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Modelizing the Nordics: transdiscursive migrations of Nordic models, c. 1965-2020

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ABSTRACT

This article examines the intertwined circulation of multiple kinds of Nordic models. We seek to understand how modelization of the region occurred at multiple levels and in disparate fields, in other words how different aspects of Nordic policies and politics came to be understood as worthy of interest and at times of emulation. In doing so, we aim to contribute to the critical scholarship on the Nordic model concept, exploring how it has been changed and contested over time, the contexts in which it circulates and why it has generated interest. Methodologically, we use digital tools to analyse scholarly literature in different disciplines published between 1965 and 2019. In focusing on intellectual constructions of the Nordic model, we locate academia as a crucial field for the development of the Nordic model concept, but one that is in communication with and integrates typologies developed in other fields. Following a brief discussion of the model concept, we assess intensifications and critical junctures in the modelization of the Nordics through wordclouds. Second, we demonstrate the variety of such modelizations through case studies. Third, we conclude by pointing to the rhetorical and heuristic effects of such modelizations.

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Introduction

There have been numerous references to ‘models’ during the global covid-19 pandemic. Mathematical models have been used by epidemiologists for tracking the pandemic and informing public policy responses, while specific (mostly) national experiences have been described as models for other societies to follow or avoid. Alongside other examples such as Taiwan, New Zealand and Israel, the policies of Sweden’s ‘corona model’ became particularly controversial and politicized.¹

Although references to a ‘Swedish corona model’ first appeared in 2020,² they built on a domestic and international tradition of *modelizing* Sweden and the other Nordic countries, which we examine in this article. Drawing on bibliographical searches of academic literature in different disciplines, we attempt to trace the history and meanings

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of the Nordic model concept, and the various ways in which it has been used over time. We ask how the Nordic model has been invented, applied and circulated across diverse fields of meaning, and what studying these processes of modelizing might tell us about the scholarly construction and communication of Nordic societies over the half century since 1970. Our periodization confirms scholarly consensus that the Nordic model concept first emerged during the late 1970s. Since the 1990s the term has been used more frequently and in increasingly diverse ways.³

In his 2019 study of the 'welfare state', Nils Edling notes the need to historicize understandings of this concept and points out how concepts such as the welfare state, 'constitute highly politicized key concepts of the Western world. Their ambiguity and fuzziness across popular, academic and political discourses is a trademark'.⁴ That same transdiscursive nature is true for the concept of the Nordic model. Taking inspiration from Edling's pragmatic nominalism, Andreas Mørkved Hellenes has demonstrated the transnational migrations of the concepts of the Swedish and Nordic model from the late 1960s and onwards. After initial resistance to the model concept in the 1970s, it became appropriated as a political slogan for Scandinavian social democrats and systematically put in use at a Nordic level during the early 1980s.⁵

Research on all aspects of the Nordic model expanded considerably during the 2010s, as have attempts to map and track the uses of the term and the evolution of its meanings.⁶ Such studies have demonstrated the ambiguities of the concept. It functions as 'an empirical, policy-based phenomenon and as a political idea and a trope'.⁷ It is perceived to be threatened by the challenges of globalization, while also praised as a means to respond successfully to such challenges.⁸ There are references to a singular socio-political model, usually understood in relation to the welfare state, but at the same time the concept is applied to a bewilderingly wide variety of phenomena across all aspects of Nordic public life. Further, there is a propensity to assume that any mention of Nordic models also implies exemplarity, reflecting either Nordic ambitions to export policy models or foreign desires to import such ideas.

Scholars have used Google Books Ngram Viewer to track the growth of references to a Nordic model since the 1980s.⁹ This article uses bibliographical material from academic databases to map the intertwined circulation of multiple kinds of Nordic models in scholarly literature since the 1970s. We explore how the concept has been changed and contested over time, and, more tentatively, why it has generated interest. In doing so, we seek to test the narratives and patterns which previous research has assigned to the Nordic model, providing a greater degree of systematic certainty and historicizing some of its particular and temporally distinctive mutations. The evolution and circulation of the Nordic model concept has to be understood within the context of the broad contours of European and global developments in the late twentieth and early twenty-first centuries. Our hypothesis is that this process has been shaped by two critical junctures in particular: the 1990s and the late 2000s. We argue that the period after the global financial crisis of 2008 saw not only a reconfiguration of the Nordic model in terms of economic competitiveness and (neo)liberal policy reform, but also a wider modelization of more fields and subjects as a marketing device, with yet unclear cognitive consequences. In focusing on

intellectual constructions of the Nordic model, we locate academia as a crucial field for the development of the Nordic model concept, but one that communicates with and integrates typologies developed in other fields.

Following a brief discussion of our method, we assess critical junctures in the modelization of the Nordics through wordclouds. We then use case studies to demonstrate the remarkable variety of different forms of modelizations, which in some instances have developed independently, and in others influence each other or even exhibit drifting meanings and transdiscursive patterns of association. In conclusion, we point to the rhetorical and heuristic effects of such modelizations.

Mapping the Nordic model

Models – and modelling – are used in social science research, referring to the application of mathematical or statistical methods to the analysis of questions relating to human behaviour and societies.¹⁰ A model is an abstraction, which helps the researcher to untangle the different strands – or variables – that make up complex human realities, and can thus be used to explain phenomena, predict trends and inform policy in the real world. From the 1960s, political scientists used models in order to explore the universal political processes of democratic countries.¹¹ In standard dictionaries and scientific encyclopaedias, *analytical* models are generally understood as being separate from *normative* models, which refer to exemplary or ideal phenomena. The bibliographic material collected for this article shows however that it is not always possible to make this clear distinction.

Machine-generated searches of relevant corpora have several advantages, making more material available to us and speeding up the process of collecting and comparing material. Focusing on a data corpus that is computer readable enables us to identify ‘patterns of language usage over long time periods in time series that can problematize existing periodizations’.¹² It thus allows us to map the concept, its core meanings and uses over time, while avoiding – even if not entirely eliminating – the potential for intellectual predisposition, subjectivity and arbitrary judgements on the texts that have defined the Nordic model.

