised within the grid/distribution enterprises but subject to instructions from the national electrical safety authority (DSB). The local electricity authority is in turn subject to state inspections. Extensive inspection programmes exist in all these fields.

In the area of societal safety, there has been a substantial increase in regulatory investments, in particular during the last decade. This includes regulatory reforms related to civil protection, societal safety, and emergency preparedness at all levels of government (central, regional and local), accompanied by corresponding audit and inspection regimes directed at ministries, as well as county governors and municipalities.

The main conclusion to be derived from this in-depth analysis is that there has been an increase in inspections and enforcement efforts in a number of domains, in particular within the area of civil protection and societal safety. The latter reflects a general increase in governmental capacity building in this policy area. The only regulatory domain where public inspections have been substantially reduced is in the area of pressure equipment. The primary rationale and justification for this reform was based on the introduction of internal control principles. As these inspections were largely detailed to the degree of controlling and ascertaining the technical safety of the equipment, they were seen to contradict these principles. Importantly however, the purpose (and outcome) was a shift in the 'division of regulatory labour' for the combined purpose of clarifying roles and for strengthening risk control; the total amount of regulatory investment was not to be reduced. Similarly, the expected drop in inspections of previously classified high-risk fire objects from local fire departments was justified from a risk perspective simply because the inherent risks related to these objects were seen to have been compensated by a corresponding reduction of management risk. Partly, this was seen as a consequence of years with frequent and sustained enforcement that had contributed to a significant improvement in organisational risk management efforts. A re-allocation of resources to dwellings and households were clearly risk-based, but regulatory enforcement did not appear appropriate for these objects compared to more supportive and educational approaches.

Overall, it is beyond the scope of this paper to assess in detail the relative pattern of growth in different regulatory regimes (e.g. as displayed in figure 1). Around two-thirds of the agencies regulate health, safety, and environment. The total pattern of growth (or the absence of diminishing resources) appears clearly. It should be noted however that the above in-depth analysis refers to regulatory investments in areas where the total increase in FTEs has been most moderate for the period in question (1.5 percent). It can be further noted that a substantial proportion of regulatory investments in the period has been dedicated to regulation inside government, such as education, healthcare and

societal safety. In addition, there has been a substantial increase in the performance auditing functions of the Office of the Auditor General.

Again, contrasting with the case of UK, we can observe some noticeable differences in both rationales and outcomes. Quite dramatic reductions in public enforcement have taken place in several domains in the UK, such as for occupational health and safety, food safety, and pollution control (Tombs 2016). The implementation of risk-based regulation has even implied wholesale exemption of enterprises considered as 'low-risk' from inspectorial coverage. Political and ideological rationales have been powerful and related to the need for 'reducing burdens on business', justified in consort with heavy, and for some authors naïve, reliance on the effect of self-regulatory mechanisms (Tombs and Whyte 2013a, 2013b). This contrast may serve as a starting point for investigating more closely how different rationales and conditions for self-regulation and risk-based regulation can lead to quite divergent outcomes.

Exploring regulatory commitments

Although the extent of changes in inspections cannot be precisely estimated, main trends appear to be reasonably clear in that no apparent drop in enforcement efforts can be observed in the majority of Norwegian regulatory regimes. Rather, strong indications exist for assuming a substantial increase. As indicated in the above, one explanation clearly relates to the relative absence of national regulatory policies that could have tempered sectorial ambitions. These developments thus reflect sector-based policies and priorities, indicating that both the ability and the willingness to invest in public control functions have more or less independently pervaded the individual regulatory domains. This has occurred in spite of – or in addition to – extensive reforms for prioritisation and for promoting different self-regulatory mechanisms. The following section will discuss (additional) explanatory candidates accounting for this relatively consistent and continuous commitment to regulatory intervention and control. The first is related to intrinsic and institutional features of the regulatory challenge itself and the latter related to the larger contextual ('Nordic') landscape.

Challenges in governing regulatory gaps

Regulation, it can be argued, creates in-built and incessant needs for resources in closing the ubiquitous gap between policy ambitions and facts on the ground, or in legal terms, between law in the books and law in action. This section will examine some generic features related to regulatory gaps, and specifically features intrinsic to purpose-based and management-based regulation. Both add to the understanding of why such regulatory strategies need not produce the expected reduction in public enforcement functions, and furthermore, how risk-based regulation primarily can serve prioritising rather than downscaling purposes.

Although designed specifically to close regulatory gaps, the literature has demonstrated a number of challenges related to management- and purpose-based regulation,

underscoring also the critical role of statutory regulation and public enforcement functions in meeting public goals (e.g. as summarised in Coglianese and Mendelson 2010; Gilad 2010). More specifically, the issue of trusting the capacity and willingness of the regulated organisations and communities to substantially assume and adopt the tasks and responsibilities, following from management-based regulations, has been addressed and critically questioned (Gunningham and Rees 1997). Management systems can be undermined by lack of organisational trust, ritualistic responses, and even active resistance, thus drawing attention to the importance of factors such as leadership commitment and organisational culture (Gunningham and Sinclair 2009). The assumption that the organisation is in a better position to identify and implement effective measures for reaching social goals may not be unwarranted, but management-based regulation also requires government oversight to insure that plans are made and implemented. Furthermore, the absence of clear standards (technological or performance based) – which may induce management-based regulation in the first place – confront regulators with ambiguities related to both inherent and management risk. In the latter case it raises questions as to how management systems in themselves should be designed (Coglianese and Lazer 2003). Vague principles, goals and purposes, may give rise to a number of contradictory outcomes and paradoxes that exacerbate the regulatory challenge (Black 2008). It has been demonstrated that regulatory gap can persist even when regulated organisations are both willing and competent compliers. Rather than seeing compliance as perfect conformity with regulatory specifications, organisational behaviour involves complex and consuming interpretive transformations where generalised provisions may be adapted to contingent situations (Huising and Silbey 2011).

The criticality of public enforcement functions for meeting regulatory goals may depend on a number of factors well documented in compliance literature (for a review see Parker and Nielsen 2011). The existence and effectiveness of self-regulatory mechanisms within organisations loom large among candidates considered to promote compliance with regulatory goals. Only in a perfect world would these make public enforcement superfluous however.

