

TOWARDS A UNIFIED VIEW OF EVOLUTIONARY CHANGE IN POLICY
SYSTEMS

SOCIAL POLICY AT THE EDGE OF KNOWABLE:
TOWARDS A UNIFIED VIEW OF EVOLUTIONARY CHANGE IN POLICY
SYSTEMS

By OLDRICH BUBAK, B.S, M.S., M.A.

A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the
Requirements for the Degree of Doctor of Philosophy in the Department of Political
Science

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DOCTORATE OF PHILOSOPHY
Political Science (2020)

McMaster University
Hamilton, Ontario

TITLE: Social Policy at the Edge of Knowable: Towards a Unified View of Evolutionary
Change in Policy Systems AUTHOR: Oldrich Bubak, B.S. (W. Carolina), M.S. (George
Mason), M.A. (McMaster) SUPERVISOR: Prof. Stephen McBride NUMBER OF
PAGES: xii, 206

Abstract (abridged)

In the world of growing diversity, interdependence, and rapid change, making sense of policy evolution, especially in analytical settings, is increasingly challenging, not the least due to the flaws of conventional assumptions or the limits to the availability of evidence. As we consider an alternative worldview embracing the complex and adaptive nature of social reality, we recognize there are further boundaries to what can be known and done about the outcomes in social systems. Yet, this foundation also promises to broaden our horizons with new tools for understanding, comparing, and developing public policy. Inspired by innovation research, this work makes the case for bringing a set of such tools into public policy studies and situates them in an essential theoretical context. Further, through an analysis of social and labour market policy development across two jurisdictions—while reaching to flexicurity as a model and reference—it demonstrates the application of the new approach to the study of welfare state modernization and to policy scholarship more generally.

Abstract

In the world of growing diversity, interdependence, and rapid change, making sense of policy evolution, especially in analytical settings, is increasingly challenging, not the least due to the flaws of conventional assumptions or the limits to the availability of both quantitative and qualitative evidence. As we assume a different worldview embracing the complex and adaptive nature of social reality, we find there are further limits to what can be known and done about the outcomes in social systems. Alert to such issues, the overarching goal of this research is to make the case for a new view on policy change, helpful beyond comparative studies, and to demonstrate the significance of an alternative paradigm and the possibilities it opens for scholars and practitioners alike.

The empirical focus is on social and labour market policy (LMP), an evolving system of interventions affecting nearly all current and potential labour market participants and contributing to the social and economic achievement of entire nations. Increasingly challenged by a range of domestic needs while also under strong pressure from beyond the state borders, such policies have witnessed much action across polities—for many especially pronounced following the recent crises—testing the capacity of traditional approaches in explaining change and making sound design choices. Motivating this research are thus important questions: *Could the key to progress in public policy scholarship and practice lie beyond convention? If so, what innovations can advance our insight into policy change? How can their application extend our understanding of change in social policy and in policy systems in general?* Ultimately, as we admit to the evolutionary character of social systems, we seek new foundations and tools to help cope with the empirically challenging world of adaptive complexity.

Informed by research in technology innovation and its state-of-the-art tools, and embracing the complexity frame of reference, we posit policies—as other technological, or what we call creative, systems—change in a systematic manner, evolving in patterns discernable over varied time periods at multiple levels of abstraction. We hence adopt a subset of such tools and make the case for their application in the study of policy. At the same time, we situate these efforts in the essential meta-theoretical context. Finally, through an investigation of labour market policy development across a pair of crucial cases, Denmark and the United Kingdom, we demonstrate the viability of the approach to the study of welfare state change and policy scholarship more generally. The emphasis is on flexicurity on account of its application as an analytical schema, policy model, and a step in the evolution of LMP.

The ability to incorporate general patterns of evolution into policy analyses could constitute a leap forward in theory and practice of public policy. This, what we call, structure-in-evolution view, offers a unified perspective on policy change, including its direction and logic, with applicability across policy studies. More pragmatically, it may also enhance the efforts in bringing the welfare state into the future, given that knowledge of regularities in policy evolution complemented by supporting tools expands the capacity of policy makers to identify solutions and increase confidence in selecting among them. At the same time, these knowledge resources can be leveraged by advocate organizations to monitor and weigh-in on these choices. Policy systems can thus be brought closer to ideal outcomes by systematically reducing the number of contradictions and, as a result, of adverse effects on their policy stakeholders.

Acknowledgements

This thesis can be considered an extension of my ongoing interests in making systems, whether those of information or governance, work and do so increasingly better. The decisions to pursue the specific set of research questions, including, too, on the assumptions made, the tools advanced, and the strategy taken in answering them, has been shaped by a range of experiences, such as exposures to intriguing information presented in seminars and conferences, problem solving in a variety of settings, as well as conversations and debates with colleagues and other scholars and practitioners. Some of these events stimulated questions on how many potentially critical findings and tools have already been developed—existing quietly within the vaults of private organizations or even the imaginary, if often equally impenetrable, disciplinary boundaries—and are waiting to be brought out into the open. Others suggested that once available, adopting such tools, notwithstanding their significance to progress, will require overcoming further barriers. It may demand a type of a broad embrace of a new paradigm, a sociological kind of a movement. This project sets out to reach beyond these barriers in search of solutions, making a case for different ways of thinking about change in the social world. The goal is thus not only to help raise the capacity of scholars and practitioners to improve upon the study and design of policy systems; it is also to add to such a transformation.

In embarking on this uncommon mission, I was very fortunate to have been surrounded by exceptional people, a supportive team helpful at its every stage. I would thus first like to thank very much my mentor and supervisor, Stephen McBride, and the committee members, Katherine Boothe and Peter Graefe, for their time, advice, and encouragement in not only this but also other projects throughout my stay at the university. Appreciation is also due to all faculty, staff, and colleagues at the Department of Political Science, who, together, are creating the kind of diverse and stimulating environment needed to foster creative research. My work also benefited from a research stay at the European Trade Union Institute (ETUI). I am grateful for all the time, resources, and support offered by the ETUI and its dedicated staff.

I would like to express gratitude to the Department of Political Science, extending graduate funding and a travel grant, the Ontario Graduate Fellowship, the Ontario Graduate Scholarship (OGS), including the support of the Dr. Ronald V. Joyce Ontario Graduate Scholarship in Social Sciences augmenting the OGS funding, for all their generosity. The latter funds are often integral to making more OGS programs possible on campuses across Canada. This work has also been supported by the Social Sciences and Humanities Research Council (SSHRC) Doctoral Fellowship.

Finally, special thanks to McMaster University and its visionaries, who are creating opportunities for growth and personal development across its many institutes. This includes the Paul R. MacPherson Institute for Leadership, Innovation, and Excellence in Teaching and the Institute on Globalization and the Human Condition, joining their organizational counterparts in helping to create a new, better world.

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Acronyms

AI	Artificial intelligence
ALMP	Active labour market policy
CAS	Complex adaptive systems
CB	Contributory-based
CEEC	Central and East European Countries
CME	Coordinated market economy
CSR	Country-specific recommendation
DG	Directorate General
DWP	Department for Work and Pensions
EC	European Commission, also European Community
ECAC	European Civil Aviation Conference
ECB	European Central Bank
ECFIN	Economic and Financial Affairs
ECJ	European Court of Justice
ELLI	European Lifelong Learning Indicators
EMU	European Monetary Union
EPL	Employment protection legislation
EPZ	Export Processing Zones
ESA	Endangered Species Act
ESM	European Social Model
EU	European Union
EZ	Employment Zone
FAA	Federal Aviation Administration
FDI	Foreign direct investment
FND	Flexible New Deal
GATT	General Agreement on Tariffs and Trade
GCS	Global civil society
GDP	Gross domestic product
HCA	Hierarchical cluster analysis
IB	Income-based
ICT	Information and communications technology
IGO	International government organization
ILO	International Labour Organization
IMF	International Monetary Fund
IPE	International political economy
I-TRIZ	Ideation/TRIZ
JCP	Jobcentre Plus
JSA	Jobseeker's Allowance
LLL	Lifelong learning
LME	Liberal market economy
LMP	Labour market policy
LMWG	Labour Market Working Group
MSC	Manpower Services Commission
NATO	North Atlantic Treaty Organisation

ND25+	New Deal 25 plus
ND50+	New Deal 50 plus
NDDP	New Deal for Disabled People
NDLP	New Deal for Lone Parents
NDPA	New Deal Personal Adviser
NDYP	New Deal for Young People
NRR	Net replacement rate
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
OMC	Open method of coordination
OPEC	Organization of the Petroleum Exporting Countries
PCA	Principal component analysis
PES	Public employment services
PISA	Programme for International Student Assessment
RTB	Race to the bottom
RTT	Race to the top
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TRIZ	Theory of Inventive Problem Solving
TUC	Trade Union Congress
UC	Universal Credit
UK	United Kingdom
US	United States of America
VAT	Value-added tax
VET	Vocational education and training
VEU	Centres for adult education and continuing training (Denmark)
WFTC	Working Family Tax Credit

Country Abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
FI	Finland
FR	France
GB	United Kingdom
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia

Chapter 1. Introduction: Agendas, Past, Present, and for the Future

Convinced that innovation did not have to be a subjective enterprise, a young patent clerk once set out to find a better way of solving technical problems. Through a systematic review of more than 200,000 patents, he developed the Theory of Inventive Problem Solving, opening new paths not only to innovation but also to a more fundamental understanding of change in creative systems...

A brief survey of political economies over the last century reveals a number of discontinuities, including shifts in the patterns of industrial development, public philosophies, and approaches to governance and policy. Prominent are the post-war transition to Keynesian era with its interventions and institutions aiming for full employment, inclusive growth, and stability in the international monetary order, and, three decades later, the shift of focus toward capital and the policies of cost containment, privatization, and deregulation—a leap into the neoliberal period. Partly a result of these trends, a series of financial and economic crises, the after-shocks of which still resonate around globe more than a decade on, may yet signal an opening to a new paradigm (Arthur 2014).

Not the least due to its zeitgeist, policy and political scholars of the Keynesian era saw institutional stability and persistence (Smyrl and Genieys 2008). However, once the coincidence of the post-industrial and the neoliberal periods and the substantial policy activity dealing with similar problems with similar thinking became palpable across the advanced democracies, the need to engage change became difficult to avoid. Scholars have hence started to pay attention to not only the nature and breadth of change but also its dynamics (Streeck and Thelen 2005; Esping-Andersen et al. 2002). Indeed, many have become privy firsthand to the impacts of the technological, demographic, and socioeconomic trifecta of shifts, changing the opportunity profiles and the labour force composition, exposing large parts of population to new risks (Armingeon and Bonoli 2007) while diminishing the states' fiscal capacities (Pierson 1998). Budgetary pressures and the varied demands across constituencies have been shaping government designs as they enact reforms ranging from unemployment to old age security. Once thought timeless (Esping-Andersen 1996), the welfare state has thus been experiencing change, a reorganization in some views of paradigmatic nature (Häusermann 2010). Importantly, many of these developments have been unfolding in context of deepening political and economic integration, placing constraints on the options available to policymakers to respond while, at the same time, offering opportunities for dialogue and learning (Bulmer 2007).

Hence, we find ourselves in an integrating world of an unprecedented diversity of needs and prerogatives—including of people who are new to labour markets, new to politics, or new to international arenas—and of varied capacities to advance their interests. In parallel, those striving to study change (Pierson 2000; Weyland 2000), as well as those seeking to effect it, find the prevailing views, methods, and strategies are meeting their limits in this environment. Mostly based in conventional, *reductionist* theories and assumptions (Arthur 2014; Colander and Kupers 2014), our understandings of social systems, and more specifically of institutional phenomena, are at best incomplete and come short in providing adequate solutions to increasingly complex

social and political issues. Recurrent economic crises (Arthur 2014), issues stemming from the (mis)application of new technologies, and environmental challenges are the most visible consequences of these deficiencies. Perhaps not unexpectedly, there is a rising mistrust in public officials, scepticism of their capacity to solve problems, and even of the legitimacy of democratic governance (Foa and Mounk 2016). There is thus a strong case to be made for a change in how we view and approach problems and understand the environment in which they arise.

To be sure, progress has been made in how we study and understand government, including on the roots of systems of government (Acemoglu and Robinson 2005), the connections between institutions and policy making (Haggard and McCubbins 2001; Tsebelis 1995; Immergut 1992), the development and consequences of institutional regimes (Hall and Soskice 2001; Esping-Andersen 1990), or the factors driving policy change (Hacker and Pierson 2010; Alesina and Glaeser 2004; Mills 2000; Smith 1990; Lindblom 1977). Yet, many of these efforts are perennial, given that theoretical perspectives which may have been fruitful in explaining the developments a few decades ago are found lacking when applied to present day conditions. This is not only with advancing methods and data challenging the established assumptions (Gilens and Page 2014; Hibbing and Theiss-Morse 2004; more formally, Sawyer 2005) but also given the rapidly changing *environment*. That is, shifts in the availability and distribution of material and informational resources, economic integration, innovation in technology, and demographics, all interrelated, affect people's condition, and, in turn, their choices and the politics surrounding these choices. Could a broad recognition that social systems are in a state of continuous flux and behave differently than their physical counterparts—an understanding formalized by science yet relegated to the sidelines of policy studies and much of social inquiry—illuminate a path to progress both in the studies and practice of regulation and governance? We believe such a shift is possible, and, given the rising number of anomalies and lapses encountered in scholarship and practice respectively, imperative. Yet, it may not occur without innovation, new approaches to change compatible with an alternate, evolutionary, reading of the social world.