To compile a list of relevant texts, we searched bibliographic databases representing a range of intellectual fields: Scopus, ProQuest, EbscoHost, Web of Science, Compendex, Embase, and Ovid Medline.¹³ While these databases include material that is ‘already popular’ and thus commercially viable, they can nonetheless provide an overview of the more widely-circulated applications of the Nordic model.¹⁴ We searched for the geographic signifiers ‘Nordic*’, and ‘Scandinavian*’ within three words of ‘model*’ in titles, abstracts and lists of keywords.¹⁵ The searches were performed at the beginning of May 2019 and focused on texts from 2019 and before. The extraction was conducted through the Aarhus University library database,¹⁶ which circumscribed the material available to us compared to searches made through other libraries and research institutions. The RIS files created from the individual searches were subsequently combined using EndNote, where duplicates were removed before being exported into an excel spreadsheet. We then manually checked each entry and rejected examples we considered to be irrelevant based on four criteria: 1) where the terms Scandinavian/Nordic and model appeared in unrelated contexts; 2) where ‘model’ referred to a highly technical or mathematical method for analysis (for example in meteorology or hydrology); 3) where

Nordic/Scandinavian referred to the geographical location for a trial (for example in medicine); 4) where ‘model’ referred to a physical model (for example a model boat or fashion model). This cleaning was cross-checked to ensure consistency.

Despite the wealth of possible information made available through digitization, or indeed because of it, working with this type of material requires careful attention to how information is gathered and extracted and the way it is subsequently interpreted.¹⁷ Research into digitized sources can make it difficult to contextualize the use of a search term in the context of other debates and topics during a given period, and in the context of the digital databases’ structures and contents.¹⁸ Here, our collective experience of researching this field allows us to comment on the relevance of these sources to larger historical developments in and involving the Nordic countries, and to some extent on the circumstances and reasons that encouraged study by observers outside the region.

We confined our searches to metadata (title, abstracts, keywords), which conforms to traditions in text mining. The vast majority of returns came from text in the abstract, though it should be noted that not all the records included abstracts. Abstracts are more readily accessible in citation databases and provide a condensed summary of key points in the article intended to appeal to the reader by addressing major scholarly debates and employing new or trending methods and terms. Besides sparing time and resources from having to clean full text hits, the search of metadata cuts down on false positives and means we do not have to weigh the importance of in-text usage (for example, if a footnote should be considered of equal importance to a reference in the main body). While this method naturally reduces the quantity and potential quality of the results,¹⁹ it does provide a sufficiently diverse range of texts and a means of handling an otherwise overwhelming amount of data.

As our terms were in English, the search mostly, although not exclusively, returned texts written in English.²⁰ In order to complement the English-language database we also searched the French social and political science databases Cairn and Persée.²¹ Persée consists of articles and literature reviews in academic journals, while Cairn includes publications in four categories: journals, books, magazines, and textbooks. The criteria for elimination were the same as for the other datasets, but there was a notable difference in that no abstracts were provided in the French data searches, meaning that our results are drawn from full-text searches.

Table 1. Initial results of bibliographical searches.

English language databases:		
Model	Initial Results	Final Results
Nordic/Scandinavian	3891	1295
Persée:		
Model	Initial results	Final results
Nordic/Scandinavian	266	151
Cairn:		
Model	Initial results	Final results1
Nordic/Scandinavian	632	650

The figure for final results is higher because the import from Cairn’s bibliography creates new entries in Endnote (e.g. special issues are registered as single articles).

Table 1 shows the total results of the search and the number of texts included in our final dataset. The final results include a majority of journal articles, most likely to be listed on citation databases and/or include abstracts, along with books, book chapters, conference papers, dissertations, and magazine articles.²² We recognized some of the texts as part of a known corpus discussing the Nordic model, but many were new to us. Despite its limitations, the search thus returned a broader overview of the usage and variation of the Nordic model over time than those that we were previously aware of.

The geographic signifiers in our search – Scandinavian and Nordic – speak to a gradual change as Nordic replaced Scandinavia as the preferred term for a region incorporating Finland and Iceland after the Second World War (figures 1,2).²³

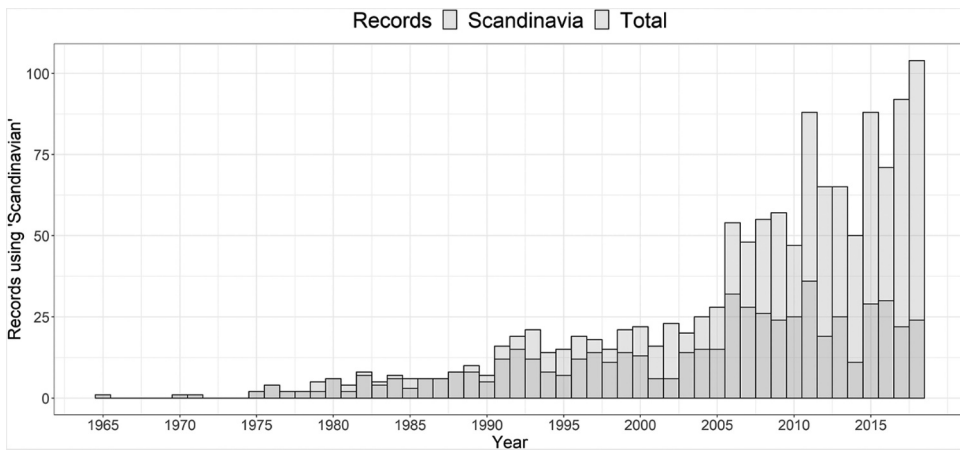


Figure 1. Dispersion of texts with Scandinavia or Scandinavian in title, abstract or keywords, excluding Cairn and Persée (see Figures 4 and 5).

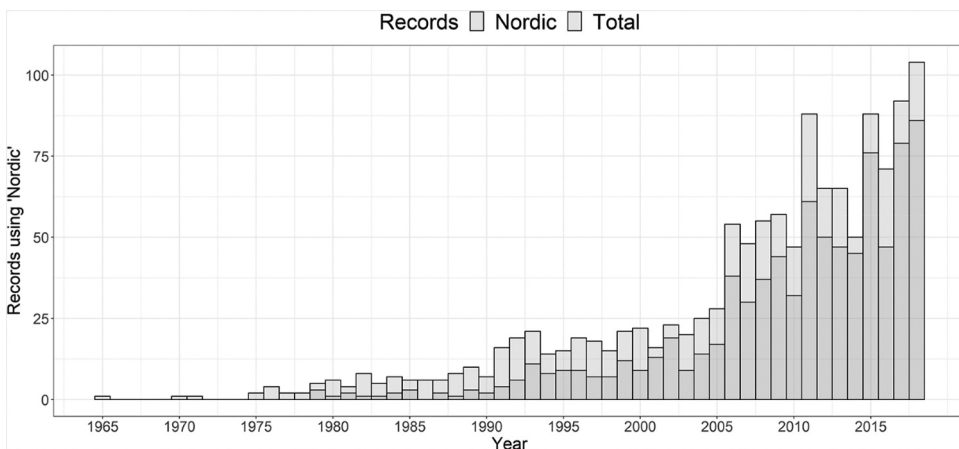


Figure 2. Dispersion of texts with Nordic or Norden in the title, abstract or keywords, excluding Cairn and Persée (see Figures 4 and 5).