Arguably, even the most well provisioned regulators can experience a persistent need for resources in their efforts to close the gap between regulatory expectations and organisational performance. One key initial condition in this respect will be the ratio between available resources and the size of the regulatory domain, tentatively to be measured by two main indicators: (1) The number of enterprises and objects of inspection per FTE, which determines how *many* objects can be covered within a given period of time; (2) The range of regulatory issues – which determines how *much* can be covered in one inspection relative to the amount of possible themes and requirements to control. Estimates of these indicators are not generally available but must be calculated for each domain separately. Based on the DSB study presented in the previous section, the average number of inspection objects per FTE amounts to more than one thousand, ranging between 10 and several thousands. The average proportion of objects inspected

every year is some 35 percent, varying between less than one percent and more than 90 percent. Furthermore, the size of the regulatory domain determines the proportion of themes or issues that can possibly be covered in the course of one inspection. Such numbers must certainly be based on very rough estimates, if amenable to calculation at all. In DSB (2018), proportions vary between 100 percent (chimney safety) and 10 to 15 percent (Seveso sites).[11]

These ratios may only indicate the range of variation within the broader spectrum of regulatory domains, but they are still evidence of the time that may lapse between any given enforcement effort directed at any given state of regulatory (non)compliance. Regulatory approaches to the ensuing priority challenges vary, and risk-based regulation has been one obvious strategy for meeting these. As indicated above, no generic policies have been implemented for harmonising such risk-based approaches. For HSE-regulations, agencies have agreed on common definitions in very general terms, but no generic framework is in use, let alone generic frameworks for assessing comparative risk across domains. The relative impact of regulation is thus not known, and cost-benefit ratios, to the extent that such ratios can be successfully calculated and produced, most likely vary considerably between regimes.

The petroleum sector regime may once again provide an illustrative case, for two reasons. Firstly, it is well resourced with a substantial increase in FTEs in the last decade (see figure 1). Regulatory scope is extensive, however, covering the bulk of risk and safety issues in the sector, and ranging from occupational health to technical safety and major accident risks. However, the number of regulatees has been limited, partly due to regulatory mechanisms inserted for creating internal accountability structures within the industrial complex where licensees and field operators are responsible for overseeing compliance within the hierarchy of contractors and subcontractors. Indeed, these structures constitute one important feature of the decentred self-regulatory system. Secondly, although this regime is arguably among the most developed and mature in terms of both purpose-based and management-based regulation, challenges in developing and sustaining a viable self-regulation regime have been present all along, as the regime is firmly established within a tripartite system. The increasing use of purpose-based regulation relies heavily on close cooperation with the industry and a dialogue with the involved parties largely based on some level of consensus and mutual trust, embedded within a strong tripartite rationale. The regulatory strategy has still caused critical discussion and conflict about standard setting and operational impacts of vague rules (Engen et al. 2013; Kringen 2014). Unions and researchers have occasionally considered vague purpose-based rules to be a circumvention of responsibility by the authorities – that the latter omitted taking a stand in not providing explicit standards. Nevertheless, the process of mobilising the self-regulatory capacities of the industry has been the dominant rationale. The industry had to make safety-critical

[11] Such numbers depend on whether inspections are systems-based audits or more detailed technical controls. The former may in theory, given the 'systems-perspective', cover the whole range of regulatory themes.

judgments on its own, not just rely on government prescriptions. Partly, this has been considered a matter of simple necessity. As one of the agency veterans explained, with reference to the pioneer days, they received 'piles of paper from the industry' and were severely under-resourced to be able to make expert-based reviews of all the technical documentation. New and unfamiliar technologies required a reliance on industrial best practices and standards (e.g. Bang and Thuestad 2014; Kringen 2009). However, there were also more positive justifications. It would not only 'empower' the industry, but also engage it actively in the risk management processes and make it accountable for the solutions adopted.

Although the widespread adoption of purpose-based regulations contributes to the processes of delegating regulatory accountability structures, it also poses critical challenges in terms of enforcement, discretion and regulatory complexity. Broad-brush formulations of basic obligations imply a mixture of legal and non-legal (soft law) norms, including (self-imposed) professional codes of conduct, industrial standards, company-specific rules, and systems of implementation. Vague rules also pose challenges in terms of legal accountability that requires coordination between lawyers and safety professionals in the agencies. The former would be dedicated to due process and legally justified enforcement practices whereas the latter would be more instrumental and pragmatically problem solving. Purpose-based regulation thus pose inherent control challenges, in large part following from the discretionary powers of the regulatory authorities and the associated problems of judging just which means and measures are effective and proportionate in promoting the regulatory goals. The goals themselves may be vaguely described, however, leaving the more precise determination of acceptable risk and what is 'safe enough' to be resolved in the implementation processes. Considerable amounts of manoeuvring capacity and regulatory negotiation are involved in these processes (see Engen et al. 2013; Kringen 2014).

As noted, the most comprehensive regulatory reforms resembling a unified and orchestrated governmental strategy are the so-called internal control reforms launched in the HSE area during the 1990s. These reforms involved a gradual shift towards management-based regulation, but a substitution of public for private control was not a key rationale. Rather, management-regulation was considered a necessary supplement for promoting the aspired objectives. Although there were arguments for seeing self-regulation as a way of relieving public authorities of control and enforcement burdens accompanying a greater reliance on self-control (NOU 1987a, 1987b), the experience of the reforms points in other directions.

The internal control reforms involved educating the inspector work force about management principles and practices. For the technically oriented inspectors particularly, accustomed to detailed box ticking controls, the new monitoring schemes represented radically novel approaches. Indeed, the term inspection as such was largely substituted with audits (or system audits) and verifications respectively – where the latter was supposed to be only a supplementary control technique for confirming that the management system (or internal control system) was adequate and effective. This

form of systems thinking substantially transformed the philosophy and practice of control. Although appealing to many, it also triggered (increasing) suspicion – more or less justified – that auditing systems would not really uncover and modify actual standards and practices followed at the operational level. 'Paper audits' appeared as a sardonic phrase for this. Examples of inadequate and inaccurate documentation records were referred to as evidence for not automatically trusting the internal control system as more than corporate window dressing.

In this manner, management-based regulations would add to the control repertoire rather than substitute for inspections. One had to do both. Audits also turned out to be quite time consuming, involving preparatory documentation reviews, elaborate planning processes, as well as extensive control and follow-up procedures (including interviews, document analysis, on-the-spot verifications etc.). The evaluation itself of management and internal control systems represented additional challenges and workloads for officials. It covers the whole spectrum of management requirements, such as the evaluation of company risk analyses: To what extent do these represent risk in a prudent manner? What methods are used? How is risk understood and evaluated? Is the analysis well embedded in operational practices, or are they only generic consultancy duplicates?