Questions and Innovations

Concerned, as we are in this research, with policy, we begin with an evolving system of interventions affecting nearly all current and potential labour market participants and contributing to the social and economic achievement of entire nations—social and labour market policy (LMP). Such policies are not only continuously challenged by a number of domestic needs but also under pressure from beyond the national boundaries, especially felt in context of the European Union (EU). Furthermore, they have seen much attention across states addressing the challenges of the post-industrial era, for many accelerated by the financial and economic crises. Working at various levels of abstraction, scholars have interpreted this change as multi-dimensional (Bonoli and Natali 2012b; Häusermann 2012), as outcome of particular integrative processes (Clasen and Clegg 2011), or, in a broader comparative context, as disjoint, lacking a definitive pattern (Theodoropoulou 2018; Agostini and Natali 2018). Revealing of the state of policy studies, the disparate analyses at once stop short of providing a shared understanding and leave us with many

questions on how to evaluate policy choices (Chapter 3; Lehweß-Litzmann 2014; Meager 2009).

Mindful of the outstanding limitations and the needs outlined above, we thus ask *How can we better understand policy change?* A traditional approach to answering such questions involves a choice between a close study of a small number of strategically selected jurisdictions, or a quantitative analysis of a large number of countries. In both cases, researchers will mostly draw on existing theories or their syntheses; they will also depend on available information, limited by resources at hand or the choices and capacities of external data providers. Underpinned by conventional assumptions, often taken as given, their findings face a dual challenge of reliability and utility, particularly in a world of increasing diversity, interdependence, and multifaceted adaptation.

While such analyses may improve our grasp of policy change, we have a specific set of expectations in this regard. Here, a *better* understanding means getting closer to a common view of policy evolution, offering an integrated perspective on its dynamics and structure; to address the increasing number of what are conventionally taken as anomalies, or atypical outcomes; and to gain a level of predictive capacity, improving with it our analyses and design. Finally, as hinted, such an understanding must be based in different assumptions than the traditional, mechanistic readings of the social world. Ultimately, with a growing embrace of evolutionary nature of social systems, we seek new foundations and tools to help cope with the empirically challenging world of adaptive complexity.

Though, as we will discuss, social sciences have developed a body of more or less relevant work on evolutionary change, meeting the above parameters will arguably demand innovation. We may begin with a strategy that found its use from humanities to engineering: making the strange familiar and the familiar strange. What if policy, whose origins and change we study, can be thought of as a kind of technology? If we can relate these two concepts, we can go outside of traditional boundaries and explore findings from other, at first glance perhaps unexpected, fields. *Could the key to progress in public policy scholarship and practice lie beyond convention? If so, what innovations can advance our insight into policy change?*

Indeed, possible answers to these questions can be found in research in technology innovation built on a novel theory of change in technological systems, the Theory of Inventive Problem Solving (Altshuller 1984, 1999). Despite some inertia in its early decades (Zlotin et al. 2001), the Theory of Inventive Problem Solving (TRIZ) has seen much progress in its application beyond physical systems. The core TRIZ precepts have hence been advanced in a range of areas, including recently in public sector problem solving (Jiang et al. 2011). A greater set of possibilities, still, can be found in advanced TRIZ research, the Ideation/TRIZ Methodology (I-TRIZ), offering a more general approach to the development of, what we call, *creative systems* (Chapter 6). *How can such applications extend our understanding of change in social policy and in policy systems in general?*

Whilst scholars have shown transformative change can be punctuated (Hall 1993), forward-looking (Smyrl and Genieys 2008), or slow and incremental (Streeck and Thelen 2005), and thus reminiscent of various processes of evolution, lacking is a rigorous approach offering a unified view of change in creative systems (Chapter 7). We argue such an approach can be found in the state-of-the-art findings from engineering science

postulating creative systems, including technological and policy systems, change in a *systematic* way, evolving in patterns discernable at multiple planes of abstraction over varying time periods. Centering on I-TRIZ's Patterns of Evolution and an updated set of assumptions, this *structure-in-evolution* view, as we submit, is significant to both policy research at domestic and transnational levels as well as comparative welfare state scholarship. Aside from extending our analytical capacity with new insights and tools in explanation, comparison, and forecasting, these applications could alter how we study change in social systems. As far as we are aware, this is an original effort with a potential to establish a new research program in policy studies.

Contributions and Rationales

As we answer the research questions, we hope to make a number of contributions to the state of the art in policy studies. The larger ambition is to join other scholars across disciplines (Helbing 2015; Arthur 2014; Colander and Kupers 2014; Mitchell 2012) and call for a meta-theoretical debate we view as integral in the efforts of moving the social sciences into the future. What is foreseen to be an era of complexity will demand the application of commensurate theories and methods in social sciences and beyond. As hinted, a challenge shared by the mainstream policy scholars has stemmed from their general reliance on the accepted approaches to inquiry, depending on narrow conceptions of causality, modes of reference, and theoretical rigidity. Hence, for example, change is determined by the cooperation and competition of organized groups with fixed interests (Esping-Andersen 1990), endogenous or exogenous pressures on policy makers (Pierson 2001; Armingeon and Bonoli 2007), or likely products of institutional arrangements (Immergut 1992; Haggard and McCubbins 2001). As a result, scholars have predicted that welfare state would either collapse, or, captured by its constituencies, remain mostly static (Häusermann 2010). Recent *syntheses* (Häusermann 2010; Bonoli and Natali 2012a; Beramendi et al. 2015) have been able to provide a more comprehensive, multi-dimensional understanding of the post-industrial change in social policy, emphasizing domestic factions as the primary drives of change. Nevertheless, there are compelling claims that policy change can be a result of a top-down dynamic (Smyrl and Genieys 2008), including, too, the processes going beyond the state (Marsden and Stead 2011). These issues become further complicated by the deepening regional integration and the politico-economic conditions stemming from this integration.

Reappearing throughout this study, such tensions become a leitmotif of the limits borne of the disciplinary gravitation towards the *reductionist* frame of reference, a perspective holding back progress in political and policy studies, and social sciences more generally (Mitchell 2012). Most scholars have thus viewed social phenomena as aggregations of preferences or actions of individuals, or used structures to reduce social complexity upwards, conveniently assuming away the special properties of social systems in their search for elegant generalizations. As a result, phenomena are explained with a manageable number of readily identifiable causes; outputs are proportional to inputs, producing intuitive, linear behaviours; markets and other systems operate at or near equilibrium; and outcomes, presumed to be distributed normally, can be assigned probabilities. This apparent capacity to identify causes or predict their effects, and thus be encouraged to seek physics-like laws of the social world, gives us the illusion of control,

misinforming analyses, regulatory approaches, and governance. What is more, such a mechanistic, Newtonian understanding of social systems (Overton 2015) poses an obstacle to progress in a discipline studying a world much different from the physical one. Importantly, it affects how to best interpret and influence policy development (Chapter 5, 6).

It is the mainstream acceptance of an alternate worldview, the complexity paradigm, that holds a promise to *expand* the horizons of inquiry into social and other complex systems (Helbing 2015; Arthur 2014; Mitchell 2012). Embracing the evolutionary nature of social reality, the frame of reference at once exposes the *boundaries* of what may be known (and what can be done) and opens the door to a new thinking about how to study and manage environmental, financial, health, and other socio-technical systems. As well, as we begin to work within this paradigm, we not only move forward in our understanding of how policy is made or how it evolves; we also recognize its limits, its updated role, and a way to enhance its efficacy (Colander and Kupers 2014).

To be sure, as we note below and in the ensuing modules, many scholars of politics and policy have recognized that explanations of political and policy outcomes require us to admit to special features of social systems and have begun incorporating elements of complexity paradigm into their research. And those in innovation and evolutionary economics have gone even further in their work. Yet, missing still is the bigger picture, one placing both in the same context. Our goal is to begin to connect these dots here (Chapter 6, 7, 8), albeit humbly, given that picture is much larger and more significant than at first may seem. Equally importantly, we demonstrate its practical relevance to research in (comparative) social policy.

Also, this research advances *evolutionary* thought in social sciences in general, and the emerging research in evolutionary policy in particular. Whether rooted in Darwin's theories or assuming a deterministic or teleological view of historical change, evolutionary thinking has appeared in various guises since the first works in social sciences. Notwithstanding the volumes of work, debates continue on the nature and direction of evolution in social systems, on what constitutes progress (Sanderson 2007), and on the relationships between evolution in social and natural world, among other questions. In institutionalist and policy studies, some scholars have recognized there are indeterminability and contingency, yet logic and order, in the processes of change (Streeck 2010). Others have argued that deep institutional shifts can occur either suddenly (Hall 1993) or be an outcome of gradual modifications, the types and mechanisms of which can be identified (Streeck and Thelen 2005). While evolutionary policy scholars have been able to provide a fuller picture of change and its dynamics (van den Bergh and Kallis 2009; van den Bergh and Gowdy 2000) and add to outstanding debates on policy development (Chapter 7), questions remain. Do these findings fit into a larger context? To what ends do institutions evolve? The structure-in-evolution view advanced here has the potential to answer these questions while supplying a common denominator in the interpretation of change.

More immediately, with its focus on social and labour market policy, we also aim to extend our understanding of social policy development, and welfare state *modernization* more specifically. Engaging the rapid post-industrial change, scholars have identified some emerging social risks (Armingeon and Bonoli 2007) and examined

the associated politics of reform (Pierson 2001). And, observing there is more to modernization than just retrenchment and expansion of existing social policies, scholars described change as multi-dimensional (Pierson 2001), involving various reconfiguration strategies, including the rebalancing of social policy commitments by weakening some instruments while strengthening others, or augmenting the rebalanced solutions with new instruments to address atypical needs (Häusermann 2010).¹

These are some important findings as they invite us consider the ever-evolving economic, and with these, social and policy systems and their relationships. They also raise questions on the nature of change, particularly as the traditional theories have not done well in explaining these outcomes. Such reasons lead us to focus on *flexicurity*, a *structural policy* (Campbell and Pedersen 2007) in which reductions in employment protection legislation (EPL) are offset by a strengthening of transition supports including unemployment, social security, and activation services. The goal is to protect labour market participants instead of jobs (Theodoropoulou 2018) while giving employers the flexibility needed to operate with agility needed to support competitiveness. Built on a *complementarity*² among a set of instruments, this model can be of analytical and practical import if viewed from an evolutionary perspective (Chapter 6, 7). That is, when understood in terms of evolutionary patterns, as we show, flexicurity becomes a *step* in the historical development of LMP, complementing our insight into policy change. As well, given working with LMP often means to consider a large number of related interventions aimed at issues ranging from employment protection to employability, flexicurity also serves as a schema allowing one to better map and assess this evolving landscape (Chapter 3).

The ability to discern patterns in the evolution of policy and conduct analyses based on these patterns should help make inquiry more robust. In comparison, for example, we can account for systems at different stages of development, obtaining thus a different perspective on policy convergence. It can also help in the efforts to modernize the welfare state, given the regularities in policy evolution offer practitioners a template to direct policy in a strategic manner whilst loaning knowledge resources to social partners and labour advocates to monitor these choices. Finally, it can help explain various *anomalies*, unaccounted for by conventional theory. Consider, in Denmark, for example, the early social policy designs are not in line with predictions of either power resource or path-dependent theories (Nørgaard 2000). Later, contrary to expectations, policies formulated in a growing economy were implemented in times of crises. Finally, it was not, as one may expect, the Danish conservatives, who began implementing neoliberal agendas, but the social democrats (Chapter 8). And, as elsewhere, the reader may think of the numerous policies (and technologies which were to be regulated by these policies) that had remained or remain in place despite their apparent flaws and even dangers. A more refined understanding of policy development, distinguishing between systems and their subsystems, each following their own patterns of non-linear growth, offers a way to make better sense of these outcomes, as we argue.

¹ A refined mapping was developed (Bonoli and Natali 2012b; Häusermann 2012) and applied in explaining (Häusermann 2010) or in monitoring (Theodoropoulou 2018) social policy change.

² Defined as a design whose elements “fit together such that the functioning of one depends on and enhances the functioning of the others” (Campbell and Pedersen 2007, 311).

Findings and Conclusions

Aiming to fulfill both research and practical goals, this project sets out at once to understand and to accomplish (Maxwell 2012). In the world of growing diversity, interdependence, and rapid change, making sense of policy evolution, especially in analytical settings, is increasingly challenging, not the least due to the constraints of conventional assumptions or the availability of both quantitative and qualitative evidence (Chapter 3, 4, 5). As we assume a different worldview embracing the complex and adaptive nature of social reality, we find there are further limits to what can be known and done about the outcomes in social systems (Chapter 6). Alert to such issues, the overarching goal of this research is to make the case for a new view on policy change, applicable across policy studies, and demonstrate the significance of an alternate paradigm and the possibilities it opens for scholars and practitioners alike.

Informed by research in technology innovation and its state-of-the-art applications, and embracing the complexity frame of reference, we posit policies—as other *creative* systems—evolve in discrete patterns identifiable at multiple levels of abstraction and chronologies (Chapter 6). Our investigation of social and labour market policy development across a pair of crucial cases, Denmark and the United Kingdom, bears out this *structure-in-evolution* view (Chapter 8, 9). We thus observe policy systems:

- evolve in stages, exhibiting nonlinear growth, and their subsystems develop non-uniformly, following independent nonlinear trajectories;
- evolve with matching and mismatching elements;
- tend towards increased dynamism and controllability;
- alternate between periods of functional/procedural complexity and simplicity;
- evolve toward the multilevel;
- tend to reduce human involvement;
- and evolve toward *ideality*, decreasing, over time, their number of internal contradictions.

Validating and applying these patterns is requisite to not only grounding the new view but also providing a foundation further work on these promising tools.