Critical junctures in the evolution of the Nordic model

The earliest explicit pairings of individual Nordic countries with the concept of model can be traced to the 1940s, though these are mostly isolated occurrences.²⁴ The extensive literature on the Nordic model points to examples of *modelizations* of the Nordic region from the 1930s or even earlier, although in the strictly nominalist sense the *Nordic model* did not emerge until later.²⁵ Our study confirms this observation.

In order to visualize changes to the concept over time, we categorized the records into four periods structured around critical junctures, informed by our knowledge of the field from previous qualitative research. The first of these was the period before 1989, when the material is also sparse. The second period was the decade and the half following the historical rupture of the early 1990s, when the end of the Cold War changed the security balance of the region and undermined its 'middle way' positioning between East and West.²⁶ At the same time, the resulting ideological upheavals, coupled with longer term structural changes and a severe economic recession in Finland and Sweden, weakened support for social democratic parties and the policies that they stood for. This in turn provoked some profound questioning of previously taken for granted aspects of historical identity, especially in Sweden, and of the countries' position in the world, especially in Norway.²⁷ The early 1990s also saw a new dynamic phase in European integration, reflected in domestic debates on membership in Finland, Norway and Sweden and the Maastricht Treaty in Denmark. The third period started with the global financial crisis of 2008, while the fourth period started with the refugee crisis in 2015.

We created wordclouds of the ten most common words in the titles, abstracts, and keywords in each period, based on their inverse relationship to other periods.²⁸ The method has some shortcomings, not least in that an analysis of inverse relationships, intended to highlight differences between periods, resulted in some wordcloud words appearing in only a small number of records (more than three records). Furthermore, appearance in the wordcloud does not necessarily indicate that the term was used in the same way in all records; for example, 'oral' in period 1990–2007 was linked to the global circulation of a Scandinavian dental care model, but also the availability of oral contraceptives in the welfare state. The wordclouds should therefore be interpreted with care, and as a starting point for further investigations rather than definitive results (figure 3).

The first period, encompassing the earliest record in the dataset (1965) until just before 1989, indicates a gradual transition from economic analytical models towards normative, social policy models at the end of the 1980s (see case study 1). Economic terms proliferated, notably 'inflationary' (see case study 1 below). Although it is not visible in the wordcloud, we can also see a growth of references to a transferable Scandinavian social model, starting in the early 1980s. The records for this period include one early example of normative scholarly modelization: an anthology from 1980 proposing Nordic policies as relevant for Scotland in the aftermath of the first referendum on devolution in 1979.²⁹ One of the reviews of this book that appeared in our database was sceptical of attempts to construct a regional model from national case studies, describing the Nordic model as a 'wraith-like creature rather than a well-rounded conceptual construct'.³⁰

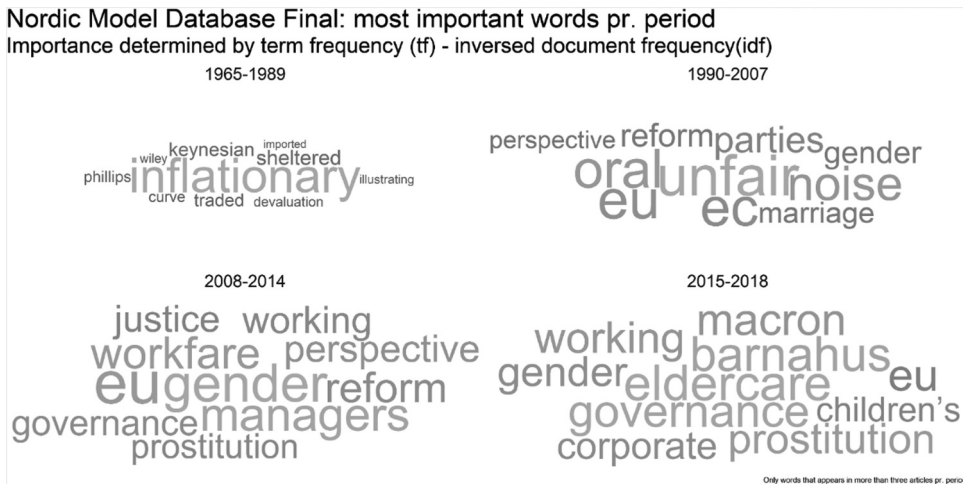


Figure 3. Ten most common words per period in the Nordic model database. Only words that appear in more than three articles per period. 'Wiley' refers to the Wiley Online Library, listed as the copyright-holding institution of some of the abstracts. Its appearance in the wordcloud for the period 1965–1989 reflects the fact that there were relatively fewer records for this period.

The wordcloud for the period 1990–2007 captures the greater focus on Europe, as 'EU' and 'EC' are prominent. 'Unfair' appears in materials describing measures to tackle unfair competition. The Nordic Council and Nordic Council of Ministers are present in the wordcloud in connection with a Nordic model for predicting road traffic noise, Nord2000. While gender equality has long been a prominent aspect of the Nordic region's international profile,³¹ such policies seem to have become particularly prominent during this period. In particular, the Nordic countries were cited as an alternative to German and British family and gender equality policies for, amongst others, Lithuania, the Czech Republic, and Germany itself. Relatively high levels of gender equality potentially presented an alternative area of modelization, compensating for the diminished prestige of other traditional social democratic markers of progress.³²

The aftermath of the global financial crisis of 2008 is assumed to have led to a re-imagining of Nordic contributions to the world. The World Economic Forum in Davos, in January 2011, where the Nordic governments sponsored the presentation of a pamphlet 'The Nordic Way', has been cited as a key moment in this redefinition.³³ There are however no direct traces in the wordcloud itself of the financial crisis and its aftermath. During this period the Nordic (or more accurately Swedish) model of prostitution legislation, promising to provide more effectiveness in regulating prostitution and diminishing violence against women, was regularly featured in academic texts. This is despite the initiation of a Nordic-Baltic Cooperation Against Trafficking campaign in 2002 that brought attention to a Nordic model.