In sum, these regulatory reforms have not alleviated the regulatory challenge. Given a persistent dedication to policy goals, they appear primarily as additional instruments. Private control supplements rather than substitutes public control. Purpose-based rules and management-based rules have presented new challenges for the authorities in a number of ways, but with one common denominator, as there are always gaps to fill in the regulatory processes from legislative intent, regulatory purpose and down to the actual materialisation of compliance and desired outcomes. Despite the delegation of regulatory obligations, regulatory gaps will endure and reappear in new disguises, and regulatees will not fully substitute the control mechanisms needed for meeting regulatory goals.

Ability and willingness: resources and welfare ambitions

The following subsection will address two rather distinct contextual factors accounting for regulatory investments: available resources and policy ambitions. They are related in the sense that the former also arguably reflect the policy ambitions of the modern welfare state in extracting resources for funding public goals.

The discovery of commercially viable offshore petroleum resources in the late 1960s has gradually transformed the Norwegian economy towards an exceptionally high GNP per capita, and a corresponding public affluence. Licensing schemes, levies and taxing policies have generated large state revenues from the petroleum activities and allowed generous fiscal budgets and public expenditures. Incomes have gradually exceeded expenditures and substantial financial assets have over the last two to three decades been placed in the so-called Government Pension Fund Global (GPFG). The Fund was established in 1990 as a fiscal policy instrument to secure long-term considerations in the phasing in of petroleum revenues into the Norwegian economy, including

considerations related to fair distribution across generations.[12] Although regulated by a fiscal rule for restricting transfers from the Fund, the national budgets have been generous, even after the recent fall in oil prices. However, moderate cutbacks have been made across the board in most policy areas. This is partly explained by articulated trimming and public sector effectiveness policies of the present conservative-liberal government (supported by parliamentary majority since elections in 2013). Although the extent and scope of such policies vary with governments, regulatory functions have (as noted) generally not been targeted as such. This applies also to the current situation.

Historically, however, investments in regulation have not appeared sensitive to the political profiles of governments. Social-democratic as well as liberal-conservative governments have appeared equally dedicated to regulatory intervention (as reflected in the 2003 White Paper). This is in part related to liberalisation reforms that has increased the reliance on regulation for achieving policy goals; these reforms have pervaded many sectors since the early 1990s, largely in compliance with single market regulations from the EU. For liberal-conservative governments, regulation, including supervisory tasks, can thus be seen as the one core role of the state to preserve.

However, in the Norwegian-Nordic context the reliance on regulation appears also to reflect a more pervasive commitment to welfare policies, risk governance and risk sharing. The present conservative-liberal government has shown no reluctance in this respect. The Minister of Education and Research recently announced a strengthening of public inspection of private higher education. This followed from an alleged fraud scandal in one of the major fine art colleges in Oslo, including charging students illicit tuition fees and receiving state funding based on manipulated information about college programmes. Political gut reactions to accidents and unlawful practices regularly involve a call for better regulation and enforcement. The most recent newcomer in the family of enforcement agencies is the establishment of a Parking Authority responsible for enforcing revised and strengthened business regulations – based partly on experiences with heavy-handed and unreasonable enforcement practices by parking companies. Whereas such responses to upcoming problems certainly reflect an interest in reputation and reputational repair, they are none the less signs of a more general political belief in regulatory interventions as problems-solving instruments.

Regulations also generally reflect high policy ambitions in different sectors. In part, this is evident in the way policies and rules are formulated as these express overall welfare goals and even requirements for continuous improvement, beyond simple risk-cost-benefit considerations.[13] In the petroleum sector, successive governments have proclaimed that the petroleum industry in Norway should have a leading role in the

[12] The Fund currently amounts to more than 8,000 billion Norwegian kroner.

[13] This is evident for instance in the use of the ALARP principle. Consider also the opening section of the Working Environment Act, stating as its purpose: 'to secure a working environment that provides a basis for a healthy and meaningful working situation, that affords full safety from harmful physical and mental influences and that has a standard of welfare at all times consistent with the level of technological and social development of society'.

world with respect to health, safety, and environment. New challenges have also generated regulatory efforts, such as those related to immigrant labour and subsequent enforcement schemes for targeting social dumping. As noted, pressure from trade- and industry organisations for reducing inspections have not been very prominent. Rather, there are occasional pressures to the contrary, as they also (or mostly) represent relatively compliant firms calling for more rigorous control of 'bad apples' that compromise fair play in the market place by circumventing regulations. Characteristically, the development of purpose-based and management-based regulations have been widely supported by key industrial stakeholders and associations, where objections primarily have been directed against rather trivial red tape concerns such as inefficient reporting procedures, uncoordinated inspections, or impenetrable legal language. Moreover, certain pressures can be observed from both political and stakeholder groups that bureaucrats should be 'out in the streets' – not only shuffling papers in their offices (e.g. Engen et al. 2013).

The pervasive commitment to exempt regulators from targeted cutbacks must therefore be related to relatively stable national values and political consensus on major welfare goals. Disagreements and conflict are much of the time related to means rather than to ends. Although the term 'social democracy' is nominally reserved for the political left, the broad consensus on welfare goals and corporate policies have justified the label 'Nordic social democracy' as a common denominator irrespective of the political party structure (e.g. Sejersted 2011). Nordic social democracy has involved both disciplined and self-disciplined capitalism and has even attracted international interest for the ability to combine a high level of income, growth and innovation with a high degree of social protection (*Economist* 2013; Sachs 2008). As noted in the introduction, this 'model' provides an important background for understanding social responses to risk and regulation. Key features involve – in addition to universally applied and publicly funded welfare services – active Keynesian economic policies and well organised and cooperative industrial relations (Dølvik et al. 2014). Norwegian society is characterised by a relatively high level of societal trust, egalitarian values, low differences in income and economic resources, as well as generous and universal welfare systems such as free higher education and healthcare. Industrial democracy has been high on the agenda, democratic leadership styles have been valued, and there is extensive collaboration between the state and the actors in the labour market (e.g. Byrkjeflot 2001; Dølvik 2007; Gustavsen and Hunnius 1981). Comparatively, Norway scores high on such indicators as trust in government, social trust in general, low tolerance for economic differences, and reliance on public provision of welfare and safety (e.g. Dølvik et al. 2014;; OECD 2013; Skirbekk and Grimen 2012; Wollebæk and Segaard 2011).[14] Economic ability and general welfare ambitions may thus serve as important explanatory variables in accounting for regulatory investments in Norway; and indeed, they are peculiarly linked together in the sense that the heavy regulation (and taxation)

[14] These factors may also account for the existence of relatively non-deterrent enforcement profiles, with high levels of trust and commitment to learning and improvement. These might be mutually reinforcing factors, as accommodative and persuasive inspection profiles may also be one reason for a higher social and political acceptance for public control.

of windfall profits from the petroleum industry have substantially facilitated the very ability to promote and fund welfare goals.