More fundamentally, we show that innovation, a process often involving inspiration from outside of one's domain, is not exclusive to conventional technology or science. Social sciences can, too, benefit from discoveries made in other areas. More importantly still, as this research affirms, with a shared, *evolutionary* understanding of change, we can find a common ground between fields traditionally treated as separate. And given the specific contributions studies of public policy and administration make in mapping policy developments and describing their outcomes, we also gain a new perspective on why “social science matters.”

In sum, we hope to take the initial step of making a case for a new view of change as we adopt and validate, in the context of evolution of social policy, the evolutionary patterns. We show how this *structure-in-evolution* can provide answers to a number of outstanding questions on change in social systems. We begin to bring together complexity and evolutionary approaches to policy, gain insight into the nature and direction of evolution in social systems, and reconcile our understanding of institutional, policy, and scientific change (Chapter 6, 7). Though we attempt to provide some hints (Chapter 10), it is not our intention to conduct a traditional comparative analysis which

may lead to causal explanations of how such regularities arise. Also beyond our scope are methodological aspects of this line of analysis. Such an undertaking will be important not only in developing a Toolkit in Evolutionary Policy—a set of tools in analysis and design, hoped to include the policy analog of the Lines of Evolution, an enumeration of evolutionary steps well developed for physical systems—but also in establishing this line of analysis as a science.

We elaborate on our findings in the following sections as we explain the organization of the study and provide an outline of each chapter/module with its key question(s). We also include a discussion of the empirical methods and country cases supporting the findings.

Roadmaps, Methods, and Cases

Given its contribution to our understanding of change in policy systems, this research will be of interest to multiple scholarly audiences; accordingly, the project’s organization offers at least two starting points in its engagement. Scholars from across policy studies may begin in the first part, “Meeting the Limits,” a set of modules engaging the post-industrial shifts in social policy and some of the challenges faced by scholars trying to describe and explain this increasingly complex environment. Together, these provide an opening to the next part, “Moving the Horizons,” presenting a novel understanding of change rooted in an alternate frame of reference. This is also the suggested entry point for scholars concerned with evolutionary and complexity policy, who will encounter a new, integrated approach rooted in familiar assumptions. Throughout, the reader should expect a consistent engagement with social and labour market policy, whose change may be, whether directly or indirectly, of interest to all readers.

The study begins with change (Chapter 2), a look at some shifts observable over time in human populations, technologies, distribution of resources, and, more proximately, in policies, values and interests. Given much of our empirical concern is with LMP, an inextricable part of a modern welfare state, our discussion opens with the challenges faced by existing welfare arrangements and the solutions that follow. No doubt, as countries move into the post-industrial age, they find social policies of the industrial era not only deficient in dealing with risks faced by a growing number of non-traditional labour market participants but also increasingly costly. Welfare policy has thus gone through a considerable *reconfiguration*, the face of which depends on the techno-economic conditions and the tradition of the corresponding welfare state. Having discussed and offered examples of these reconfigurations, many of which have occurred gradually, over time, we ask: *What constitutes change? Has there been an identifiable pattern of reforms which can be used analytically?* Finally, we recognize that aside from the salient drivers of change in social policy, there are other factors, some of which have come to prominence only following the crisis: the supranational forces steering the outcomes of domestic policy. We close the chapter with a detailed discussion of flexicurity, both as way to study LMP and a step in its evolution.

Chapter 2 sets the stage with a discussion of a changing welfare state. Social policy has been subject to, as is argued, complex reforms, often consisting of a combination of old and new policy instruments, involving either a weakening or strengthening of such instruments (Häusermann 2012). As a result, various aspects of the

welfare state can be subject to retrenchment, expansion, a type of rebalancing, and protectionism (Häusermann 2012). Comparative scholars (including those interested in policy convergence) have thus faced the tall order of assessing multi-dimensional change across polities. This is also the case with LMP, where a rebalancing strategy, flexicurity, has gained prominence both on paper and in practice. Thus of particular interest has been to determine (and explain) a general thrust of change across polities—especially as precipitated by the financial and economic crises across the EU. On the whole, studies have found LMP developments across the EU to be varied, possibly skewed away from flexicurity (Theodoropoulou 2018; Hastings and Heyes 2018). In Chapter 3, we thus set out to examine these as we ask: *What is the state of LMP across the EU? How far can such analyses take us?* We carry out a hybrid analysis using a combination of commonly used methods and data sources seeking to weigh independently on both the LMP condition and the capacity of its research. More specifically, we begin with a principal component analysis, allowing us to better visualize and assess the relative conditions across countries, and continue with hierarchical cluster analysis revealing groupings of countries based on their LMP characteristics. Using a custom index, we identify a set of countries of interest in the next stage of the analysis focused on the intensity of interventions. Finally, we evaluate qualitatively a subset of these countries, exploring more closely select policy trends. Our evaluation of the recent conditions is generally consistent with the findings presented in the literature; yet, we also identify the limits faced by contemporary analysts, which, if addressed, could lead to a different set of conclusions. This has implications to public policy decisions and our study of change, given these and, more fundamentally, the epistemic barriers to measuring (and predicting) the effects of interventions.

A conventional appraisal of the state of LMP across the EU conducted in Chapter 3 suggests a highly varied, if dynamic, policy environment, both in terms of nature and depth of change. How can we explain these developments? In Chapter 4 we thus ask: *How do the main theories of social policy explain its stability and change? What do studies of atypical outcomes reveal about the dynamics of social systems and the future of the scholarship?* We engage the neo-functional, conflict, and institutionalist perspectives, the three key theories of welfare state outcomes, elevating problem pressures, factions asserting their interests, and various rules facilitating or constraining political behaviour, respectively, in their explanations. Following Starke (2006), we also include ideational logic serving as an important complement of institutional analysis. Some scholars of welfare modernization have found these individually lacking, and made the case for integrative explanations (Häusermann 2010). Others, encountering anomalies which cannot be explained by existing theories, argue for a complementary approach, based in an updated view of policy making and policy (Smyrl and Genieys 2008). It posits that change can come equally from the top as from the bottom, emphasizes the fuzzy and evolving nature of the political space including the fluidity of interests, and centers on the role of the policy elite and their less-intuitive motivations in driving change.

There are two themes emerging from the text presented up to this point. One involves *change*, including economic, social, and cultural shifts at the macro level, and, at lower level, institutional transformation. More or less apparent, change, as discussed, is product of interplay among the public and private spheres, inviting many a question about

its direction and implications. The other theme is *diversity*: a variety of institutional regimes across countries, the differences of values and interests between and within their populations, and, corresponding to these, differences in policy outcomes. Here, given the forces of global or regional integration, technology and innovation, and economic development, questions arise on the persistence of this diversity. Perhaps most famously, these questions have been brought to the fore by the “end of history” debates, which engage at least two groups of scholars. Working mostly in the institutionalist tradition, one is focused on explaining the (ongoing) differences. Making up the other group are policy convergence researchers, who are concerned with discerning, measuring and explaining any homogenizing trends. Both of these are engaged in Chapter 5, whose goal is to continue the exploration of our capacities to explain policy trends and outcomes. The focus, however, is on the bigger picture: *What can we learn from the arguments and theories explaining similarities or differences in policy outcomes across countries? What does recent integration research suggest about how we approach and study the social world?*

The chapter begins with research that has established differences in industrial organization and in systems of social protection in advanced capitalist countries, structural disparities that are argued to determine not only the nature and extent of post-industrial risks but also the way they are addressed (Esping-Andersen 2002). This is followed by a discussion of globalization and Europeanization, two processes thought to drive economic and political convergence among countries, and explore and evaluate the mainstream convergence theories. We continue with mechanisms of policy convergence, a key innovation in convergence research, further refined in their application to Europeanization. Discerning scholars have observed non-linearity and co-evolution in policy processes challenging the traditional approaches to explaining stability and change. They thus invite further rethinking of both methods and theories in studies of policy, and of social systems more generally, a position that concludes our chapter.

Our review of the post-industrial condition, the contemporaneous policy responses, and the related research efforts reveals at once the difficulty with diagnosing the state of play and the challenges in explaining the outcomes, particularly in cross-national context. Current political landscapes, scholars find, are not only diverse—in interests, pressures, and outcomes—but also interrelated with other entities now going beyond the state borders. These structural shifts bring into contrast the explanations of the welfare state origins, as stemming from class compromise, and its modernization, driven by cross-class alliances (Häusermann 2010). We thus observe increasing calls for synthetic approaches in analyses and explanations. At the same time, some scholars recognize the inherently limited capacity of policy makers to realize their intentions—constrained not only by knowledge but also various path dependencies and lock-ins—and caution us not to overestimate their role in outcomes (Smyrl and Genieys 2008; Pierson 2000). Making sense of the increasingly complex and non-intuitive policy developments thus leads the modernization scholars to challenge not only the limits to conventional theories but also the fundamental assumptions behind these theories. This is also the entry point to the second part of the study, which opens with Chapter 6. *What does a rethinking of conventional assumptions mean for the study of social systems? How can it advance the way we study, influence, or make policy?* are among the key questions posed.

Following the discussion of the conventional assumptions and their fitness for the study of institutional development, we advance a different view of the social world. At its core, it assumes social systems function more like biological than physical systems, and thus should be studied accordingly. Far from new, evolutionary perspectives have been around since antiquity, and, for a time and in various guises, even prevailed in the social sciences (Sanderson 2007). Yet, inspired by the successes of physicists and chemists in explaining the physical world, social scientists have embraced the same assumptions and strived to emulate these approaches, particularly in the realm of policy. Advances in mathematics and computation reignited interest in evolutionary views, giving rise to new streams of research including evolutionary economics and the overarching inquiry into complex adaptive systems (CAS).

While a good deal of effort has been made in the applications of CAS in economics (Arthur 2014), policy and public administration (Colander and Kupers 2014; Geyer and Rihani 2012; Rhodes et al. 2010; Richardson 2007), sociology (Sawyer 2005), and social sciences more generally (Byrne 1998; Steinmo 2010), the scholarship is yet to meet its potential. Most complexity work in the policy field, for example, has thus far been published in book format or specialized journals³ while staying out of the mainstream literature (Gerrits and Marks 2015). Nevertheless, there are echoes of these developments in political studies as scholars incorporate CAS elements—including path-dependence, emergence, multi-causality, or nonlinearity, among others—into their explanations. In Chapter 6, we are not only more explicit about CAS and the relevance of the paradigm it informs; we also provide a larger picture as we show how research into the behaviour of complex systems, complexity policy, and evolution of technology (innovation economics) are related.

Hence, we set the stage with the discussion of CAS and their special properties and behaviours, and present the essential epistemological and ontological assumptions. Complex systems move between phases of order and disorder, exhibiting nonlinear dynamics: large interventions or changes in the system may have disproportionately small effects on systems behaviour and vice versa. As a result, outcomes are inherently unknowable (and far from intuitive). Some of this behaviour becomes apparent in the socio-political and economic development in the US over the last two centuries, an example with which the chapter continues. The example further reveals patterns of change, regularities between the times of stability and growth following the periods of decay, crisis, and resolution. Technological innovation and the related economic and social changes are at the core of these developments. Technologies, constituting socio-technical systems, are thus inextricably connected to economic and social developments. As technologies also include policies, both *creative* systems that exhibit shared characteristics, we can apply tools originating in technological innovation research to public policy. That research has established that technological systems exhibit *patterns* in their evolution (Altshuller 1984, 1999; Clarke 2000); we argue that knowing these patterns allows us not only to better understand policy (that is, its level of advancement and possible next states in its development) but also to shape its evolution (enhancing objectively its design and improving its outcomes). We use more or less familiar examples to show the applicability of these patterns to studies of policy. What is more, we engage novel research in policy (Colander and Kupers 2014), which, informed by

³ Books on complexity in public policy sparsely reference each other (more in Gerrits and Marks 2015).

complexity paradigm, provides a new understanding of the purpose and the role of policy. We demonstrate the fit of this new view of regulation along the Patterns of Evolution, reinforcing further the larger implications of the complexity paradigm—implications not only to the immediate study of policy but to a possibility of a broader shift in disciplinary thinking.

Reaching this point of the study, the reader will have realized there exists a new view of policy and, consequently, new ways of studying its development and *change*. Policy, as we point out, is a socio-technical system, a kind of technology that shapes and is shaped by society and the environment. Society and technology change together, they are co-evolving. Viewing policy from an evolutionary perspective is thus vital to its understanding. *But what is an evolutionary thinking in policy studies? Can we extend this thinking and obtain a unified view of evolutionary change?* we begin to ask Chapter 7. As hinted earlier, evolutionary interpretations are not new to social sciences. Many have been devised over time, not the least given the lack of a formalized, shared understanding of how social systems and their elements develop. While we briefly engage biological evolution and its inspirations, we focus on evolutionary policy research which, just as its complexity counterpart, holds much promise in how we study and design policy. A common framework, the structure-in-evolution view, we argue, can help reconcile different perspectives on change in creative systems while providing answers to a number of outstanding evolutionary questions.

While the chapter begins with theory, its remainder focuses on the applied aspects of the structure-in-evolution analysis. Recent works have identified various patterns or regularities in social and labour market policy development, spheres that appear to be increasingly integrated. Scholars have thus observed change is multi-dimensional and mapped its variants (Bonoli and Natali 2012b; Häusermann 2012), identified processes of “triple integration” driving the restructuring of unemployment systems (Clasen and Clegg 2011), or used flexicurity as a key (Chapter 3). We thus ask, *How does LMP evolve? And how does flexicurity fit into the larger picture of change?* We explain how the structure-in-evolution of policy can provide a more general view of change in LMP. Rooted in both reality and hypothesis, our case study interprets LMP development through an evolutionary lens, suggesting there is, after all, an order and some direction in how social protection systems change (compare Clasen and Clegg 2012, 153).