The final period is marked by the critical juncture of the European refugee crisis of 2015. Terms related to migration do not feature in our wordclouds, however, though they are present in the records. Foreign attention to the Nordic model is represented by the appearance of 'Macron' during this period, reflecting the French President's interest in

a flexicurity model. The *barnahus* model – a strategy for tackling child abuse initially launched in Iceland – is most likely overrepresented in our records, due to the inclusion of a book with multiple chapters showing as separate entries.³⁴ Its emergence, with the Swedish prostitution models in the final periods of our wordcloud, indicates the ways in which the Nordic model is used in reference to very specific areas of policy. This suggests the capacity of Nordic models to work in multiple spaces at once, as social models (recent discussions of governance), economic solutions (the interest in workfare following the financial crisis), and policy models.

As this suggests, there is certainly evidence for continued – or indeed renewed – international interest in the Nordic model during the 2010s. We can assume that this has been stimulated partly by the successes of the Nordic countries in achieving high rankings in international indices on such diverse matters as happiness, competitiveness, good governance or educational attainment (see case study four). But its rebirth and popularity has also been driven by the focus of the region's governments on branding, unilaterally and through the Nordic Council of Ministers. In the next section, we explore in more detail some of the specific meanings of the concept.

Modelization in practice: four cases

While these visualizations of the database materials help us to identify the shifting topical emphasis in successive modelizations of the Nordic countries, the database also provides the materials for us to track in some detail the more precise processes by which modelization takes place in practice. In the following case studies, we show how our records can be used to identify various types of modelization as discursive practices, with specific meanings that stay over time and show a propensity for moving across genres, fields and discourses, generating distinctive social and political outcomes. Our records thus offer a useful entry point to explore how various model applications to the Nordics evolved in academic fields and gradually fused with national policy models. This process has contributed to the diffusion of the Nordic model, but also to its 'stickiness' in a general sense.³⁵

1. From formal models to policy models: the Scandinavian model of inflation

The wide net cast by our approach to the databases reveals references to a 'Scandinavian model of inflation' in the 1970s as one of the first systematic applications of the model term to the region. In 1970, economist and Director of Research at Statistics Norway Odd Aukrust developed a formal model, presented in English as PRIM I (PRice Income Model I), as an attempt to explain the paradox of why Norwegian exports remained high despite inflation.³⁶ Aukrust observed that the Norwegian economy was divided into an export-oriented sector exposed to international competition and a sheltered sector protected from competition, theorizing that price increases were offset between the two sectors. Based on Aukrust's model, Swedish economists Gösta Edgren, Karl-Olof Faxén and Clas-Erik Odhner, formulated the eponymous 'EFO-model' as the basis for wage negotiations between the Swedish labour market organizations, while the Finnish equivalent became known as the Input-Output Framework.³⁷ The formal model of the price-

wage relationship was thus early on used domestically as a policy model. As such, it was strongly influenced by the earlier Rehn-Meidner model, which posited that an expansive welfare state, active labour market policies and public investment would offset inflation resulting from wage increases as structural adjustment would ensure productivity growth.³⁸ Combined, the EFO-model and the Rehn-Meidner model served not only to explain labour market behaviour, but also to inform it. However, the EFO-model also drew criticism from economists, who observed that its authors had not presented the model in a readily testable form as a predictor of inflation.³⁹

Nevertheless, as the dismal prospects of 'stagflation' captured the attention of economists internationally in the early 1970s, the Nordic experiences of controlling inflation became an item of discussion. The role played by demand-management policy and the expansive domestic public sector contrasted with the recommendations of monetarist economists. It also challenged the thesis of imported inflation. While neither a fully-grounded theory, nor a formal model in its original formulation, the Scandinavian model of inflation was soon discussed by economists as if it indeed represented the actual functioning of Nordic political economy.⁴⁰ Aukrust himself joined these exchanges, referring to a 'Norwegian model' of inflation. Gradually these exchanges were picked up by the OECD in analysing the performance of smaller industrialized economies,⁴¹ as well as applied to larger countries like Japan,⁴² while they also informed more general debates on Scandinavian political economy and can thus be understood to have contributed to the notion of the Nordic/Scandinavian welfare state model.

The application of the term model to this theorizing on the relative performance of the Nordic countries is interesting from our perspective, as it shows a fusing of analytical and normative elements in modelization. Traditionally, in economics as in the natural sciences, models are used for prediction and simulation, while the above-mentioned models are mostly concerned with positing relationships. In this sense, the modelization exemplified by the discussions on inflation rather shows 'modal claims' about what is and is not possible.⁴³ Following advancements in computer-assisted analysis, agent-based macro modelling was established as an academic field during the 1960s and 1970s.⁴⁴ Influentially, micro-to-macro simulation models of national economies such as Bergmann's 1974 micro-model of the US economy were followed by attempts at modelling the Nordic economies as well.⁴⁵

Through these transdiscursive transfers of meaning and usage we can witness over time the gradual fusing of what were originally two distinct, if related, formal models – the Scandinavian model of inflation and the Rehn-Meidner model. This underpinned the expansion of the Nordic model concept to encompass not only the labour market and price-wage relations in Nordic economies, but the Nordic model of welfare, thus exemplifying a key transdiscursive process from professional economics to socio-political analysis and debate on the Nordic welfare state. This is considered further in our next case study.

2. *The Nordic model of welfare: Esping-Andersen's Three Worlds of Welfare Capitalism*

For many observers the Nordic model is synonymous with the Nordic welfare model.⁴⁶ Indeed, 468 records in our database (a little over one third of the total) include the word welfare, most of them appearing after 1990. It is widely acknowledged that a key text on the Nordic model of welfare was Gøsta Esping-Andersen's *The Three Worlds of Welfare Capitalism*, first published in 1990. Based on comparative analysis of social policy data from eighteen countries, Esping-Andersen identified 'regime-types' according to the extent to which different welfare states 'de-commodified' social rights. These were categorized as liberal, conservative and social democratic welfare regimes. The final chapter of his book analysed Sweden as an ideal-typical example of the social democratic cluster, while acknowledging that the Scandinavian welfare regimes also had liberal elements and were thus not 'pure' social democratic regimes.⁴⁷