The relevance of the national context might be further illuminated by contrasting with the UK experience. Going back to the early 2000, whereas the British Labour government launched an ambitious programme for 'Better Regulation' with a heavy focus on business friendly deregulation, by reducing regulatory burdens with enforcement cutbacks, the Norwegian conservative government launched a reform for strengthening governmental enforcement schemes, with only parenthetic reference to regulatory burdens. The rationale in Norway was indeed embedded within ongoing liberalisation processes, involving large-scale outsourcing of public production. However, the strengthening of regulatory intervention – and enforcement in particular – was seen as critically instrumental in compensating for the loss of direct control and for securing public interests while transferring the production of goods and services to the market place. The extent of liberalisation may however also indicate the moderate and government friendly rationale. In most sectors it has been restricted to EU-driven domains, thus including consumer oriented utilities/commodities (e.g. transportation services, electrical power, and telecommunication), whereas citizen oriented welfare services largely are left within the public domain. The stated rationales have generally been to re-arrange roles for the sake of efficiency rather than liberalisation for its own sake. The market should be the servant not the master, thus corresponding with the more general evaluations of how New Public Management (NPM)-related reforms have materialised in Norway, focusing less on market-based and more on managerial and user-responsiveness strategies (Hansen 2011).

Summarising discussion and some theoretical implications

This final section will follow up the introductory promise to discuss some theoretical implications and the possibility of explanatory rigour in accounting for regulatory policies and practices in Norway. It will also provide some additional cases for illustrative purposes.

Regulatory functions in Norway have been strengthened across the board and new enforcement regimes have been established for key policy areas. Changes in regulatory systems do not emanate from general regulatory policies but from perceived needs in specific sectors and domains. Indeed, the relative absence of such policies has provided more room for sectorial ambitions as reflected in regulatory investments. The most generic and pervasive reform trends have been the implementation of purpose-based and management-based rules, accompanied by appropriate enforcement practices. However, decentring strategies have not reduced or made public control redundant. As the paper has demonstrated, the regulatory strategies followed in Norway provide a case for seeing the growing reliance on self-regulatory mechanisms as expanding the overall size of publicly instigated regulatory investments, in particular as these mechanisms

have been statutory and state-imposed i.e. enforced self-regulation. In the same vein, schemes for risk-based regulation appear to have promoted prioritisation rather than downscaling of public enforcement. The general increase in enforcement efforts stands in some contrast to the economising potentials and rationales related to both decentring and risk-based regulatory approaches

Summarising probable explanations for this finding, two factors appear critical. Firstly, regulatory gaps will survive and endure in spite of decentring regulatory strategies. They do create new control challenges in themselves, and regulatees do not fully substitute the control mechanisms needed for meeting regulatory goals. Secondly, the state has had both the ability and the willingness to pursue regulatory goals. No strong pressures have existed for cutting public expenditures and regulatory governance has taken place within a national context characterised by high welfare ambitions combined with government legitimacy and tolerance for public interventions.

Operative mechanisms appear to be found primarily within the institutional setting of the regimes and in the rationales for promoting the goals of regulation, which in turn, are embedded in the public concerns at stake. In the latter case, they are in part external and contextual preconditions, which further migrates into the institutional sphere of regulatory rationality. In combination, these factors provide a case for seeing institutional mechanisms as operating in consort with contextual shapers for promoting publicly defined welfare concerns, as these are transformed into broad and ambitiously phrased regulatory goals.

In general terms, the decentring of regulation implies a re-allocation of responsibilities for working out the practical application of the regulatory provisions. This raises critical questions in terms of normative legitimacy and rationale, as well as empirical and explanatory issues regarding risk-based and hybrid forms of normative control in the (post)regulatory state (e.g. Scott 2004). From a deregulatory public choice perspective, the decentring of regulation would be considered a technically and normatively justified delegation of regulatory responsibilities only if accompanied by a withdrawal of both command and control regulations and government enforcement. From a more broadly conceived public interest angle, the rationale would be to optimise welfare outcomes by mobilising regulatory resources at all levels of regulation. This involves both the prioritisation of public enforcement efforts and engaging regulated organisations to take part in joint processes for achieving regulatory goals in more effective ways. The paper thus reflects the wide range of public goals and a corresponding variety of just how the public interest might unfold against the complex and dynamic conceptualisation risk in mature welfare societies.

Some key dimensions in theoretical reasoning on regulation

In terms of theoretical interpretation and explanatory rigour, several questions can be raised however. These can be related to a few relatively distinct dimensions: positive versus normative theory, endogenous versus exogenous factors, the degree of comprehensiveness in formulating theoretical positions and hypotheses (broadly versus

narrowly), and the degree to which explanatory (or normative) biases or theoretical assumptions shape the outcome of regulatory analyses. The latter will be addressed in the following with a bias in favour of public interest theory, responding to the tendency in much regulatory scholarship to the contrary effect. A brief sketch of key dimensions is however needed as a background for the discussion.

Theoretical approaches to regulation are commonly classified as normative or as explanatory in their orientation (Baldwin et al. 2012; Hood et al. 2001; Morgan and Yeung 2007). Normative approaches are concerned with how regulation should work according to some selected criteria and may accordingly prescribe remedies for identified regulatory failures. In this, they also rely on some causal or explanatory mechanisms for producing the desired outcomes. Explanatory (positive) theory, however, will take the 'state of regulatory affairs' as the given explanandum and seek to account for how it has come about. Whereas normative theory reflects ideological battles over the basis and extent of justifiable state interventions, positive theory is supposedly value-neutral in this respect, since 'norms' here only provide 'analytical benchmarks' for explanatory analysis, taking the regimes as such as the dependent variable (e.g. Hood et al. 1999; 2001). The following will primarily deal with the latter but will briefly discuss how normative benchmarks migrate into explanatory models and implicitly, how such benchmarks may become 'moving targets', possibly also with normative implications.