Having discussed both conventional and novel ways to approach policy change, and shown how new tools can help us understand it, we are ready to put our arguments to the test through empirical work. This is the objective of Chapters 8 and 9, examining LMP development across two crucial cases. Mindful of our appraisal from Chapter 3 and our interest in LMP development, two countries stand out for consideration. The first is a state at once providing a baseline understanding of flexicurity and a prototype for its implementation as well as an important case study of LMP and its formation and change—Denmark. Denmark achieved considerable economic success in the decade following the introduction of the combination of passive and active LMPs in the 1990s, experiencing the highest employment rate among the EU-27 countries, one of the lowest unemployment rates, wage stability and budget surpluses (Madsen 2004)—despite the high costs of its Nordic-style welfare state. While boasting generous family leave, child care and pension policies, as well as universal health care and free higher education, Denmark has attracted international attention with its system of flexicurity (Rodrik 2008).

The Danish model, characterized by its high flexibility levels, comparable to the traditionally liberal economies of the UK or the US, and its employment-focused social programmes, is considered central to the country's strong performance (also in Madsen 2004, 2008). As noted earlier, notable of the Danish system is its salient (co)evolutionary character; it is a product of an asynchronous, though not unrelated, series of institutional interactions, some unsuccessful (failing to alter the levels of job security), others successful (securing generous unemployment benefits), and some a matter of a patent compromise (implementing ALMPs).

The United Kingdom, a European outlier, is the second country of interest. With its minimal labour market intervention, high numerical flexibility and the lowest level of individual employment protection in Europe (Chapter 3), the country is among the most economically liberal in Europe. The national government develops social policy centrally and thus in relative isolation, resulting in less space for contestation and outcomes skewed towards business interests (Wright 2011). The UK is also a stable, aging democracy, a system that has not experienced a major disruption, an institutional "reboot" forced by an intervention by a foreign power or a revolution. As a result, over time "British society has acquired so many strong organizations and collusions that it suffers from an institutional sclerosis that *slows its adaptation* to changing circumstances and technologies" (Olson 2008, emphasis added). The power of vested interests became painfully evident, for example, during the post war decades when the lack of institutionalized agreement on wage policy and the inability to adapt posed issues to employment, economic growth, and the provision of welfare (Rhodes 2000). Since then, however, the mould was broken and social policy subjugated to the economy, creating a lean welfare state contributing to UK's competitive advantage (Rhodes 2000). Following many of these adjustments, the UK labour markets have exhibited very strong performance, placing the country in the same success group as Denmark and Netherlands (Clasen 2002). Notably, such reforms coincided with major reforms in social policy, in turn looked upon as a model of modernization. Not to forget, both countries exhibit a range of internal pressures and counter-pressures, reflected in their different industrial regimes, their policymakers' philosophies, and the outcomes of their politics and policy.

We thus ask, in the cases at hand, *does the structure-in-evolution view of LMP bear out? What can the evolutionary approach tell us about the development in social policy, past and present?* We trace the development of LMP across history in both jurisdictions. Rather than causes, we are concerned with policy designs, focusing on the patterns in their evolution over time. Validating empirically the structure-in-evolution of policy view should help both to reinforce our argument and open a new line of questions for further research.

The study culminates with an analysis and a discussion presented in Chapter 10. We speak to some challenges and opportunities in the evolutionary view of policy. We argue there is much value in the study and application of the Patterns of Evolution, identified in technology innovation research yet also relevant to policy studies, as this general theory of evolution (a generalization of the theory of biological evolution) can be used to understand developments in socio-technical CAS. First, we can improve our capacity to make sense of ostensibly unrelated policy developments. This is especially the case when dealing with the welfare state and its modernization, solutions that are interrelated and increasingly complex. Structure-in-evolution analysis complemented by

related tools expand policy makers' capacity to identify policy solutions and enhance confidence in selecting among them whilst loaning the knowledge resources to advocate organizations to monitor and weigh-in on these choices. Policy systems can thus be brought closer to ideal outcomes by reducing the number of contradictions and the negative effects on their policy stakeholders. Second, it should help advance research which relies on comparison. If we can make comparisons mindful of these patterns—rather than making conclusions from systems possibly at different stages of development—we attain more reliable results. Finally, we gain a new perspective on policy as we analyze its present state and past developments. Can these developments validate existing theories? What can the evolutionary structure observed in policy reveal about the underlying social and political developments? What can we know about the factors of change given an (un)expected pattern?

Chapter 2. A Changing Welfare State in the Post-Industrial Era

Whether seeking to study the origins of modern social policy or understand the emergence of different welfare systems, policy scholars often choose to start their inquiry at the dawn of the previous century, a time when power, information, and wealth were distributed differently. Though a number of proto-welfare programs began to take root at that time, their size and extent across states were relatively similar. Dominated by the prerogatives of capital, these systems did not work very well in improving their citizens' quality of life (Beramendi et al. 2015, 381). Rather than continuing the contemporaneous trends towards integration, nations started to close off commercially and soon began to settle their grievances. It is in the ensuing decades of great instability and economic downturn that the case was made for the importance of social policy and the state's role in the provision of welfare.

To other scholars, a critical moment for the development of social policy came at the end of the Second World War, when policymakers saw social stability as key to the survival of the new order. Maintaining full employment and other inclusive economic strategies have thus assumed tops of the agendas of the Western coalition countries, whose political economies and *welfare states* have been evolving distinct institutional arrangements (Hall and Soskice 2001; Esping-Andersen 1990). These policy interventions were sustainable due to post-war innovations across mechanical, chemical, or aerospace engineering sectors and to their associated productivity gains fuelling growth and shared prosperity (Ford 2015). In time, as the rates of innovation across these traditional sectors plateaued, the Fordist interventions began to skew the labour markets, leading to unsustainable labour costs and, in turn, accelerating inflation. A vicious circle was created through, what Blyth (2012) terms, a cost-push mechanism, which became deeply felt in the 1970s, the era of stagflation and the dissolution of the Bretton Woods system.

These conditions provided a window of opportunity to a set of entrepreneurs pressing for change. Debt holders joined forces with the industry in a successful "market-friendly revolution" (Blyth 2012) prioritizing price stability and deflation. The door to the neoliberal era has been opened. This paradigm shift thus carried deep implications to the existing systems of social protection. In the European context, the focus throughout the 1970s was on cost-control through wage bargaining and macro-economic policy. In the following decade, the goal was to improve competitiveness by deregulation and limiting the supply of labour. The Maastricht Treaty provided an impetus to contain costs, frequently accompanied by the development of various activation strategies. As well in the 1990s, the states began to transform their social security systems (Hemerijck 2002; Häusermann 2010), reflective of the changing landscape of employment in advanced capitalism.

Partly a consequence of the market-friendly revolution, the global financial crisis, the aftermath of which we find ourselves in, may have opened yet a *new era* for social and employment policy and the evolution of the welfare-state more broadly. To be sure, referring to these events in the singular "crisis" may overshadow their severity and extent. Speaking, as some do (Kickert 2012; Kickert and Randma-Liiv 2015), of four distinct, albeit related, crises, each with different problems and responses reveals their momentous nature. Briefly, the series began with the *banking* crisis in which a set of

global financial institutions were nearing a collapse. The governments were compelled to step in to revive and stabilize the system. This was followed by the meltdown of the financial markets and the ensuing *economic* crisis. Economic stagnation and the associated rise in unemployment were met with a series of government stimuli. Many governments increased expenditures by investing in infrastructure, direct transfers, and investments into the private sector. The third in the series was the *fiscal* crisis. The massive bailouts and economic recovery packages resulted in large budget deficits pressing the governments to respond by accelerating the existing fiscal consolidation strategies (reducing the number of public sector employees and/or their salaries, or cutting government social programs) and revenue generating measures (increasing taxes on income and consumption), or by introducing new ones. Finally, there was the European *sovereign debt* crisis, or the Eurozone crisis of 2010. The ballooning debts and the costs of those debts to some European Union (EU) countries became unmanageable. The distinguishing feature of this crisis was its supranational, rather than domestic management as in the other three crises. The EU, European Central Bank (ECB) and International Monetary Fund (IMF), also called the Troika, became the bailout architects and administrators (Kickert 2012, 2015). Hence, the crises have had an impact going beyond economics, affecting national and supranational governance, regulation, and policy strategies. Was the crisis a juncture sufficiently critical to set welfare states on a path toward deep change?

The disruptions of this series of shocks have also generated many questions while providing opportunities to understand better the political and policy (dis)continuities of the post-industrial era. They also brought to attention a development steadily unfolding in the background: the changing constitutions of states, a reorganization resulting in, among other outcomes, internationalization of policy regimes (Jessop 1997). This exposure of states' policymaking processes to economic and political pressures from beyond their borders has been a source of theorizing (Pierson 1998; Rodrik 2011), raising many a question on policy outcomes in this ostensibly homogenizing environment. It is thus no surprise there is a growing academic interest in the study of policy developments across jurisdictions, particularly in context of the EU (Heichel et al. 2005; Bulmer 2007; Knill and Lehmkuhl 2002; Bulmer and Radaelli 2005). Are policies becoming more alike? How can we tell? If so, why and how does this occur?

Such interest is deepened by the similarities in the agendas confronting policymakers, who must make decisions on stimulating trade by reducing various transaction costs in the form of employment regulations and taxes, on the one hand, and on revisiting a range of policies dealing with workforce development and social assistance and insurance, on the other. The solution spaces are further constrained by the capital-centric, deflationary commitments shared by the participants of the open economy, pushing governments toward cost cutting, privatization, and balancing budgets. The above conditions, the realities of the contemporary era, are serving as a backdrop to this study. In what follows we take a closer look at some of the recurring concepts in the contemporary welfare state literature, before discussing in more depth the study of social policy and its change. *What constitutes change? Has there been an identifiable reform pattern which can be used analytically?* we ask. Our goal is to provide the essential context for the ensuing discussion of labour market policy and its change. We engage flexicurity in greater detail, both as a policy model and a step in the evolution of LMP.

Part I. Change in the Post-Industrial Times

Welfare State Under Pressure

A set of interrelated developments, the above discussed structural shifts have not gone unnoticed to the welfare state scholars, who have begun to discern the realities of post-industrialism, “permanent austerity” (Pierson 1998), the “age of dualization” (Emmenegger et al. 2012), the rise of “new social risks” (Armingeon and Bonoli 2007), and welfare state modernization (Häusermann 2010), and, with these, the establishment of new social policies (Häusermann 2012; Armingeon and Bonoli 2007). We discuss these below, given both their stage-setting and conceptual importance.

As hinted, the type of technological progress which had driven the post-war industrial and economic growth could not have been sustained. While the ensuing rise of information technology—and particularly advancements in the computing power, networking, sensors, and software—has enabled productivity increases and moderate growth, it has not created the types of employment of the industrial era. It has also deeply altered the overall economic landscape including the labour markets, the results of which are increasingly evident.

In one analysis, Standing (2011) identifies six key trends within labour markets driving many politico-economic transformations unfolding over the past several decades. An outstanding trend is the increases in labour *supply* globally, growing four-fold since 1980. The availability of labour for the open economy, the author notes, has grown even faster, making it possible for an increasingly larger number of multinational corporations to relocate their operations to regions with low labour costs. At the same time, we witness a growing proportion of the *elderly* in the populations given the tapering, or in some cases negative, population growth. This creates a large number of issues across economies, ranging from the employability of older workers to sustainability of various pay-as-you-go pension schemes dependent on contributions of existing workers. The third trend is *migration* of a growing number of people to urban areas in search of a better employment. These workers may come from poorer areas of the same country or from abroad taking on low-paid or unreliable work opportunities, frequently motivated by providing for their families many of which stay behind. The fourth trend is employment *tertiarization*, where most labour market participants (are forced to) work in the service sector rather than in raw materials or manufacturing. Another characteristic of employment in this new age is the *informalization*. Seeking flexibility and cost savings, private and public enterprises alike have started using various forms of contractual labour, including subcontractors and workers provided by agencies. Finally, there is the *feminization* of employment. This is understood not only as an increasing participation of women in the labour force, but also as the growth of unsteady, precarious types of employment (Standing 2011).

While trends identified in global analyses are often defined by conditions in the more populous developing countries, important in this case is its relevance to advanced industrialized countries, where they are sharply reflected in the economic trends. These include stagnant wages, decline in labour force participation, decrease in labour's share of national income, growing inequality, and market *polarization* (a labour market where middle-skill jobs are replaced with many low-skill service and a few high skill

technology jobs) (Ford 2015). Indeed, these are the defining characteristics of the post-industrial era.

While these issues are often thought to be products of globalization,⁴ financialization, and politics, some authors (Ford 2015) ultimately trace these problems to the limits to technological progress. More specifically, while innovation has occurred in some areas, such as in the information and communications technology (ICT) and the associated services, it has not been commensurate in the industrial sector leading to shrinking growth rates in employment and productivity familiar from the post-war decades. The welfare state—in place to reduce the worker risk arising from dislocations brought by technology or economic integration, and to provide levels of social security more broadly—has been hoped to provide once again the safety in this transition. What for some may be yet another adjustment, others view this era as posing unprecedented challenges to the continuity of the traditional welfare designs.

Pierson claims that policy makers are working in an era of “permanent austerity” (Pierson 1998, 2001), a condition borne of three related developments. The first is the overall decline in economic growth attributed to the ongoing displacement of industrial jobs with low-skill service jobs, where gains to productivity are limited. The second is the maturation of welfare states, which have since their establishment seen a considerable growth in reach and program diversity and the associated growth in costs. As the welfare expenditure increases outpaced the growth of national economies, the policymakers have been faced with the task of trying to finance these programs, often through higher taxes or social insurance. What’s more, the relative generosity of the unemployment programs, on the one hand, and the increases of employee’s tax or insurance burdens, on the other, are changing the incentive structures people have to take jobs or leave them (Pierson 1998), exacerbating the condition. Finally, there are the demographic shifts dominated by the graying of the populations across the advanced industrialized countries. Retiring populations seeking pensions and health care, two of the most expensive elements of the welfare state, are becoming a significant cause of fiscal concerns (Pierson 1998).