While the idea of specifically Scandinavian welfare state with distinctive characteristics was established before Esping-Andersen's study,⁴⁸ *The Three Worlds of Welfare Capitalism* is described as having had a 'defining influence' on comparative welfare research, to the extent even that the concept of the three welfare regimes has been described as 'normal science', taken for granted and rarely questioned.⁴⁹ Assessing its impact twenty-five years after its publication, Patrick Emmenegger and co-authors found that one third of all articles published in the *Journal of European Social Policy* between 1991 and 2013 had cited the book.⁵⁰

A search for records containing 'Esping', 'worlds', and/or 'regime(s)', in the titles, abstracts and keywords of our bibliographical references returned only 74 hits, however. Of these, 32 were rejected as irrelevant, mostly because they used the term 'regime(s)' in a different context (for example, exchange rate regime, political regime).⁵¹ Of the remaining 42 entries, most referred to welfare regimes or welfare state regimes. That this formed a relatively small proportion of all our records on the Nordic or Scandinavian model – and indeed of the records containing 'welfare' – could reflect the limitations of our method, which did not include analysis of bibliographical citations. But it may also be a reminder that we should be careful not to overstate the significance of the *Three Worlds* paradigm for understandings of the Nordic model of welfare.

That said, it is possible to make some observations on how it shaped the concept of the Nordic welfare model in three ways, drawing on these records and on other studies. First, Esping-Andersen's typology has undoubtedly functioned as an important starting point for comparative investigations of welfare and social policy. These include large-scale multi-case comparisons; comparisons between one or more Nordic countries and other welfare states, including for example Scotland, Ireland, Portugal, Luxembourg, Australia and the Baltic States in our examples; and internal comparisons within the Nordic region. They include not only studies of the welfare state as such, but also investigations of specific policies, including for example housing, education and lifelong learning, elderly care and the labour market. The notion of Nordic distinctiveness became a starting point for subsequent analyses of the existence of a Nordic welfare regime or welfare state model. It became more common to speak about a Nordic welfare model, rather than regarding the welfare state as one feature of a general Scandinavian model of political economy.

Second, as Nils Edling has observed, the labelling of the three regimes as liberal, conservative and social democratic has contributed to the elision of the Scandinavian welfare cluster with social democracy.⁵² As social democratic parties lost electoral ground in the 1990s, the question for researchers therefore became not only 'is there a Nordic model?' but also 'does it still exist?' The consensus was largely that it did: despite social policy reforms driven partly by necessity but also by ideology, the main features of the 'Nordic welfare model' were often assumed to remain intact.⁵³

Third, the example of the welfare model also offers examples of the elision between the Nordic welfare model as a formal, analytical model, and as a normative or programmatic one. It has been suggested that the difficulties of defining the Nordic model limits its usefulness as a formal model, but that this does not diminish its power as a normative concept.⁵⁴ Again, the use of the model in this sense was not entirely novel, nor was it always regarded positively. There were strong signs of rising interest in this normative interpretation of the Nordic model especially after the turn of the millennium, which is discussed further below with reference to debates in France.

3. Capturing flexicurity: French uses of the Nordic model(s)

In French public debate there is a long tradition of referring to Scandinavia as representing an alternative social model, on the political left and right. Sweden in particular has been cited as a reference when reforms have been on the political agenda, especially within technocratic elite circles of public administrators, managers and social scientists.⁵⁵ Figure 4 depicts a strong intensification in references to Nordic models – and to Scandinavian, Danish and Swedish models – in the years 2006–2008. The especially steep rise in references to the Nordic model is also visible in the comparably much more limited Persée material (Figure 5).

In these years, previous interest in Swedish models amalgamated with a newfound interest in flexicurity, glossed as a Swedish, Danish, Scandinavian or Nordic model almost interchangeably. This was possible because in the French debate such concepts referred

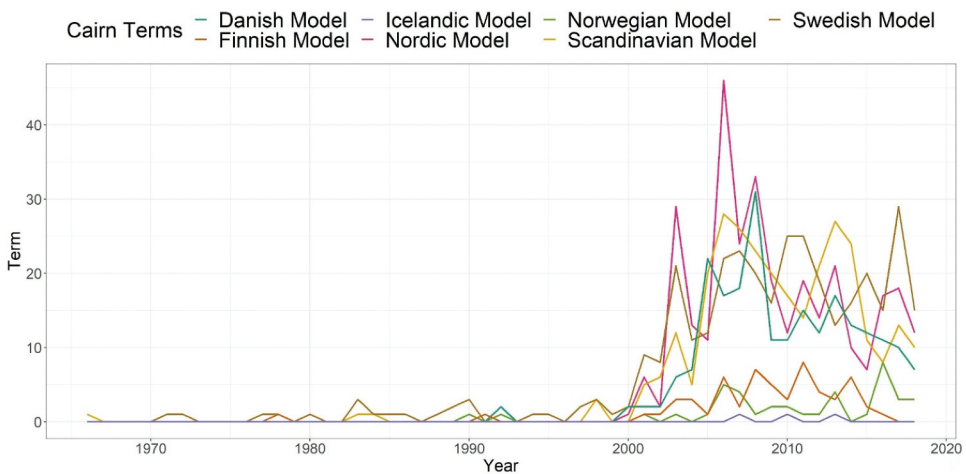


Figure 4. Occurrences of different Nordic models in Cairn.

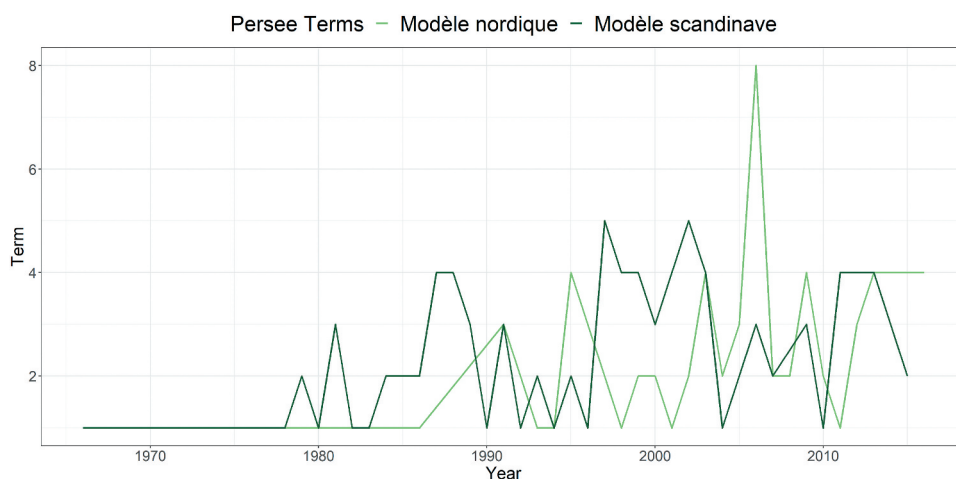


Figure 5. Nordic model and Scandinavian model in Persée.