Explanatory (positive) approaches distinguish regularly between exogenous and endogenous shapers of regulation. Exogenous factors are also referred to as external or contextual, in that they seek to explain the actual content of regulation by reference to mechanisms outside the regimes that produce and shape their constituent components, such as rules, enforcement strategies and institutional structures. These shaping factors are typically divided into different types of interests or concerns, supported and promoted – in general terms – by some sort of agency, the concentrated power of which determines its impact. Interests and concerns can, at one end of the spectrum, be public and collective, typically by seeing regulations as instruments for correcting 'market failures' or for promoting public or citizen benefits not unequivocally classifiable among the market failure candidates. At the other end of the spectrum, we find private and particular interests, promoted by consumer groups, industrial actors, lobbyists of different kinds etc.

Regulatory scholarship still lacks consolidated consensus on the prevalence or explanatory strength of the positions or theoretical approaches. This is partly because of difficulties in substantiating explanatory claims given the (forbiddingly) wide range of possibly confirmative evidence for any given theory. We may, at this point, recall an observation made two decades ago, reflecting on whether regulatory scholarship was moving into a midlife crisis or to its prime (Baldwin et al. 1998). Discussing the general challenge encountered in attempts to explain social phenomena, the authors observed that:

> The broader the thrust of a theory, the more it provides a frame for understanding, but the more it requires refinement to explain particular circumstances. The narrower the range of an account the sharper its thrust in relation to the focussed-upon topic, but the poorer its capacity to serve as a frame for general understanding (Baldwin et al. 1998: 13).

Concluding this general remark, the authors' advice was to develop a nose for the 'kernels of truth in varying theories, a sense of the limitations of, and assumptions underpinning such theories and an awareness of the information needed for applying and testing them' (p. 14).

Whereas the preceding analysis clearly corresponds best with the broad approach, providing frames for understanding rather than clear benchmarks for explanation, a discussion of implications along the broad-narrow range may clarify some assumptions and possible biases.

Interest-based perspectives: biases and critique

The notion of public interest is clearly problematic both in terms of defining it and evaluating its realisation. As observed by Anthony Ogus (1994: 29):

> … any attempt to formulate a comprehensive list of public interest goals which may be used to justify regulation would be futile, since what constitutes the 'public interest' would vary according to time, place, and the specific values held by that particular society.

Accordingly, one objection against 'positive' public-interest theory is that it is too open-ended for explanatory purposes if the 'public interest' is not more clearly specified. Too many regulatory interventions can be taken to match the scope and variety of hypothesised predictions.

Although a broad range of collective goals may normatively justify regulatory intervention, such as redistribution, procedural fairness, participative dialogue etc. (e.g. Balleisen and Moss 2010; Feintuck 2010), the conventional approach in welfare economics provides some restrictions by reserving regulatory interventions for the correction of market failures such as those related to externalities, information asymmetries, monopolies or public goods. Effectiveness, in this respect, appears as a necessary condition for normatively justifying or for analytically confirming public interest theory. But even with these restrictions, testability in a strict sense would be difficult. One solution has been to introduce assumptions based on 'strong' liberalist and minimal intervention conceptions of market failure, thereby further restricting the spectre of outcomes that can serve as evidence (Hood et al. 1999; 2001). This so-called 'minimal feasible response' assumption implies estimates of such factors as the costs of acquiring risk information, the costs of opting out of risk, the role and availability of tort

law etc., implying that any observed intervention exceeding expected levels of response given these presumptions, will disconfirm the hypothesis. Outcomes of such testing typically yield mixed results, and a number of regimes would not match the levels of interventions expected. The (restricted) market failure hypothesis, it is argued, appears more useful as 'a method of analytical benchmarking than as a reliable predictor of regulatory content' (Hood et al. 2001: 71). Admitting that the 'minimal feasible response' assumption reflects an individualist cultural bias, the authors explicitly point out that this is meant as an analytic and not a normative benchmark:

> The analytic point of spelling out the (minimal feasible response) approach and its entailments is not to endorse that bias but to use it as a basis for reasoning about what the minimal conceivable state response to the 'market failure' presented by each hazard might look like (Hood et al 1999: 153).

So far, the analysis and the assumptions appear value-neutral.

However, if these assumptions are used as the *only* way to operationalise public interest theory, the bias returns in other guises, in particular, if alternative public interest related hypotheses are not also explored. In their study of nine risk regulation regimes in the UK, Hood and colleagues appear to follow the former strategy: 'to the extent that regime content differs from what might be expected from (a market failure) perspective, we can turn to other explanations …' (Hood et al. 2001: 72). As it happens, these explanations involve the impact of public opinion, experts, private lobbying etc., whereas the public interest is more or less implicitly operationalised only through the 'minimal feasible response' assumptions.

Almost by default, the analysis is thus directed at mechanisms outside the scope of public interest perspectives. It can be argued, that what may thereby be gained in explanatory power, may be lost in exploratory scope, and in effect, neglecting evidence that would support a broader conception of the public interest. If public interest theory is exhausted by and tested only against a narrowly defined market failure hypotheses, and if 'failing' that test, other (private) interests or institutional mechanisms, are what remains, the hegemony of simplistic economic models is indeed pervasive. This would leave out a spectrum of public goals and concerns, including those where benefits (and costs) cannot be easily calculated. It may be hypothesised (and anticipated) in passing that ambitious and affluent welfare systems would not provide much empirical evidence for confirming such restricted versions of public interest theory.

Biases against public interest approaches, methodological, theoretical, as well as ideological ones, are first and foremost to be found in (economic) private interests theory. Much scholarly effort has been invested in demonstrating the impact of private interests in the tradition of public choice and capture theory, where regulation is seen to serve the private interests of the regulatees themselves (or the regulators) rather than

public concerns. Most forcibly formulated in the original 'theory of economic regulation', it was even claimed that regulation 'as a rule' serves private rather than public interests (Stigler 1971). From these theories of regulation, we learn that regulation is just another commodity available in the market for politico-administrative decisions – that can be 'bought' by powerful actors. In such a view, all actors in the regulatory market place are governed by calculating self-interest – and ultimately to the effect of delegitimising regulatory intervention as such. The assumption that politico-administrative decision-making serve the common good in a trustworthy, disinterested, and effective manner is considered naïve, and regulatory officials are seen as self-interested rent-seekers. The critique is thus directed at all phases of the regulatory process, ranging from the initial motivations of public decision-makers to the outcomes of regulation, which do not serve the public goals as intended and may even be counterproductive (for a review, see Carrigan and Coglianese 2015).