Thus it is argued that addressing these structural challenges demands a significant reorganization—including in the reductions of the generosity and the qualifications of the traditional benefit schemes—affecting nearly all parts of the welfare state. These conventional policies were created throughout the last century “as part of welfare state capitalism, based on an ‘industrial citizenship’ model linking social entitlements to holding a formal job” (Standing 2011, 261). Focused on income and job protection, such policies were based on “the assumption that jobs are there to be had, if not now, then in the near future” (Standing 2011, 261), and on a related assumption that sole breadwinner model is sustainable. Given the employment and economic shifts discussed above, this assumption is no longer appropriate challenging with it the viability of the traditional policy solutions. Theodoropoulou (2018b) comments on these issues:

Passive income support and the provision of channels for labour market exit of the (long-term) unemployed became ineffective and expensive. Generous unemployment benefits and highly protective employment protection legislation were no longer as necessary for encouraging workers

⁴ “82 percent of the goods and services Americans purchase are produced entirely in the United States; this is largely because we spend the vast majority of our money on nontradable services. The total value of imports from China amounted to less than 3 percent of US consumer spending,” found the economists at the Federal Reserve Bank of San Francisco (Ford 2015, 54).

to invest in industry or firm-specific skills useful in manufacturing sectors...[and] were likely to raise the reservation wages of former manufacturing workers, thus making their shift to less well-paid service jobs harder. (3)

Aside from the cost and utility issues in the traditional welfare arrangements, some scholars have identified new forms of risk, or lapses in welfare coverage. These new social risks⁵ (Pierson 1998, 2001; Armingeon and Bonoli 2007) stem from the rise of non-traditional forms of employment, an increasing use of flexible contracts and other forms of employment informalization. They are also product of a parallel process of social change, a move away from the sole, traditionally male, source of income per family and the consequent entry of non-traditional employees into labour markets. Such risks come into contrast in this “age of dualization,” where workers in protected employment or with skills allowing them to remain in such employment, the job market insiders, receive a different policy treatment from the rest of the job market participants (Emmenegger et al. 2012).

Understanding whether and how policies help to close or widen the gaps between the labour market participants, and the members of society more broadly, is important in coping with new social risks. These interventions are an important part of welfare state modernization (Häusermann 2010), a term describing “the adaptation of existing institutional arrangements to the economic and social structures of post-industrialism” (Häusermann 2010, 1). The outcomes of the modernization processes are policy solutions addressing the fallouts of this restructuring. These new social policies are interventions “aimed at covering welfare risks that are typical of the post-industrial society (either because they are ‘new’, more widespread or newly politicized), such as atypical employment, long-term unemployment, working poverty, family instability and lacking opportunities for labour market participation (due to care obligations or obsolete skills)” (Häusermann 2012, 113). More specifically, Häusermann identifies two classes of new social policies, distinguished by their objective. Leveraging both activation and skills development and training instruments, the first type of policies aims to improve labour market participants’ chances of gaining employment. The second type of policies deals with new risks groups, not covered by the old model relying on security from a sole source of income drawn from a stable employment or unemployment insurance. The aim is to provide an individual with needs-based security independent of employment insurance schemes or family status by, for example, creating non-insurance based assistance schemes (Häusermann 2010).

A significant policymaking activity has been observed in context of these modernization efforts over the recent decades. Take, for instance, Häusermann’s (2010) analysis of the pension schemes of continental welfare states, which have undertaken deep, in some views paradigmatic, changes over the past several decades. Countries, such as France, Germany, or Switzerland, have been replacing their traditional pension schemes with tiered-solutions based on risk groups: a tax-financed basic level of security for those at the lower income scale while supporting various forms of private, capitalized solutions for those in the upper brackets. Turning away from the family-centric model of welfare, dependent on a sole, mainly male, source of income, meant policies focused on

⁵ Not all welfare states face the same new social risks. Advantaged by their more universalistic schemes, the Scandinavian welfare states addressed these risks well before they arose as risks in other countries (Armingeon and Bonoli 2007).

promoting financial independence of the citizens in their old age (for example through rights to a minimum pension benefit). These thrusts towards gender equality resulted in improving coverage for market outsiders, traditionally women, and in other solutions such as the educational pension credits. Häusermann (2010) thus observed four key developments across France, Germany, and Switzerland: “(1) the strengthening of minimum old-age income protection, (2) an increasing emphasis on private or occupational capitalized pension funds, (3) enhanced gender equality in pension policy, and (4) retrenchment (i.e., the scaling back of insurance rights in the basic pension schemes)” (197). While these reforms concern primarily the Continental countries, they steer our attention to the kind of adaptations, multi-faceted and extensive, characteristic of most post-industrial environments.

Developed under pressure from both citizens demanding equality and individualization (Häusermann 2010), and existing constituencies pushing to retain or expand their benefits, within their respective politico-economic environments, new social policies have often supplanted or augmented the traditional solutions. Having a grasp of types of measures employed and these combinations has been important in explaining how change occurs. This will be explored in more detail in the next section.

Conceptualizing Institutional Change

Above, we have highlighted a number of key conditions and constraints faced by the contemporary welfare states. As policymakers have been tackling these challenges, scholars have begun to shift their focus from studying the persistence and stability of welfare systems toward explaining their change. What qualifies as change? How are processes effecting change conceptualized?

At its most basic, change may mean a transformation of existing institution(s) into ones that are dissimilar. Change may also mean a shift in the broader social and economic context, where apparently stable institutions may, through the processes of *drift*, lead to erosion. Hacker (2005) aptly shows this in his study of the US welfare policies. While appearing resistant to change (retrenchment), the effect of social policies, Hacker argues, has been in fact reduced due to emerging risks outside of the scope of coverage of the existing programs. Alternatively, institutions may be reinterpreted in different ways overtime. Here, Jackson (2005), for example, demonstrates that the German doctrine of codetermination based on a set of formal legal rules resulted in a variety of employee company arrangements on account of the rules’ ambiguity. It is this ambiguity that allowed (re)interpretation, negotiation and slow change overtime, rather its collapse and removal. Further, the enforcement of specific institutions may change, yielding very different outcomes from one time to another. As apparent from these examples, institutional change is a multifaceted concept, not the least as institutions are constructs that exist in an ever-evolving social, political, or economic context.

Hence defining the more abstract institutional change, which may include various organizational or macro-institutional aspects, is not easily done. Yet, we have a better grasp of what change is and how to measure it in comparative policy studies. Building on his earlier work (1989), Hall (1993) responds to the limits of explanations of change based on "social learning" (which was, in his view, ambiguous in its definitions as well as its relationship with the state). Attempting to explain the outcomes of economic

policymaking in the United Kingdom in the 1970s and 80s, Hall thus introduces a classification of policy change and an associated causal process. Hall distinguishes between minor adjustments in instrument settings (first-order change), a change in the policy instruments (second-order change), and a paradigm change in the policymaking *regime* involving shift in goals, priorities and the resulting instruments (third-order change). Inspired by Kuhn, the author thus introduces *policy paradigm*, a concept defined as “a framework of ideas and standards that specifies not only the goals of policy and kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing.” A paradigm change results from a process of social learning in which first and second order changes are first tried without success. While Hall's *process* driving the policy changes has been revisited (Oliver and Pemberton 2004), the classification of change remains a useful way to assess policy change.

Drawing on literature, original research, and the findings in their edited volume, Streeck and Thelen (2005) identify five general types of gradual transformations leading to deep change. These are displacement, layering, drift, conversion, and exhaustion, each with an associated mechanism: defection, differential growth, deliberate neglect, reinterpretation, and depletion respectively. *Displacement* is an organically driven process in which institutional change unfolds through gradual diffusion of new models that get adopted as they are found more apt to solve emerging issues. In the cases at hand the authors note change happening “not through explicit revision or amendment of existing arrangements, but rather through shifts in the relative salience of different institutional arrangements within a ‘field’ or ‘system’” (22). *Layering*, on the other hand, is an *active* addition of new institutional forms to the existing ones. This may result in an unbalanced growth of new institutions, driven by a mechanism of, what Streeck and Thelen call, *differential growth*. *Drift* is a slow process of institutional erosion in which institutions may formally remain the same, but they no longer effectively meet their objectives. Important to note here is the observation that institutions must be maintained, actively tuned or refocused in order to remain effective. Hence, for example, failing to index unemployment benefits to inflation gradually reduces their power, which results in a type of passive retrenchment. *Conversion* is a process of repurposing of existing institutions to meet other objectives. This is the case, for example, with German doctrine of codetermination in which the old institutions remain unchanged in form, but are (re)interpreted toward new goals (Jackson 2005), as noted earlier. Finally, *exhaustion* describes gradual institutional collapse. The authors differentiate this process from institutional drift, as exhaustion is process in which the original rules encourage undesirable behaviours. Streeck and Thelen note here that while the newer institutions may be more pliable with room for adjustment and reinterpretation, the older ones may face an overextension in the context of the changing environment.

While there exist other descriptions of institutional change, the aforementioned approaches represent its two key evolutionary instantiations: transformative change as a result of either punctuated or gradual processes. Though vital in advancing the studies of policy, these influential interpretations have not been immune to challenges (Smyrl and Genieys 2008). Thelen and Streeck (2005) observe “the notion of path dependence seems to encourage scholars to think of change in one of two ways, *either* as very minor and more or less continuous (the more frequent type) *or* as very major but then abrupt and discontinuous (the much rarer type)” (6, *emphases original*). Scholars thus generally

associate incremental change with minor and adaptive adjustments, and mostly exogenously driven breaches of continuity as major change. This, the authors argue, is problematic, as it "makes excessively high demands on 'real' change to be recognized as such and tends to reduce most or all observable changes to adjustment for the purpose of stability" (7). Above all, symptomatic of the lack of an integrated understanding, perhaps their greatest issue is that scholars are inadvertently forced to a reductive choice and assume one view over the other. While some, as we will discuss (Chapter 4), have made attempts at their reconciliation, lacking still is a unified approach able, also, to accommodate the complex transformations discussed next. Focused, as we ultimately are, on advancing such a view, we continue below and in the ensuing modules to explore the potentials and limits of existing scholarship.

Mapping Change in the Post-Industrial Policy

As apparent from the discussion thus far, the economies and societies of industrialized countries have been experiencing significant changes. These developments have left imprints on social policy. There, we learn small interventions or even no action can over time lead to significant change in welfare state outcomes. As well, we observe it is not only existing policies that change or new policies that are introduced, but that modernization of particular social policy area involve cross-cutting adaptations—adaptations that cannot be explained fully using the conventional theoretical approaches (as will be discussed in Chapter 4). Studying these developments then requires going beyond a mapping of change along a single-axis, i.e. expansion or retrenchment, and demands a more comprehensive approach (Häusermann 2012).⁶

One such an approach has been advanced by Häusermann (2012). The author first draws contrast between old and new social policy, or more specifically, between old and new instruments within the policy programs. Hence, in labour market policy example, removing rigidities or employment protections have been advanced as a solution not just to coping with labour market segmentation and raising participation (EC 2010), but also in providing greater agility to respond to the market pressures by bringing employees in and out of work with ease.

But policy instruments, Häusermann adds, may be also combined in different manner whereby the general direction of the reform becomes discernable. The first set of possibilities are the general *expansion* or *retrenchment* of both old and new social policy instruments, as each are either strengthened or diluted respectively. The second set of possibilities becomes discernible when considering policy instruments, addressing a particular need within a domain, together. Here, one group is *recalibration strategies*, solutions combining benefit expansions in some areas, with dilution or weakening in others, in order to address new issues, or "risks" (Theodoropoulou 2018a), which are classified into two general types. The first is *flexicurity*, a policy-mix in which a weakened employment protection is offset by building up transitional security and

⁶ Hence given our discussion thus far, a recognition of the organic manner in which flexicurity developed in Denmark—implemented asynchronously and only being labeled so in retrospect (Bredgaard and Madsen 2018)—helps to appreciate the evolutionary character of policy change. This is particularly important in the contemporary EU where flexicurity has been embraced as an EU policy recommendation and thus forms an ideational anchor, a source of policy replication across the integrated polity.

activation support, provides an example from labour market domain. The other kind of recalibration strategy is *welfare readjustment*, where the traditionally high income protection afforded to market insiders is decreased in favour of increasing the support of labour market outsiders (usually dependent on means-tested benefits). The final case is, what Häusermann (2012) terms, *welfare protectionism*, a scenario in which the insiders, traditionally the social policy winners, retain their benefits, protecting them from the outsiders or new types of social constituencies.

We may now begin to appreciate a dual importance of mapping change in this manner. The first comes from the broader view that a policy change can also involve recalibration of multiple instruments. This can involve shifting the resources from one group to another, or, as in the case of flexicurity, creating new features of employment and transitional security while reducing various employment protections. This is reflected in the writing of a European social partner speaking to the impacts of introducing greater flexibility into labour markets:

It can also be considered as a *new* form of social risk. The benefits of flexibility in creating more jobs and employment could be complemented by social protection systems to manage the risks of individual workers... Social protection systems play a central role in the overcoming of risks, which is why they play such an important role in the social model in the European Union. They therefore have a clear complementary role in dealing with the unemployment risk of a more flexible labour market. (Eurofound 2007, 10, emphasis added)

The organization recognized the risks to workers created by increasing employer flexibility while noting it could be addressed by adding protections—a complementarity at the core of flexicurity.