not so much to specific policies as to a catch-all social model discourse. Several social and political science journals had special sections on the Nordic models and flexicurity. The common denominator of most of these texts was the 2006 book *Faut-il brûler le modèle social français?* by the journalist Alain Lefebvre and the sociologist Dominique Méda.⁵⁶ France's low results in international rankings on economic performance and higher education, resistance to globalization, urban violence and the country's waning international and European position were important ingredients in this discourse of generalized *déclin*, especially in the media landscape of the political right.⁵⁷ Within this 'doxa' of French decline – a discourse situated above all in the media landscape of the political right – the Nordic model appeared relatively suddenly, as actors of the left sought to establish alternatives to the liberal, Anglo-Saxon model associated with globalization.⁵⁸ The Nordic social model was contrasted to Anglo-Saxon liberalism as an example of a successful synthesis between economic flexibility and workers' security on the labour market. Drawing on European comparative welfare literature – notably the work of Esping-Andersen, whose book appeared in a French translation in 1999 – they argued for the transferability of Nordic policies to France following a path dependency principle, not by producing direct copies, but by reforming the French welfare state's structures.

We thus observe a circulation from an analytical model of social science to a normative social model, the policies associated with which are recommended in journals and magazines. This demonstrates a dynamic in the public debate where political usages and academic usages of foreign models were mutually reinforcing: academics sought to make sense of what politicians mean, but also to challenge them. Politicians relied on academic outputs to bring in new facts and models of policy reform, especially concerning the labour market where the combination of flexibility and security was an acute question.⁵⁹ This is indicative of the relationship between the knowledge production of the social and political sciences and the public discussions about the reform of France. What we see, in other words, is the construction of a critical juncture related to a politically contingent perception of crisis for French national identity and the future of its welfare state. In the

debates about French decline and the need to reform the French social model, the Nordic models had a role as alternative paths not only to an outdated French social model, but also to a competing and successful Anglo-Saxon liberal model.

The study of this moment shows continuities with what previous research has told us about the usage of Nordic models in French political discourse, as championed by technocratic milieus as reformist alternatives in moments of crisis (1930s, 1960s) and mobilized by ultimately unsuccessful political campaigns. Moreover, we observe the paradigmatic influence of comparative welfare research in spreading notions of Nordic models in France. This speaks to our observation in the next section that usages of the Nordic models in indexes centred on intra-European welfare comparison; their establishment of the model in performance-based rankings as a type or benchmark is mirrored in the more explicitly political analyses found in the French material. Importantly, however, this case also reveals that the chronologies we have developed on the basis of the English-language material do not correspond to the French story. Critical junctures are local, and the French material clearly indicates that rather than the global financial crisis of 2008–2009, it was debates over the French social model of 2006–2008 that constituted a moment of intensification in usage of references to Nordic models in France. Complementing the findings of the English-language database, the French dataset helps us understand how the policies of the Nordic countries have been constructed as models in intra-European debates about the future course of the European welfare state. It illustrates a Europeanization of the French debate – including perspectives from the outside, benchmarking and rankings, to be analysed in the next case study – and is a clear indication of a different spatio-temporality that we must be sensitive towards in a history of the global circulations of ideas.

4. Indexes and rankings confirming Nordic performance

The annual publication of international indexes has developed into a moment of self-congratulation and foreign acclaim for the Nordic countries, which regularly appear high on lists dedicated to global governance and indexes focused on more ephemeral subjects like branding or sustainability.⁶⁰ For countries frequently self-characterized as modest, the release of indexes provides an opportunity to claim national success and cement the status of region as a lesson for other, losing states. The international indexes entrench the Nordic states as paragons of an ‘emerging global audit society’, in which nation-states compete through the publication of statistical performance.⁶¹ Here, the Nordic states have employed data as an exportable resource for quantitatively demonstrating that governing can be simultaneously economically efficient and socially responsible.⁶² The emergence of the audit society exists hand-in-glove with the isomorphism of a Western normative authority, especially when a vast majority of the rankings are produced by Western associations or nation states, particularly the United States.⁶³ As ‘rankings describe and prescribe’ policy methods and goals,⁶⁴ they help reinforce the spread of worldwide ‘models and the purposes they reflect, e.g. equality, socioeconomic progress, human development’, establishing the rules for ‘full membership in the world community of nations and individuals.’⁶⁵ Exploring the role of indexes in constructing a globally-

pertinent Nordic model thus moves beyond explaining the claims of exceptionalism into explaining how the Nordic countries have aided the international spread of a broader Western social model of governance and statecraft.

Scholars have indicated how international indexes align with and influence the goals of media, NGOs, and public officials; however, the response of academics, despite often producing the methodology behind these indexes, has been largely overlooked. To determine the role of rankings in our dataset, texts with the following keywords were extracted: ranking, rankings, index, indexes, rating, ratings, happiness, score, scores, indicator, indicators, happiness, PISA. From these results we took all texts that refer to international indexes in order to frame their project, to group the Nordic countries together as a single model based on performance, or to demonstrate the strengths and/or weaknesses of a Nordic model. Despite the increasing application of statistics from international indexes in recent texts, instances where index data were applied without a comparative element were not included. Nor were texts written by index-making organizations like the OECD included, as this represented a different, albeit important form of direct modelization. The dispersion of texts can be seen in [Figure 6](#).