However, a number of recent contributions in regulatory scholarship has argued for a *broadening* of the scope of regulatory justifications, not only from a normative point of view, and largely, in response to the dominance of capture and public choice perspectives (e.g. Balleisen and Moss 2010; Feintuck 2010; Leight 2010; Stiglitz 2010). This revitalisation is in part also a response to the prevailing academic deregulatory mind-set, more focused on government failure than success. As the failures of market-failure regulation have been a dominant research agenda, 'scientific evidence' has provided fertile ground for deregulation and non-interventionism, even to the puzzlement and concern of some of the proponents. The critique addresses concerns, inter alia, related to one-dimensional and calculating conceptions of regulatory rationality, stereotyping of policy-makers and regulators as shallow rent-seekers, and other presuppositions that blocks exploration of alternative hypotheses. It calls for moving beyond market failure considerations alone, taking into account market irrationalities, considerations of distributive justice, and a broader spectrum of social goals (Stiglitz 2010). Simple economic models cannot capture the range of public concerns and a consumer-oriented perspective neglects a conception of the *citizen* as embedded within a democratic settlement, as argued by Feintuck (2010), relating the public interest to the value of equality of citizenship, which underlies liberal-democracy. The economic and individualised interest of the citizen as consumer is different from those of the citizen qua citizen – which in turn implies a wider value-set that includes also non-commodity values and with a view of society qua society i.e. a community beyond the sum of private interests. A large share of regulations do indeed have the citizen as the focal point, to be protected beyond the possibility of opting for utility-maximising alternatives in the market place.

These perspectives opens up the space for both justifiable *and* explicable interventions. In terms of setting 'analytical benchmarks', their explanatory value is more problematic, if the regimes as such are taken as the only dependent variable. If, however, the

outcomes serve as the primary explanandum, the analytical focus shifts and the researcher will to a greater extent align with the regulator in searching for relevant mechanisms that contribute (or not) to the desired results. We return briefly to this choice of vantage point below.

Biases in endogenous perspectives – institutional theory

Turning to institutional theory, operative mechanisms are to be found within the regimes themselves. Attempts to find common denominators do not narrow down much, but tend to highlight the 'internal dynamics' in different rule-based spheres, and more or less loosely coupled normative communities. Morgan and Yeung (2007) identify a diversity of institutional theory in approaches such as 'responsive regulation' (Ayers and Braithwaite 1992), 'regulatory space' (Hancher and Moran 1989), and 'systems theory' (Teubner 1986). It is thus difficult to find common denominators within the very broad and divergent strands of institutional approaches, and it has even been argued that it is 'hard to find anyone who would not claim to be an institutionalist' (Baldwin et al. 2012: 53). As with public interest theory, if broadly conceived, the range of possibly confirmatory evidence when applying such wide-ranging perspectives thus gives little room for strict testing of institutional theory as such. Rather, it provides theoretical orientations, drawing attention to certain mechanisms that will be present in regulatory systems in various shapes and degrees.

Institutional perspectives will generally tend to focus on aspects of social behaviour that exceed immediate and rational maximisation of self-interest, and the observed outcomes as only the aggregate result of individual preferences. Actors are embedded in institutional environments that provide legitimacy and normative expectations that significantly shape behaviour, and internal and environmental complexity severely restrict the scope for rational cause-effect-based decision-making (March and Olsen 1989; Powell and De Maggio 1991). As noted by March and Olsen, the institutionalist perspective takes seriously the fact that everything cannot be attended to at once, even though such attention is required for 'comprehensive' solutions. Increased capability by reducing comprehensiveness is described as a central anomaly of institutions (March and Olsen 1989: 16–17). A logic of appropriateness, shaped and supported by norms, identities, routines, and rules, enters as a matter of necessity in coping with ongoing demands and informational overloads, and facilitates coordinated behaviour by constraining and channelling the allocation of attention and resources.

However, these formulas also indicate a trend in these versions of institutionalist thinking for devaluing the amount of public interest rationality to be found within the politico-administrative system. Rather than acting purposefully in the pursuit of collective goals, regulators are trapped in their own rituals of decision-making, resorting to logics of appropriateness, cognitively and normatively shaped and constrained within insulated institutional frames of reference. Actors are turned into over-socialised rule-followers or ritualistic goal seekers who 'champion programs that are established but

not implemented … gather information assiduously, but fail to analyze it', and hire experts 'not for advice but to signal legitimacy' (Powell and DeMaggio 1991: 3). As applied within the field of risk regulation research, the extent to which rationality is allowed for, is reserved for strategic and self-serving blame-avoidance calculations (e.g. Hood et al. 2001).

The vision of rationality in organisational decision-making appears perhaps most vehemently undermined in the 'garbage can model', which in its pure form appears to decouple problems and solutions altogether (Cohen et al. 1972). Two organisational structures, the access framework consisting of problems and solutions, and the choice opportunities available to participants, are linked in arbitrary and anarchic ways. Problems can be ill-defined, ambiguous, or contested; solutions may appear from unexpected sources, participants come and go, and choice opportunities appear and disappear. Goals and preferences are not clearly ordered, and their realisation is apparently not attached to the means available in an instrumentally rational manner. Densely summarised, these organised anarchies appear as 'a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work' (Cohen et al. 1972: 2). A temporal order of chance and chaos substitutes a consequential order of rationality. Problems, solutions, information, preferences, decision makers, and choice opportunities flow in and out of decision arenas, and linkages appear as arbitrary and autonomous. Cultural scripts, values, and rules of appropriateness help agents in manoeuvring within these anarchic and decoupled streams of ambiguous opportunities (March and Olsen 1989). Although such manoeuvring may seem understandable in the face of the complexity of the problems and the environmental instabilities encountered, rationality, if allowed for at all, appear as basically incidental.

These strands of the institutionalist paradigm, it is argued, 'tries to avoid unfeasible assumptions that require too much … in terms of normative commitments (virtue), cognitive abilities (bounded rationality), and social control (capabilities)' (March and Olsen 2005: 20). One might however also question whether they require too little; or differently put: whether a biased search for anarchy and irrationality in turn rules out the possibility of finding traces of forward-looking consequentialism.

As it happened, March and Olsen (a Norwegian), in their classic book on the new institutionalism, used the establishment of the Norwegian petroleum regime during the 1960s as an illustrative case (March and Olsen, 1989: 34–37). They claimed that the regime was more or less a blueprint of earlier industrial policies and that the policy makers had basically followed tradition, 'standard operating procedures' and 'rules of appropriateness', rather than rational strategies in the pursuit of the public and national interest. Allegedly, there was no careful or systematic calculation of alternatives, but

rather some simple experience-based rules and norms. Rational considerations, assessing policy options, alternatives, and systematically estimating possible consequences were not really adhered to. Furthermore, the processes of handling foreign investments and companies in the process of 'Norwegianisation' and the securing of national control, were more or less duplicates of formerly applied policies in the energy sector, such as the policies adopted in regulating the waterfalls earlier in the twentieth century.