Viewing reforms in this manner provides not only a better understanding of the direction of change, it also steers the analytical attention to the systemic aspects of policy. That is modernization in social policy means that solutions must satisfy an increasingly demanding set of requirements, leading to interrelated sets of policies which balance budgets, flexibility, and the needs of various groups.

Accelerating Change

The fast changing world is demanding continual adjustments to policies, programs, and the systems that produce them. Demographic shifts and the limits to industrial innovation can be seen as the ultimate drivers of advanced industrial nations into the post-industrial era. Proximately, domestic issues including the rise of new social risks and the fiscal challenges stemming from aging populations and the limited tax revenue potential of restructuring economies are becoming the “problem pressures,” at once demanding change and dominating its explanations. Yet, there are other important drivers of (social) policy change originating from beyond the state’s borders: globalization, international organizations, and, in the EU context, Europeanization (Bulmer 2007). We discuss these briefly below and revisit some in greater detail in later modules where we explore their steering role on policy in cross-national contexts.

The conflict between domestic prerogatives and the needs of open markets is the quintessence of the contemporary economic order. States and their citizens have differing priorities, including the needs for economic development, or health and safety, environmental, or labour standards. As hinted above, in the past, nations have had a

greater ability to determine their own development paths, employment policies, and balance other regulations in accordance with their democratic politics. Enabled by various international agreements, the demands of open markets constrain this democratic politics. These conflicts come to the fore in the debates on globalization, or "enhanced trade and financial integration" (Rodrik 2007), seen by some as one of the key policy-shaping forces.

Volumes have been written on contemporary transformations triggered by globalization, in which the state is seen either as retreating, taking on a different role, or becoming evermore important to the functioning of the (global) economy. In his ode to globalization, Friedman (1999) explained with certitude the mechanics of the state, politics, and the open markets:

[As] your country puts on the Golden Straitjacket two things tend to happen: your economy grows and your politics shrinks... [The] Golden Straitjacket narrows the political and economic policy choices of those in power to relatively tight parameters. That is why it is increasingly difficult these days to find any real differences between ruling and opposition parties in those countries that have put on the Golden Straitjacket. Once your country puts on the Golden Straitjacket, its political choices get reduced to Pepsi or Coke—to slight nuances of tastes, slight nuances of policy, slight alterations in design to account for local traditions, some loosening here or there, but never any major deviation from the core golden rules. (87)

Purposely cited, Friedman's segment channels a stylized view of the economically integrated state under *constraints*. While this statement is oversimplified, globalization does limit options policymakers have in several areas. For example, they are cognizant that "currency and interest rates are more difficult to control; large budget deficits financed by government borrowing are susceptible to capital flight as investors anticipate inflation; and the use of certain policy instruments such as tariffs and subsidies, once favoured by wealthy countries in their climb up the ladder of development, is now heavily disciplined under international trade agreements" (Weiss 2005). Yet, governments may choose not to give in to these pressures; or they may take action but for reasons other than globalization (Pierson 2001).

Nevertheless, much globalization scholarship is concerned with change, whether in governance, legal structures, or in policy making. Some scholars explain the contemporary transformation through the lens of *neoliberalization* (Harvey 2005; Brenner et al. 2010), describing the varied processes of economic liberalization that manifest themselves unevenly, are replete with contradictions (Harvey 2005), and have different implications across countries. Others argue these processes go so far as altering the very structures of governance, a part of a larger project "attempting to make liberal democratic capitalism the sole model for future development" (Gill 1992, 159). An element of this project is, in Gill's terms, disciplinary neoliberalism, "a discourse of political economy that promotes the power of capital through extension and deepening of market values and disciplines in social life, under a regime of free enterprise" (Gill 2002, 47). Disciplinary neoliberalism and its politico-legal counterpart, new constitutionalism, are thus viewed as disembedding forces, mostly displacing the old order of embedded liberalism (Gill 2008). In theory, new constitutionalism is an "international governance framework [which] seeks to separate economic policies from broad political accountability in order to make governments more responsive to the discipline of market forces and correspondingly less responsive to popular democratic forces and processes"

(Gill 1998, 5). In practice, this is manifested, for instance, in preferences for non-discretionary macroeconomic policies and the establishment of insular institutions for the regulation and supervision of trade and finance. The overarching goal of these designs, locked-in and placed away from democratic scrutiny, is to “protect and extend the investment and other rights of private corporations in ways that help constitute an emerging global market civilization” (Gill 2015, 19). Their reach, permanence, and the manner in which they can be contested are thus reminiscent of constitutional rules and norms. This, ultimately, is thought to lead not only to a significant reduction in policy options but also to policy outcomes increasingly veering away from the public (social) interests.

Another author argued that “with seventy countries competing for the export-processing-zone dollar, the incentives to lure investors are increasing and the wages and standards are being held hostage to the threat of departure. The upshot is that entire countries are being turned into industrial slums and low wage ghettos, with no end in sight” (Klein 2000, 208). Klein was referring to the race to the bottom, frequently invoked in the critiques of globalization and to explain cross national policy outcomes. Indeed, the race to the bottom and its converse, the race to the top, become some of the most visible (and disputed) arguments for policy change due to globalization. Hence, despite the various view and lenses, the scholarship, in general, hints to homogenizing effects on policies adapted within this constraining environment. We will return to these in greater detail later (Chapter 5) along with some theoretical alternatives.

It is less discussed that the state, as an enabler of integration processes, makes globalization possible (Rodrik 2011). Economic integration is akin to technological innovation (Rodrik 2011), or forces of creative destruction, where the less economic is replaced with better and cheaper—resulting in dislocations and thus risks to those impacted by these processes. And, given their role as providers of training and security, the states play an important role in reducing risks posed by open markets and technological advancement. This has been argued by Cameron (1978), who found a drastic expansion of the public sector of advanced economies in the second half of the 20th century. The author tested several possible explanations for this expansion on a sample of 18 advanced industrial nations and found states most open to the international economy also had the largest public sectors. States with relatively small economies, namely ones that cannot implement protective measures such as protectionism or neo-mercantilism, respond by expanding public services including training and education, unemployment benefits, employer subsidies, and by investing into public corporations, among others. Rodrik (1998) conducted a more robust analysis and found a statistically significant positive association between a country's integration into the global economy and the size of its public sector. In line with Cameron, the author's analysis suggested the extra public spending serves as an insurance against the risks created by the open economy.⁷ While debates on this issue (Epifani and Gancia 2009), and on the outcomes of market liberalization in general, persist, an analysis of policy change must nevertheless take these conditions into account.

⁷ However, in a related study, Epifani and Gancia (2009) noted increased spending but come to a different conclusion regarding its causes and thus on appropriate policy prescriptions.

There are also international organizations, forums for discussion and resolution of common and individual challenges of different types, ranging from competitiveness and trade to security issues. For example, the “North Atlantic Treaty Organisation (NATO) has been a long-standing arena for identifying collective Atlantic security and defence and the Group of Eight industrialised nations (G8) economic summits serve as another arena within which economic policy ideas and practices are discussed” (Bulmer 2007, 44). These along with a number of smaller organizations have a significant influence on policy making. Consider the Organisation for Economic Co-operation and Development (OECD), an association of 36 countries and a budget of less than \$400 million, which has been playing an outsized role in the world of policy. OECD has gained a reputation of a standards setter and as one establishing aspirational, global initiatives. The organization set as one of its goals to help to “ensure that people of all ages can develop the skills to work productively and satisfyingly in the jobs of tomorrow” (OECD 2019). Programme for International Student Assessment (PISA) ranking system was developed as a means of achieving this goal. And in short order, this national and global benchmark has become one of the most influential factors in education policy discussions and development (Breakspear 2014).

Finally, just as globalization, Europeanization is also considered an important factor influencing domestic policy (Graziano and Vink 2007; Bulmer 2007). The EU members must not only adhere to the existing or negotiated EU treaties and agreements, EU laws and regulations, or follow the rulings of the European Courts, their policymakers and institutions are also subjected to various indirect pressures. The latter include fiscal rules, conformity, and coordination mechanisms.

Specifically, a number of instruments have been developed boosting the European institutions’ (such as the European Commission) capacity to influence domestic policies of the EU countries (Hastings and Heyes 2018). For example, the recent Euro-plus pact, the EU legislation Sixpack, and the European Semester framework have been established to facilitate structural reforms within the Eurozone countries, strengthen economic governance, and provide framework for coordination of economic policy respectively. In terms of the latter, the countries must “respond to ‘country-specific recommendations’ (CSRs) that focus on measures related to growth and competitiveness, including the reform of employment protection legislation, active labour market programmes and unemployment benefits” (Hastings and Heyes 2018), and other social and economic policies. Further, as mentioned, the EU has been able to influence policies of some of its member countries directly, as it imposed various conditions on the “program countries” in exchange for financial assistance, following the Eurozone crisis of 2010.

Part II: Evolving LMP

Flexicurity in Context

As hinted above, LMP, and social policy more generally, has been undergoing significant changes aiming to make states more responsive to the demands of the post-industrial age. To review, the industrial LMP has focused on protecting jobs rather than individuals (possible in a growing economy with low unemployment) across regimes. The primary beneficiaries were the market insiders, regular workers (committed mostly to one career

path at just one or a small number of employers), making up most of the work force. In this period, select countries began to develop their ALMP, aiming to supply adequately skilled workers into the growing economy. In most countries, however, ALMP remained a complementary instrument (Bonoli 2011).

With a transition to the post-industrial era and its shrinking industrial employment, job creation became concentrated to low-skill service and, to a lesser extent, high-skill technology sectors (Ford 2015). The growing number of those employed in irregular service jobs, outsiders subject to weaker protections, leads to market dualization. On the business side, there are growing competitive pressures from companies around the globe gaining the ability to deliver across value chains. Not the least due to these developments, the policy makers began to take steps to reform LMP. The policy priority shifted from protecting jobs to individuals, with focus on employability and transition supports. At the same time, the search for savings, attained in part by improving efficiency in activation and employment services, demanded new or updated instruments. In countries with more evolved LMPs, the concern became individualized services closest to employers (Chapter 3), leveraging organizational and technological innovations in making the delivery more effective. As a result, we witness systems of interventions, with some of their elements (EPL) being relaxed and simplified, while others (ALMP and social supports) growing more integrated (Clasen and Clegg 2011; Bonoli 2011). One such a model is, as hinted, flexicurity, a solution emerging at first organically, without intent, and in time assuming a prominent role in the EU employment policy and thus attempts at its replication. Before we discuss flexicurity, we first provide the politico-economic context. We begin with the contemporary situation and consider structural as well as ideational elements—neoliberal globalization, the European Social Model, and the “austrian doctrine”—while leaving the conceptual dimensions for the next section.

At the outset, we hinted at some challenges created by neoliberal globalization and accelerating economic interdependence. A closer look is needed, however, to begin to understand the drivers of the promulgated solutions. Contemporary global integration can be traced to the 1970s, a period which begat the new economics, a shift from the state-driven model of prosperity toward economic liberalization. The ensuing “optimization”—starting with the offshoring of consumer goods production, followed by offshore assembly and manufacturing, and leading to global supply and value chains—reshaped the industrial and employment landscape and the associated strategies in developed and developing countries.

Economic upgrading, a ‘process by which economic actors, firms and workers move from low value to relatively high-value activities in the global value chains’ (Gereffi 2014), became the key to economic growth in the fast-moving business environment. Specifically, this means upgrading *products* by increasing their sophistication; *processes* by reorganising business flows to gain efficiency; functions by recalibrating business functions and increasing the skill levels needed; and *chains* by integrating new, geographically dispersed and specialised producers (Humphrey and Schmitz 2002). Economic upgrading is enabled by technological innovation, improvements in efficiency, workforce development and the capacity to respond to change quickly. Poor performance results in a loss of business effectiveness, competitiveness, and ultimately market share; and for the worker, a loss of competency

and employment. Accordingly, firms seek lower transaction costs and demand lower barriers to their operation, such as increased numerical flexibility, while workers require at least skills upgrading and transitional security.

It should be noted that European integration was an early prototype of such developments, later unfolding on a global scale. It has also become an experiment in the varied European political economies' individual and joint responses to globalisation. One such a response is the European Social Model (ESM), a set of principles capturing the social dimensions of European integration. This aspirational model was introduced in the mid-1980s by the European Commission under the leadership of Jacques Delors, as a statement of the EU's twin social and economic commitment (Busch et al. 2013). The model builds on six primary policy objectives for the Social Market Economy (Busch et al. 2013): prioritizing full employment in macroeconomic policy; ensuring that wage growth corresponds to productivity growth and that a minimum wage policy to support low-wage workers is in place; establishing strong social protections including pensions, access to health care, and family support; encouraging social dialogue and promoting enterprise participation rights and a level of employee co-determination; maintaining a robust public sector servicing the needs of the general public; and, finally, institutionalizing social progress clauses that prioritize social needs over market prerogatives. And while the ESM, not least due to its political nature, has various interpretations, it nevertheless serves as an important reminder of the multi-dimensionality of the European project.

Discussions on labour market reforms and public spending in general, and various policy solutions proposed or implemented in response to economic and political pressure in particular, have taken on a different tone in the post-crisis world. The global financial crisis of 2008 and the ensuing bailouts opened the floodgates to arguments for restoring economic competitiveness by accelerating fiscal adjustment and liberalisation policies—known as austerity.