The selected records demonstrated a change in how indexes were employed, with a division between the mid-to-late 2000s. In the earlier period, texts generally attempted to confirm whether the Nordic model implied by the index results existed. In the latter period, however, it was no longer requisite to prove that a statistically verifiable Nordic model existed; scholars generally assumed it did. In the international market for policy advice, scholars appeared reactive to rankings, rather than defining their legitimacy or methodology. Moreover, the reliance on indexes and surveys for data has become noticeable in the last 10 years. As the notion that a model can be detected in indexes became uncontested, scholars began to apply a Nordic model as a respected benchmark for other countries in these rankings. Given this purpose, and perhaps due to the method of looking at texts interested in comparisons, a large majority of the authors in the selected

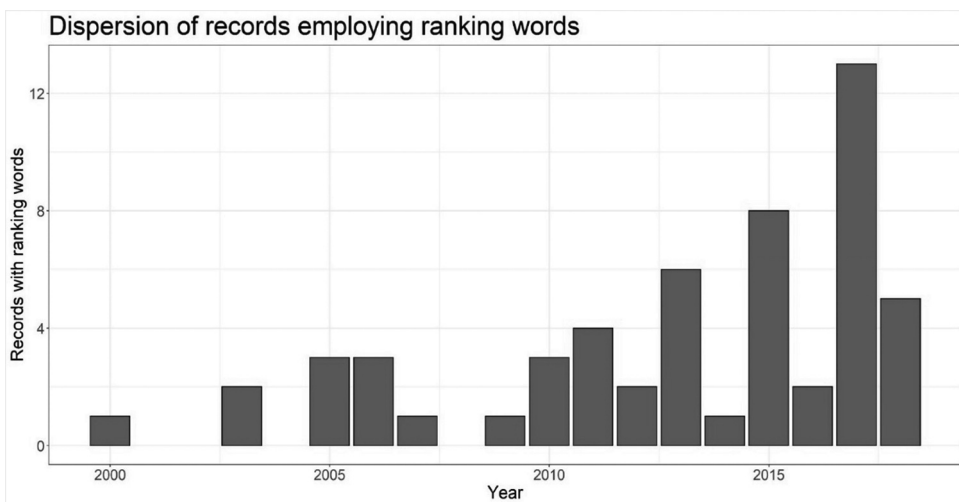


Figure 6. Dispersion of texts with texts using comparative rankings and indexes.

records were European, non-Nordic scholars. Many of the selected records used the Nordic model as a benchmark for Southern and European countries, framing their work within traditional welfare model paradigms, with comparisons to Romanian standings in international rankings being particularly well represented.

For the most part, foreign authors uncritically assumed the accuracy of these rankings and used them to demonstrate how lessons in governance could be learned from the north. Here, the normativity of purportedly analytical rankings was laid bare, as they established rules by which lagging countries could improve their international standing. In this case of government by numbers, the Nordic countries had secured the favourable numbers. On the other hand, a minority of Nordic scholars were more likely to use the indices as grounds for criticism of the Nordic countries, for failing to live up to these rankings. For their part, these authors did not challenge the accuracy or legitimacy of the rankings but applied them as grounds to demonstrate policy failings in the Nordic countries and perhaps pressure for policymaking action.

The selected records mainly clustered around a few topics: labour market/economy/taxes, education, and a Nordic model of corporate governance. Despite this clustering, the indices used were broad, although many were not named, referring simply to transparency, economic performance, quality of life, competitiveness and happiness. These topics obviously demonstrated softer parameters for what made governance successful. It remains to be seen if specific indices and topics are more common for different Nordic countries and whether specific indices like PISA are applied in different ways amongst the Nordic countries.

Conclusion

While it is evident that the concept of the Nordic or Scandinavian model has been applied to a wide variety of phenomena associated with the Nordic countries, it is also clear that there have been distinct types of modelizing over time. Our expectation was that the Nordic model concept stemmed from multi-case international comparisons in political science, historical sociology and social policy research. Further, we assumed that these comparisons aimed to describe independent variables influencing different phenomena and to identify clusters, in turn as a means to develop more general theories about variations in the trajectories of societies, mostly European ones.

Our material demonstrates how the modelization of a particular phenomenon may travel 'transdiscursively' between various fields of meaning. Moreover, such modelization also generates self-referential and frequently self-reifying effects, confirming 'models' simply by naming them as such, even if there is no serious claim to exemplarity. The overview provided by our records also shows a persistent tendency towards expanding the scope of model from one arena to another.

In our study, we have been able to identify at least four different forms or types of modelization at work. First, there is the application of formal models to Nordic socio-political developments and conditions, as evident in the first systematic modelization of the Nordics as a 'Scandinavian model of inflation'. While this scholarly modelization did not simulate or predict outcomes it fused normative and analytical elements. The second case study considers the extent to which a more generalized account of specific political economy informed comparative studies of the Nordic countries, which could also be

translated into normative prescriptions for how – or how not to – transfer Nordic policies to other contexts. The third case study demonstrates how this aspect of the modelization of the Nordic countries served domestic political agendas in France, irrespective of the factual background of the features being modelized. The fourth case study confirms actual performance, as depicted in the comparative statistics of indexes and rankings, as a key feature for establishing difference, and thereby establishing the continued interest of scholars in explaining this difference. If Nordic societies did not perform relatively well in international comparison over a comparatively long time period, it is highly unlikely that they would have generated the attention they do attract. Similarly, it would be unlikely that the explanations to this performance would be analysed and communicated in terms of models.

By tracing these processes of modelization, our intention was to move beyond the limits present in much of current research on the Nordic model – does it exist? has it been exported? – to approach the role of this figure of thought for placing the Nordics in the world. While it is no surprise that our database has not allowed us to make any radical reinterpretation of the well-researched history of the concept of the Nordic model, the depth and diversity of materials made accessible to us through our data collection has provided us with a chart of the various instances in which the Nordics have been modelized over time. One of the main strengths of our digital approach is that we can systematize an otherwise impossible number of relevant materials, providing us with a starting point to trace which features were modelized, and explore intensifications, junctures and types of modelizing. Still, while our database does not allow us to contrast modelizing the Nordics with that of other societies, it represents an important, quantitative step towards assessing the rhetorical and cognitive function played by discursive renditions of the Nordic model and how this trope has evolved into an aggregated, self-referential repertoire.

Notes

1. For assessments of Swedish exceptionalism in response to the covid-19 pandemic, see Andersson and Aylott, "Sweden and Coronavirus;" Baldwin, *Fighting the First Wave*; Aucante, *The Swedish Experiment*.
2. For an early Swedish reference to the 'Swedish corona model,' see Sokolnicki, "Om svenskar ska ta eget ansvar."
3. For discussions see: Koivunen et al., "Always in crisis," 3–5; Kettunen and Petersen, "Images of the Nordic welfare model," 25–9; Strang et al., "A Rhetorical Perspective."
4. Edling, "Studying the Welfare State," 1.
5. Hellenes, "Tracing the Nordic Model." See also Koivunen et al., "Always in Crisis," 6.
6. Koivunen et al., *The Nordic Economic*; Byrkjeflot et al., *The Making and Circulation*; Marjanen et al., *Contesting Nordicness*; Hilson and Hoxter, "From the 'Middle Way.'"
7. Koivunen et al., "Always in Crisis," 3.
8. Kettunen, "The Transnational Construction."
9. Koivunen et al., "Always in Crisis," 3–4; Marklund, "The Utopian Trap," 64–6.
10. Burkhart, "Modeling."
11. Fiorina, "Formal Models;" Russo, "Models in Social Sciences;" Shipan, "Model."
12. Robertson and Mullen, "Digital History and Argument," 16.
13. JSTOR is also a critical repository of articles from the humanities and social sciences but was not included here due to its limited access to metadata.