However, we may ask if the prevalence of national 'customs, rules, and traditions' was not the result of deliberate strategic choices. Noting of course, that the outcome of social choices cannot explain their causes, the emergence of the Norwegian petroleum regime, after all, generated vast incomes for the country. It also laid the foundation for developing its most important industrial cluster of technology and knowhow. The architects later came to occupy leading positions in academia, law, industry, and politics. If this case exemplifies a 'logic of appropriateness' more than a 'logic of consequence', the former 'logic' may appear as too all-encompassing for explanatory purposes, and the latter as a theoretical construct more than an empirical possibility. The attempt to broaden perspectives by opening up the scope of interpretations thus serves rather as restricting this scope. Whereas theories of rational choice have been criticised for loss of explanatory power if 'rationality' is too broadly conceived, we may also ask how 'smart' or rational a policy must be, to disprove a nearly all-inclusive theory of appropriateness.

However, other strains of institutional theory appear more attentive to the multiplicity of mechanisms and rationalities that operate within institutional spheres. Morgan and Yeung (2007) add an interesting twist to institutionalist theory in identifying the blurring of differences between public and private actors – and interests – as one factor that appears to unite different strains of institutionalism. The next section will elaborate these varieties of institutional analysis as they materialise within the regulatory space (Hancher and Moran 1989), combining institutional and contextual perspectives on how knowledge and interest are produced, negotiated and aligned.

Negotiating welfare concerns within the regulatory space

Hancher and Moran (1989) question the assumption that there is an inviolable public core or sphere, that the 'public' and the 'private' can be clearly distinguished, and that regulatory processes can be portrayed as contests between private and public interests. Rather, there exists a 'regulatory space', involving complex mechanisms of manoeuvring and trade-offs between different goals. The authors focus on the intermingling of interests and how patterns of interaction between groups negotiate a plurality of goals. This framework is particularly appropriate when regulatory processes take place within a tripartite collaborative framework – with government regulators in

the orchestrating role. Indeed, such mechanisms are in many respects constitutive of Norwegian regulatory processes, based on vaguely defined and ambitious goals carefully prepared through different consultative processes, and gradually implemented and amended through complex transformative processes (Lindøe et al. 2018; Nordrum 2017).

These mechanisms were in fact evident in the early phases of the comprehensive (management-based) internal control reform for the land-based industries. As the first regulation issued in 1992 was considered excessively 'bureaucratic', with the use of rather abstract administrative and legal terms and formulas, pressures for reform built up from several quarters. Regulated organisations as well as front-line government officials faced serious challenges in translating the general management templates into practicable solutions that would reflect and adapt to the risks, complexities and administrative capacities of the regulated organisations. A comprehensive collaborative process was initiated, involving researchers, industries, unions, and government, with the latter in a leading role. The process included evaluation of experiences and effects as well as a major revision of the regulation, for a much simplified and more user-friendly language and including also practical soft-law guidelines. The reform thus served public as well as private interests; clarifying conditions for compliance and enforceability was imperative for regulatees and regulators alike. The reform was processed through well established institutional mechanisms, with actors performing their expected roles, procedures followed, and the outcome, in its consequence, serving a reasoned public interest as much as one could hope for. The regulation has been virtually unchanged for more than 20 years,

The collaborative tripartite framework materialises arguably in its most mature and institutionalised form in the petroleum sector. It comprises the whole range and variety of goals and interests embedded in regulatory interventions, including rule-making processes. Management- and purpose-based regulations range from requirements on participative processes to knowledge-based decision-making (e.g. involving risk assessments). Substantially, regulations certainly also involve the establishment of acceptable risk and standards of safety, occasionally causing severe conflicts between interest groups (notably unions and industrial associations), and with the regulator in a dual role as both public authority and mediator. The dividing line between process and substance is not always clear-cut, and conflicts may occasionally refer to procedure and participation in consort with standards for safety and risk tolerance (e.g. Kringen 2014). To some extent consensus is in itself regarded as a goal for these collaborative efforts, seeing (relative) consensus as an important condition for later success in terms of implementation and compliance. This reflects also basic rationales behind the management and purpose-based regulation. In fact, the emergence of these regulations relied on a functioning tripartite framework, largely transferring the production of regulatory content to institutional processes, and the removal of deterministic and

prescriptive rules was in part both justified by and reliant upon a well functioning and legitimate tripartite system (Bang and Thuestad 2014; Engen et al. 2013; Kringen 2009).

The private-public divide is thus blurred to the extent that participative governance ideals are an integral part of the defined public interest, which is collectively agreed upon by all parties as a framework for cooperation and conflict resolution (Engen et al. 2013). In addition, the enforcement role of the regulator exceeds simple compliance-related interventions, and merges delicately with roles related to the facilitation of participative and professional dialogue, and deliberative processes aligning different interests. These processes certainly also include severe conflicts and sometimes non-transparent mixes of professional expertise and value judgements where questions about 'acceptable risk' are intertwined with public as well as private goals.

In a recent study Slayton and Clark-Ginsberg (2018) demonstrate just how regulatory processes involve the joint mobilisation of industrial and professional expertise, in part as a consequence of (and precondition for) management-based regulations. Drawing on research from critical infrastructure protection (the United States electric power grid), they criticise how rather 'instinctive' suspicions of capture has given biased understandings of how such expertise is mobilised and utilised in regulatory processes. Whereas reliance on industrial expertise regularly has been turned into evidence for capture, they argue that the formation of knowledge and expertise is endogenous to regulatory and political processes. Conflicts about regulatory standards reflect tensions between different expert communities within the electric power sector, not reducible to simple conflicts between private and public interests. Rather, expertise and regulation are 'co-produced' in a manner that serves a plurality of public and private interests. What may at first glance appear as capture may in fact be a (forced) attempt by regulators to mobilise expert groups in joint efforts to promote a plurality of different public goals, involving delicate trade-offs related to efficiency, economy, reliability and safety/security. Such processes also expose the relational and value-laden nature of expert knowledge and the uncertainties intrinsic to judgements about risk.