As with other public philosophies, austerity benefits from being both a state of mind and a policy goal, thus rendering it a concept difficult to contest with traditional, often nonintuitive arguments. Boyer (2012) thus points to four (false) assumptions used to justify the far-reaching programmes of post-crisis austerity. The first assumption relates to the causes of the crisis, often framed as the result of profligate public spending in concealment of the true culprit—the explosion of private, speculative credit. The second is based on an unconventional argument that sees fiscal contractions as boosting confidence and thus driving economic expansion. The economics behind this position have been shown to be flawed, leaving the 'austrian doctrine' mostly discredited (Krugman 2015).⁸ The third assumption is that austerity is a universal recipe, applicable equally across political economies. Unfortunately, the prescriptions working well for net exporters like Germany are unsuitable for service-based economies like Greece, for example. Finally, austerity supporters assume that what is effective for an individual economy is also appropriate on an international scale. Yet, the decisions made during the interwar period, including competitive devaluation and the raising of tariff barriers, constitute a stark reminder of this fallacy of composition. Nevertheless, governments continue implementing their austerity programmes using a variety of instruments, including cutbacks or removals of various subsidies (for food, agriculture or energy),

⁸ With the exception of the UK (more in Krugman 2015).

reductions in social safety nets, pension and health-care system reforms, and labour market interventions (Ortiz et al. 2015). With regard to the latter, the ALMPs (employment incentives and training, job-search services), labour market regulations (numerical flexibility), unemployment benefits and assistance, and wages (changes in minimum wage legislation, ceilings on public sector wages, indexation) have been subject to more or less significant dilution, depending on the jurisdiction (Gama et al. 2015). Finally, governments have accelerated the privatization of service delivery and state property, and taken steps to bolster revenues through various tax increases (Ortiz et al. 2015). The emerging programmes are often disconnected from traditional social democratic commitments, such as the European Social Model, and have broad social implications, including the willingness and capacity to challenge their enactment.

We have discussed economic integration at European and global levels and detailed the contemporary processes driving economic growth. Maintaining economic competitiveness in this dynamic environment is the key concern of both public and private enterprises at local, national, as well as regional levels. We have also noted a salient ideational anchor of social conscience, the ESM. Answering the business demands for agility and efficiency while seeking a level of redress for the dislocated thus became the new political and policy challenges. And while various fiscal adjustment policies under an assortment of labels were gradually introduced for decades prior to the crisis—a sign of the times of “permanent austerity” (Pierson 1998)—austerity has since become the compass in the world of economic, social, and even employment policy development (Ortiz et al. 2015). It is against this backdrop that flexicurity has gained purchase—whether as an idea, device, or a solution.

Flexicurity: An Idea, Device, or Solution

To some, flexicurity is an ambiguous concept injected into the debates on LMP—an area impacting virtually all labour market participants, and, indirectly, most of the population—as part of a broader market-reorientation agendas. To others, it is a response to contemporary problem pressures, a strategy necessary in bringing labour markets into the future. Still to others, flexicurity is nothing new, merely a constellation of features more pronounced in some jurisdictions over others. This conceptual range is not surprising once we consider its development, the contemporary politico-economic landscape, and empirical challenges (Chapter 3).

First, while there is no consensus on the origins of the term flexicurity, scholars generally trace the origins of the LMP innovation trading flexibility for security to the politico-economics developments in two jurisdictions, Netherlands and Denmark (Muffels and Wilthagen 2013; Viebrock and Clasen 2009; Bredgaard et al. 2005). As Voss and Dornelas (2011) explain:

In the Netherlands, the term is ascribed to the challenge of balancing the concepts of flexibility and security in the context of a growing number of “flexible” jobs emerging as a result of business needs and worker preference in the mid-1990s. This debate and the concept of “flexicurity” resulted in the “Flexibility and Security Act” of 1999, and the legal regulation of “flexwork” in the Netherlands. A key element of the Dutch flexicurity approach was the notion of equal/equivalent rights of the different groups in the labour market... Other sources (such as Eurofound) stress that the term flexicurity was first coined by Poul Nyrup Rasmussen, Social Democratic Prime Minister of Denmark, who was Prime Minister between 1992 and 2001. In Denmark, the notion of

flexicurity is based on a specific labour market model that combines high levels of external flexibility (in terms of hiring and firing) with high standards of social security. (10)

Moreover, the Danish solution now also incorporates a strong AMLP component including lifelong learning, more recent additions to the model (Madsen 2008). Only with these elements the Danish flexicurity took on the shape of the “golden triangle” with its key complementarities between transitional security, employability, and numerical flexibility. Hence, debates on social policy models should be mindful that flexicurity is a product of “a gradual process of political struggles, and compromises with a strong element of path dependency” (Madsen 2007, 527). Furthermore, as “[p]olicy makers are not always aware that they intervene in the flexibility security nexus” (Tros 2004, 12), developing complementarities may be a result of chance (Schwartz 2001).

Nevertheless, despite their differences, both models attracted widespread attention due to the support and satisfaction of the stakeholders and their apparent performance (Viebrock and Clasen 2009; Madsen 2008; Wilthagen and Tros 2004). In time, the Danish model has been taken up by the EU, where it was officially adopted as a policy strategy in 2006, and later included in the European Employment Strategy and the 10-year plan, Europe 2020 (Bekker 2018; Chapter 3). In addition, flexicurity, both in parts and its entirety, has been explicitly referenced in CSRs for individual countries and the Euro area (Bekker 2018). Supported by both problem pressures and the ESM, the model has thus seen attempts at its replication.

Whether as a policy solution or, to some, a political agenda, flexicurity has not escaped its challenges. One set of issues is due to its ambiguity. If its core aim is to create complementarity—both between flexibility and security, and flexibility and employability (Bredgaard and Madsen 2018)—it is not clear what the parameters should be. To some, this provides a (problematic) opening to dilute the EPL without an adequate increase in security (Bekker 2018). The second challenge was posed by the crisis which had a hard impact on Denmark, leading observers to declare the end of flexicurity. The crisis also steered the attention of policymakers away from flexicurity and towards first dealing with the immediate crisis fallout, and, later, implementing austerity (Bredgaard and Madsen 2018; Bekker 2018). Finally, as discussed earlier (Chapter 3), there are disputes over the effects flexicurity-inspired interventions have on dualization and on lowering unemployment, particularly in the disadvantaged groups.

Notwithstanding the challenges, flexicurity, if conceived as an LMP innovation, is a reality. It is an (evolving) model borne of a particular set of conditions, created both with and without intent. And although the LMPs have different priorities across the two jurisdictions to which flexicurity is traced, the solution has at its core a strategy of rebalancing employment protection and social security, a restructuring for the “labour market of the future.”⁹ Below, we continue with a closer look at flexicurity and its major conceptions, before furthering an argument on a new analytical orientation towards flexicurity and beyond.

⁹ Per Danish Prime Minister Anders Fogh Rasmussen (2004), as cited in Bredgaard et al. (2005). In this respect, scholars would like to know “how countries and regimes shift over time in their performance on balancing flexibility and security and what causes these shifts, also in view of the impact and consequences of the current economic crisis on inequality and inclusiveness” (Muffels and Wilthagen 2013, 119). Taking an evolutionary view may provide a better insight here.

Earlier it was suggested that rather than a single policy, flexicurity can be viewed as a balance of specific policies aiming to create a virtuous circle of employment flexibility, employability, employment security, and employment growth. The intended consequences are economic growth through facilitated efficiency, increased productivity and competitiveness, as well as improvements in social cohesion. The EC officially defines flexicurity as a four-pronged policy solution with: 1. flexibility in employment contracts; 2. continuous learning and training to improve skills and employability; 3. calculated labour market policies supporting employment transitions; and 4. upgraded social insurance policies to support workers during skills acquisition and employment changes (EC 2007b).

Contractual flexibility gives both the employer and employee greater freedom in functional, numerical, and wage arrangements. Research has shown that, while policies mandating stricter protection reduce employee turnover, they also limit hiring (OECD 2004) as risk-averse employers avoid incurring future costs when needing to reduce or rebalance the company's employee profile. Such rigidities generally led to labour market segmentation and increases in contract employment (EC 2007a), and underpin precarity, a common theme in the new (globally integrated) economy.

Education and skills development are seen as key to maintaining competitiveness in the new economy. This does not only mean good initial education, but also ‘lifelong learning’ in order to meet the rapidly evolving demands of competitive markets. The usual on-the-job training is seen as insufficient or exclusive, i.e. the goal is now to develop human capital continuously and inclusively. Optimal training systems work in concert with the active labour market policies described below.

Active labour market policies (ALMPs) are intended to accelerate, promote and encourage the matching of potential employees and an employer, possibly through incentives, such as subsidies, or job-search support services. They are ‘active’ as they involve an ‘effort’ component on the part of the candidate and a ‘service’ component generally provided by a third party. In other words, ALMPs have built-in motivation and individual responsibility elements requiring the recipient of counselling, employment services and skills development to take action.

A strong social safety net is the cornerstone of flexicurity. In order to provide the unemployed with the transition security needed in highly dynamic employment markets—which often require the time-intensive acquisition of specialised skills, possibly protracted interludes between suitable employment opportunities, and health-care coverage independent of employment—the availability of strong systems of social security is seen as essential.

Country labour market conditions and their position with respect to the four pillars are quite different, resulting in distinct clusters (Chapter 3). This means that countries aiming to implement flexicurity will follow different roadmaps. The EC (2007c) has identified four implementation strategies in their effort to establish the portability, and to reinforce the status of flexicurity as a *model*. The first pathway, as EU labelled it, is for countries with segmented labour markets. Such markets consist of various groups of workers, distinguished by their employment arrangements, contract type, or employment category, whose capacity to move across these categories is limited. The primary goal in this situation is to improve employment mobility. The second pathway is focused on labour markets in which narrow-skilled workers, generally

dependent on a narrow range of job types, are at risk of not being able to find other employment. The need here is to establish or expand systems of ongoing skills development. The third pathway is for countries with specialized economies with relative skills gaps. Implementing flexicurity in these environments requires a combination of training and active labour market policies. The final pathway is available to countries that have gone through restructuring. Such countries require an establishment of lifelong learning systems, encompassing LMPs, and dependable social insurance (EC 2007c). To be sure, many countries do not fit neatly to these categories (Chapter 3), and may opt for a mixed strategy.

Flexicurity has thus far been presented here as a hybrid policy solution built around a constellation of specific classes of policies. These, we have noted, can be seen in action in Denmark, a common point of reference. Yet, there exists another conceptualisation of flexicurity, as evidenced by the European Commission's (2006) "mapping [of] different 'flexicurity' systems/models in Europe," classifying countries based on their employment and security regimes (Chapter 3). If these welfare state clusters are taken to represent "varieties of flexicurity," then the term also takes on another usage—a condition of the labour market. Bredgaard et al. (2008) thus identify flexicurity as three possibly overlapping concepts: a policy strategy, a "state of affairs in the labour market," and a framework for policy analysis. Beginning with a policy strategy, the authors draw on Wilthagen's (1998) description of the Dutch case. In this view, the authors (re)explain, "[t]o qualify for the label flexicurity, the strategy, policy or programme must be synchronic (contain elements of flexibility and security at the same time), be deliberate (the actors must be conscious of this mutuality) and be targeted at weak groups (persons on the margins of or outside the labour market)" (2008, emphasis added). Yet this description is not compatible with the Danish interpretation, which, the authors observe, is concerned with the entire labour market, rather than just its most vulnerable participants. Hence, the authors identify another definition that captures the state of the labour market, where various forms of flexibility and security are continuously adjusted (Ibsen 2011).

Finally, given the multi-dimensionality of both flexibility and security, Bredgaard et al. note that flexicurity can also serve as "an *analytical approach* to empirical analyses of the combination of security and flexibility in various national labour market systems or in specific programmes or policies" (2008, emphasis original). The authors build on Wilthagen and Tros's (2004) framework creating an updated version that captures not only the trade-offs but also the positive and negative configurations or combinations of the varieties of flexibility and security. The new framework thus accounts for internal and external flexibility and security, distinguishing employer (enterprise-level) and external (market-level) (de)regulations and security instruments respectively. Importantly, their framework is capable of communicating two competing, and in the authors' view ideal, flexicurity implementations: external numerical flexibility through state-provided employment, income, and combination security; and internal functional, working time and wage flexibility with the enterprise-provided job and combination security.

To be sure, each of the above interpretations has its merit. Some recognize that changes in the labour markets are paralleled by the rise of new statutory or non-statutory arrangements, creating complexities requiring new tools in their analyses. Other interpretations are rooted in specific implementations, which, because they communicate

partly what flexicurity ought to be, are a source of numerous policy debates. Finally, there is the general policy strategy, advanced not the least due to problem pressures arising in the changing economies.

This research uses flexicurity in three ways. We conduct an assessment of the state of LMP across the EU (Chapter 3) and use flexicurity as an analytical lens to examine the developments in LMP across the EU. And given the EU, along with select countries, make flexicurity an explicit strategy, we further consider flexicurity as a policy model built around the four complementarity-creating dimensions. Importantly, we view flexicurity as a step in the evolution of LMP. Though the evolution of labour markets can be studied from multiple perspectives, we focus on legislation, and more specifically policy measures. Taking an evolutionary view, our assumption is that policies adapt, co-evolving with broader socio-technical conditions. In other words, just as other creative systems embedded in the larger historical environment, policy designs exhibit evolutionary patterns discernable over time. Given that policy is often made under significant constraints and comes with many unintended consequences, the extended evolutionary view can provide a step forward not only in explanation but also in design of policy.

Conclusion

We began this chapter with an exploration of some major politico-economic developments over the recent past. Standing out in this brief flow of history are two contrasting periods. The first was the three post-war decades of full employment and inclusive growth policies, when the prerogatives of the state took the priority in international trade. The second is the neoliberal era in which the main policy concern is the needs of the capital and, with it, smaller government, deregulation, and the protection of creditors. The latest set of crises and, importantly, the responses to them (taking place at both national and supranational levels) were the most salient outcomes and expressions of this policy paradigm.