14. Jensen, "Digital Archival Literacy," 4–5.
15. The search strings in the databases varied to conform with the in-built search functions, but all employed a proximity operator to search for combinations of our chosen terms.
16. Now Det Kongelige Bibliotek.
17. Putnam, "The Transnational;" Hitchcock, "Confronting the Digital."
18. Putnam, "The Transnational," 392; Romein et al. "State of the Field," 304–06.
19. Iarrobino, "Text Mining;" Westergaard et al, "A Comprehensive and Quantitative Comparison."
20. It did however return texts in other languages, many of which we are not able to read ourselves, but which included titles and abstracts in English. A more problematic aspect is that the bibliographical databases we searched in tend to favour journals and publications from Western or larger countries, placing blind spots on our understanding of how these terms circulated amongst and were employed by scholars in other regions, especially in the Global South.
21. Only Cairn carried the possibility of using proximity operators.
22. Newspaper articles were removed.
23. Jalava and Stråth, "Scandinavia/Norden," 38; Strang et al., "A Rhetorical Perspective," 25–6.
24. For a discussion of early references to Swedish models, see Marklund, "A Swedish Norden," 269–71.
25. Musiał, *Roots of the Scandinavian Model*; Stråth, "Den nordiska modellen." Anu Koivunen and co-authors have pointed to the 1981 sessions of the Nordic Council as a key moment of breakthrough for the concept: Koivunen, "Always in Crisis," 6.
26. Hellenes et al., "Nordic Nineties."
27. See for example Ringmar, "Reimagining Sweden,;" Zander, *Fornstora dagar*; Hellenes, "New Gustavians,;" Ikonomou, "1994"; Nissen, "An Oil Company."
28. The analysis of term and document frequency is based on Silge and Robinson, *Text Mining with R*, chapter 3.
29. Archer and Maxwell, eds. *The Nordic Model*.
30. Elder, review of Archer and Maxwell, eds., *The Nordic Model*. See also Hilson and Hoxter, "From the 'Middle Way,'" 87–8.
31. Bergqvist, "The Nordic Countries."
32. Waldemarson, "Gender Equality," 25–6.
33. World Economic Forum and Global Utmaning, *Shared Norms for the New Reality*; Swedish Institute, *The Nordic Way*; for discussions, see Lönegård, "Propagandaministerns plan,;" Svensson, "Historieätarna,;" Marklund, "A Swedish Norden,;" Koivunen et al., "Always in Crisis."
34. Johansson et al., *Collaborating Against Child Abuse*.
35. For a survey of Nordic models as a 'transdiscursive' process across social science fields, see Mjøset, "Social Science." For the notion of 'stickiness' of the 'Nordic brand,' see Browning, "Fantasy, Distinction, Shame."
36. See Aukrust, *Prim I*; Edgren et al., *Wage Formation*. For a more general account, see Aukrust, *Inflation*.
37. Lundgren, *EFO-modellen*.
38. For a discussion of the practical application of this model, see Erixon, *Den svenska modellens ekonomiska politik*.
39. Branson and Myhrman, "Inflation in Open Economies."
40. Kierzkowski, "Theoretical Foundations,;" Paunio and Halttunen, "The 'Nordic' Approach,;" Frisch, "The Scandinavian Model,;" see also van Poeck, "What Scandinavian Economists Have to Say."
41. OECD, *OECD Economic Surveys*.
42. See for example Handa and Okiyama, "Inflation in a Large, Open Economy."
43. Morgan and Grüne-Yanoff, "Modeling Practices."
44. The key reference here is Orcutt, "A New Type."
45. Bergmann, "A Microsimulation of the Macroeconomy."
46. See Hilson and Hoxter, "From the 'Middle Way,'" 86–7.

47. Esping-Andersen, *The Three Worlds*. See also Esping-Andersen and Korpi, "From Poor Relief," 41–3.
48. Edling, "Studying the Welfare State," 7; Kautto, "The Nordic Countries," 586.
49. van Kersbergen and Vis, "Three Worlds' Typology;" Arts and Gelissen, "Models of the Welfare State," 569.
50. Emmenegger et al., "Three Worlds."
51. This included all entries before the 1990s.
52. Edling, "Studying the Welfare State;" Arts and Gelissen, "Models of the Welfare State," 574; Kautto, "The Nordic Countries," 592–3.
53. Kautto, "The Nordic Countries;" Kuhnle, "The Scandinavian Welfare State."
54. Mjøset, "The Nordic Model;" Cox, "The Path-Dependency."
55. Clerc, "Un serpent de mer du débat français"; Hellenes, "Fabricating Sweden;" Hellenes, "Tracing the Nordic Model."
56. Lefebvre and Méda, *Faut-il brûler?* Both graduates of the Ecole Nationale d'Administration, Lefebvre was former counsellor for social affairs at the French Embassy of Stockholm and author of a book on Danish flexicurity, while social scientist Méda also held high-ranking positions in the Ministry of Labour.
57. For a tour d'horizon see Bitar and Fadel, *Regards sur la France*.
58. Lebaron et al., "Le 'modèle social français.'" Méda and Lefebvre were both associated with Ségolène Royal's campaign for presidency; their book was cited as a source of inspiration for the social policy programme of Royal. See Lévy, "Pour préparer son projet."
59. In 2006, Prime Minister Dominique de Villepin launched a reform of the labour market intended to give employers the flexibility to hire young workers on short-term contracts. The proposal led to a social mobilization by unions and students with a series of violent demonstrations, and it was eventually abandoned.
60. Marklund, "The Nordic Model," 2–4.
61. Marklund, "The Nordic Model," 4; Marklund, "From Promise to Compromise," 237–38.
62. Erkkilä, "Reinventing Nordic Openness."
63. Kelley and Simmons, "Introduction."
64. Erkkilä and Piironen, *Rankings and Global Knowledge Governance*, 23.
65. Meyer et al. "World Society," 144–5, 173.

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