In the same vein, Coglianese (2016) criticises what he refers to as the 'public-interest detriment' inherent in capture theory, arguing that even if industries take part in regulatory processes and reap benefits from their involvement, this does not necessarily imply that the public interest has been compromised. Regulation will in many cases involve a balancing of benefits and costs, and industry influence may also contribute to counteract regulations that impose grossly disproportionate costs. He goes on to address the problems involved in establishing 'optimal points' at which regulatory policies should be set and enforced. Indeed, it would be deviances from such points that would justify assertions about public interests being compromised (e.g. by industrial influence). But regulation involves interventions in society, that triggers normative as well as factual and even epistemological questions about what is proportional to the

problems encountered. This further illustrates the difficulties in drawing clear distinctions between normative and analytical benchmarks.

Final remarks

Risk regulation regimes exhibit mechanisms of different kinds, reflecting a plurality of interests, mediated in complex institutional processes, and involving normative as well as epistemological challenges, that are not always clearly distinguishable (e.g. Aven and Renn 2018). Taking this as a point of departure, challenges arise in terms of extracting selected components of broad theoretical orientations for the purpose of subsequent testing in the strict sense.

This paper has focused on overall rationales and a limited set of data related to regime content, rather than domain-specific or generic and comparative estimates of net risk outcomes of regulation and their distribution across the spectrum of possible beneficiaries, be they private industries, directly affected citizens, or the population at large. Analyses of the level of regulatory investment are largely restricted to data on enforcement resources. At the same time, and given the rationales associated with the reforms, reductions in investment that *could* be expected were not found. An assessment of policy rationales and impacts measured against benchmarks derived from public interest theory would require an analysis of whether self-regulation had in fact served the purpose of compensating for public enforcement efforts, with similar or better results in risk terms. Likewise, if the introduction of risk-based regulation were to justify (or explain) substantial reductions in public enforcement, given an imagined 'optimal point' of regulatory investment, one would need rather complex analyses of reliable risk metrics at a societal level. Such analyses would involve an examination of the extent of regulation measured against the available risk metrics in order to understand how different interests and mechanisms operate in producing regulatory outcomes in different domains. One would also need to understand how such data can be convincingly compiled for the purpose of comparative analysis (be it fatalities, injuries, or economic losses). However, risk metrics within different regulatory domains are indeed highly contested, even in areas where the amount and quality of data must be considered comparatively high, such as in the petroleum industry (e.g. Blakstad 2014).

Still, the very idea of such analyses also begs the question of just how 'proportionate' regulatory interventions should be to confirm or contest any given theory on regulation. Evaluation of risk is inherently value-laden – involving normative as well as epistemological uncertainties, with critical relevance for the application of standard risk-cost-benefit analyses (e.g. Shrader-Frechette 1991; Aven and Renn 2018). The imagined balancing point between proportionate intervention and problem characteristics (and outcomes) is in reality a moving target, that may fluctuate in response to a number of factors (in addition to 'risk metrics'), ranging from current definitions of risk to the setting of the value of statistical life (VSL). Incidentally, both these 'benchmarks' have been in motion in Norway in the past years, as definitions of

risk have gradually moved from the traditional probability-impact conception to more uncertainty-based conceptions (Røyksund et al. 2017). Furthermore, the national standard for VSL was recently doubled at the stroke of a pen, following an expert report initiated by the Ministry of Finance. It would not contribute much to the 'explanation' of risk regimes to argue, that this, in effect, would render a large share of regulatory interventions 'proportionate' from one day to the next, although this would be a justified claim seen from a risk-cost-benefit point of view.[15]

The challenge of defining a commonly accepted conception of what constitutes public interest – in terms of optimal points of intervention – thus seems particularly problematic within the field of risk, with all its associated dilemmas, uncertainties, and contested issues. It can be argued, however, that other major theoretical approaches – such as private interest theories – also rely on a conception of public interest, since these would be the interests that should be demonstrably compromised if arguments about, say capture or opinion-responsiveness, is to be convincingly substantiated. From this perspective, some notion about the public interest will always lurk in the shadows.

The approach in this paper aligns best with a conception of theory in a broad sense, as perspectives and orientations drawing attention to certain types of (causal) mechanisms rather than others. This reflects the view that regimes might contain several elements supporting different perspectives – exemplifying different kinds of mechanisms – and cautiously adapted to a national context where regulation serves broad societal goals. These would include high welfare ambitions combined with government legitimacy, capability, and tolerance, as public interventions have provided contextual preconditions for combining decentred and top-down approaches to regulation. Judging what is the appropriate level of intervention is correspondingly complex, and outcomes may serve a plurality interests in a manner which cannot be easily settled with reference to precise benchmarks. Against this background, public interest perspectives cannot be seen as exhausted when market failure hypotheses fail to support them.

The regulatory challenge in this context consists in balancing between different regulatory purposes, approximating a level of intervention that match democratically and normatively legitimate considerations of proportionality in broad terms. Public monitoring and enforcement will, from this perspective, constitute a necessary and integrated component. Following a distinction provided by Morgan and Yeung (2007), the regulators can be seen as constructively arbitrating both the facilitative and expressive roles of law in society; the former seeing law as an instrument for shaping social behaviour and the latter for seeing law as institutionalising societal values.

[15] Disregarding for the moment the question of whether the establishment of VSL is empirically or normatively substantiated.

These considerations should cause some reservations in terms of providing caricatures of regulators as captured, rent-seeking, or otherwise normatively or cognitively biased. The complexities involved may call for joint engagements, partly by taking the 'local point of view' seriously, and in considering the political and cultural contexts from where regulatory rationales emerge. Analyses of whether regulatory investments are proportionate, in relation to conceivable impacts on more or less specified social and economic goals, are still one key task for regulatory scholarship, but the manner in which such analyses reflect back on the regimes, as dependent variables, pose additional questions. Under conditions of regulatory uncertainty, given the range of epistemological and normative issues involved in risk governance, the kind of outcome data needed for assessing risk regulation policies against an imagined 'optimal point' of intervention, may in most cases not really be available at all, and certainly not when considering comparative risk in broad societal terms. These considerations may provide reasons for alternating the focus of analysis in the direction of discovering and understanding mechanisms of interventions as seen from the position of the regulator. Just as one cannot fully understand local cultures on the basis of externally imposed criteria (e.g. of rationality), the study of regulation implies sensitivity to the contextual nature of regulatory regimes and the corresponding difficulties involved in 'explaining' them. A shift in focus in the direction of taking the regimes as 'independent variables' would to a larger extent involve active alignment with the regulatory point of view. This may involve the adoption of a moderate (regulatory) relativism, in the sense that attempts to understand or explain, must take account of the way in which different communities and societies conceptualise and understand the public interest.

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