Though analytically important, these developments are only part of the picture, as we recognize that the neoliberal age is also a post-industrial one. We thus become alert to the significant demographic, technological, and socioeconomic shifts, all with implications to labour markets, and ultimately to public policy. As revenue from the workforce engaged in lower-paying service occupations shrinks relative to that of the industrial past, budgeting processes and the legacy institutional designs come under strain. As new participants enter the workforce asserting the desire for independence or out of sheer necessity, and often take on irregular, flexible, and low paying work, subject to different rules and protections than their insider counterparts, they encounter market dualization. Finally, as the new participants face career instability, limits borne of their traditional roles and responsibilities, and material insecurity, they experience new types of social risks. As a result, governments, now working under the condition of “permanent austerity” (Pierson 1998), have been undertaking modernization of their welfare states, reforming their social policies to address at once the challenges of costs and employability and risk coverage.

Whereas the defining word in policy studies of the prior eras was stability, scholars are now concerned with *change*. And change, as we discussed, can be major or

less salient, unfolding at different speeds, and occur both with and without active interventions (Hacker 2005). Arguably, attempting to address the more diverse set of needs in an environment where stability and employment-based security gives way to flexibility, activation, and multi-tiered safety-net solutions, social policies become progressively interrelated and complex (Häusermann 2012). The same can be said of the drivers of change, given policy outputs are not only determined by the increasingly diverse set of motivations and interests or problem pressures, but may be shaped by globalization, international organizations, the processes of Europeanization, or their combination. There are thus many outstanding questions about policy change, its drivers, and direction—particularly in the larger, historical context. How can we explain welfare state reforms and make sense of the developments in labour market policy? And how can we assess change and its direction across states, increasingly interdependent, economically and politically? Can we? We begin to seek answers in the next module.

Chapter 3. The State of Labour Market Policy: A Cross-European Appraisal

Previous chapters have discussed the modernization of social policy, consisting of reforms introduced over the recent decades to make the welfare state more responsive to risks emerging from change driven by demographics, technology, and the deepening economic integration. Indeed, as comparative scholars have repeatedly demonstrated, welfare systems have been anything but “frozen” as they have experienced broad-ranging reforms (Häusermann 2010; Clegg 2007). Consider, for example, the pension and unemployment reforms in the continental countries. Social and economic change has put under pressure the continental welfare model centering on family supported by a sole source of employment and retirement. As discussed earlier, countries such as France, Germany, or Switzerland have been updating their systems of old-age protection by improving their sustainability through cut-backs, strengthening minimum benefits, and providing for independence and equality. When taken together, the reforms in these countries have amounted to, what some consider, a paradigmatic change in the pension systems (Häusermann 2010).

Also, since the 1980s, the unemployment policy in continental regimes has seen a series of incremental changes adding up to rather significant shifts (Clegg 2007). Belgium, France, Germany, and the Netherlands are among the countries having, on the whole, improved protections for the labour market insiders and, at the same time, introduced new activation schemes for outsiders whilst lowering their benefits (Clegg 2007). More specifically, as Clegg argued, such reforms took a similar, “distinctively Bismarckian trajectory,” with their focus on qualified cost containment, recalibration favouring insiders, selective activation, and light administrative restructuring. The changes thus maintained “the integrity of insurance-based, contribution financed and managerially autonomous unemployment protection arrangements” of these systems (Clegg 2007, 611), suggesting that path-dependencies have a defining role in the nature of change.

Last, but not least, countries have been relaxing their systems of employment protections. While some countries have reformed their labour law over the last few decades, this area has seen much activity following the global financial crisis as countries have eased “or diluted their regulations on individual or collective dismissals, sometimes coupled with reforms of working time schemes and atypical employment law, while decentralising collective bargaining systems, reforming unemployment insurance and restructuring public services” (Schömann 2014, 51). Moreover, as Schömann argued, there has been a significant variance in the extent of the reforms across countries, where the “reforms affecting Greece, Spain and – distinctively – the United Kingdom and Estonia are on an altogether different scale from the ones introduced in France, Belgium, Italy and the Netherlands” (2014, 51). And the shrinking of the public services as part of the austerity programs has further challenged the protective capacity of the labour legislation (Schömann 2014). This is, as we will show, why studying labour market change demands a more comprehensive analysis, one encompassing related dimensions of social and employment policy found in flexicurity.

The goal of this module is to examine LMP developments as understood through the analytical device of flexicurity and determine and describe any regularities across the EU, before and after the global financial crisis. In what follows, we thus build on existing

work and conduct a set of complementary analyses and their assessment. *What is the state of LMP development across the EU? How far can such analyses take us?* Given our overarching interest to examine any patterns in LMP development, we begin with quantitative analyses of the state of labour market policies. Guided by these results, we thus take a closer look at select developments qualitatively. Finally, we assess the limits to our conclusions and the value of such analyses in general.

Existing Analyses

A number of works have analyzed the recent developments in labour market policy in the EU context, some aiming to study any patterns of change in the period following the financial crisis (Theodoropoulou 2018a, 2018b), some with an explicit focus on flexicurity (Hastings and Heyes 2018), while others looking further and exploring the drivers of labour market reforms (Turrini et al. 2015). These are briefly discussed in turn as we set the stage for our approach.

The post-crisis environment, dominated by pressures to reduce public spending and to reinvigorate the slowing economy and the ailing job markets, is making more pronounced the trade-offs faced by policy makers as they try to bring different labour market participants into employment and provide for their support in unemployment, and do so in a regime of fiscal discipline (Theodoropoulou 2018b). This is further restrictive for the members of the Eurozone and particularly the programme countries dependent on the EU for loans. Motivated to learn more about policy change in light of these developments, Theodoropoulou (2018a, 2018b) sets out to examine relative policy movements in LMP across select EU countries. That is, has there been convergence or divergence in unemployment benefits, EPL, and activation policies, and are there any discernible patterns in these developments? Overall, the author finds a disjoint set of changes in LMP across the EU, observing all the patterns, retrenchment, welfare readjustment, and welfare protectionism (per Häusermann 2012). The author observes that the welfare readjustment and flexicurity programs are the most common, although these “resulted in more flexibility and activation and less security/protection overall.” Theodoropoulou further notes that the “trend towards activation has been strengthened, although the cuts in public spending per person wanting to work in that domain have meant that activation has been pursued more by means of incentive reinforcement than by means of more expensive enabling programmes aimed at activation;” this means that while the balance of coverage between the insiders and outsiders has changed, it was more by reducing the protections of the outsiders (2018a, 6).

In a related work, also aiming to learn more about the social policy ramifications of the post-crisis austerity agendas, Hastings and Heyes (2018) examine the developments in flexicurity across the EU nations. The authors first evaluate quantitatively the policy outcomes across various flexicurity dimensions considering the scores on flexibility, social security, ALMP, and lifelong learning participation rates and, based on these, are able to identify relative positions of individual states. The authors also conduct a qualitative analysis of the post-crisis policies across the EU countries with a goal to account for the findings from the quantitative step. Hastings and Heyes (2018) not only conclude that “countries can be clustered on the basis of shared social policy characteristics, but ... also show that there are shared social policy tendencies across

clusters and that these do not favour flexicurity” (459). Notably, the authors find variations between and within clusters of countries representing different regime types. This includes, for instance, reductions of unemployment and other social benefits, as well as “in severance pay, longer probation periods and increases in the freedom of employers to set dismissal criteria” (474). And while these do not entail policy convergence in “terms of their detailed content or results,” a similarity can be found between the “functions and goals” (Hastings and Heyes 2018, 474).

Taking a more general view of the labour market reforms for the period from 2000 to 2011, Turrini et al. (2015) set out to explore their main attributes and the drivers. Turrini et al. focus on the reform activity over time and across domains, considering the ALMP, EPL, early withdrawal, labour taxation, unemployment and related benefits, wage setting, and working time, and find similar reform patterns in institutionally similar countries. The authors confirm the crisis triggered an increased reform activity, in line with theoretical expectations. When classified into phases, the first phase of reforms was focused on labour demand and the adaptation of social security, whereas the focus throughout the second phase was more on labour market adjustments, including the EPL and wage setting. In terms of the drivers, Turrini et al. find that a “higher unemployment rate and the presence of a large negative output gap are associated with a higher frequency of reforms, although results depend on the specific policy domain, the relation being strong especially for active labour market policies, EPL, early retirement and retirement age reforms, and wage setting reforms” (2015, 2). As well, the reforms depend on initial conditions, such as the initial tax rates and the country’s fiscal situation, and on the timing, where the likelihood of reforms is lower in election years. Finally, there is some indication that financial markets put pressure on reforms, including those on employment and wage setting (Turrini et al. 2015).

In sum, scholars conducting analyses of recent LMP developments choose to focus on the number and the direction of policy reforms or study the changes in the balance between security, flexibility, and employment services. Importantly, many authors recognize that employment policy landscape is multidimensional, where interventions at times attempt to create *complementarities*, including between numerical flexibility, transitional security, and training. Scholars thus make the case for going beyond quantitative studies (Bertozzi and Bonoli 2009) and supplementing such analyses with qualitative assessments (as in Theodoropoulou 2018a; Hastings and Heyes 2018).

Flexicurity Regimes

As hinted, we leverage flexicurity as an analytical lens in order to examine the key complementarities in national regimes of employment. While flexicurity has seen varied application (some considering the basic state of social security and numerical flexibility, others adding further dimensions, including the ALMP elements), we understand flexicurity through its widely recognized four pillars (EC 2007b): contractual flexibility, strong social safety net, ALMP, and a system of ongoing learning and skills development, as discussed previously. While past studies have found a significant variation in how these pillars are implemented, there are nevertheless commonalities partly reflective of the employment and welfare regimes that have emerged over time across states (Chapter 5). Analyses have identified five (EC 2006), and later six (EC 2007a), general *flexicurity*

clusters, or regimes. These stylized types are presented in Table 3.1 and briefly discussed below on account of their relevance to the ensuing analyses (based on ICF 2012; EC 2006; EC 2007a; Wilthagen et al. 2014).

Flexicurity Cluster	Countries
Continental	Austria, Germany, France, Luxembourg, Belgium
Nordic	Denmark, Sweden, Finland, Netherlands
Eastern European	Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Romania, Bulgaria
Southern	Spain, Portugal, Italy, Greece
Anglo-Saxon	UK, Ireland

Table 3.1 EU countries classified into flexicurity clusters (Source: EC 2006; ICF 2012)

Countries of the Continental cluster, including Germany, France, and, in some analyses, Italy (EC 2007a), have in common intermediate levels of EPL, above average security and commensurate levels of taxation. While these states have been reforming their systems of social protection, the insiders remain at an advantage in terms of both social and employment protections. This is partly due to their systems of industrial relations where unions continue play an important role in protecting their members.

Members of the Nordic flexicurity cluster, including Denmark, Sweden as well as the Netherlands, are known for their high levels of security, relatively high flexibility, higher tax burdens and the highest welfare expenditures in the EU. Social benefits have been largely decoupled from employment in these systems providing generous, universal welfare coverage. The higher levels of numerical flexibility are offset by both social safety nets and advanced ALMP. There are low levels of unemployment and higher replacement rates.

Countries of the Southern cluster, including Spain, Portugal, and Greece, have traditionally had strict EPL along with moderate levels of social protection. Post-industrial conditions have not been favourable to regular employment, with employers opting for temporary or part-time over open-ended agreements, particularly following the recent economic crises. These developments along with weaker social policies, such as low unemployment benefits, carry a disproportionate impact on some demographic groups. As well, Southern countries have had low lifelong learning (LLL) participation rates, further weakening individual employability.

Centering on the Visegrad countries, the Eastern European cluster is characterized by intermediate EPL (with higher EPL in the Baltic republics) and intermediate levels of taxation. Social security levels are low and so are is on ALMP, participation in LLL, and flexibility at work.

Finally, the Anglo-Saxon cluster, represented by the UK and Ireland, has the most deregulated labour markers with the lowest EPL. Their citizens have relatively low tax rates but also low levels of social protection; the levels of disparity in wages and social outcomes are higher. The rates of unemployment are lower, but high numbers of workers are engaged in irregular employment including temporary or part-time work. Participation in LLL is relatively high, often coupled to ALMP designed to bring people to work.

Part I: Data and Methods

The number and variety of employment-related policies across countries means choices must be made not only on how to operationalize each of the flexicurity pillars but also on how to best make sense of the many different instruments and their outcomes. Ultimately, the aim is to conduct an analysis within the limits of what is available and methodologically reasonable. The development and the application of composite indicators (Manca et al. 2010) and variable reduction methods (Hastings and Heyes 2018) have been advanced as a way to achieve this goal.

We thus partly draw on Hastings and Heyes (2018) and Manca et al. (2010) in our operationalization of variables and selection of methods. In terms of measurement, the first pillar, the flexibility of employment, is enumerated by the OECD's EPL indexes. More specifically we utilize its EPRC and EPT indicators, capturing the regulation of individual and collective dismissals for regular contracts and of temporary contracts respectively. The social security pillar is enumerated by OECD's summary measure of benefit entitlements, the Net Replacements Rates (NRR) (including social assistance and housing benefits), and by Eurostat's out-of-work and early retirement supports (categories 8 and 9 of their LMP intervention statistics). In turn, Eurostat's categories 1, and 2 to 7, capturing services, and job creation and maintenance respectively, and a proportion of the unemployed participating in AMLP, are used to enumerate the ALMP pillar of flexicurity. Finally, Eurostat's education and training participation by those employed and the unemployed are used to enumerate the learning and skills development.

The variable names along with supplementary information are presented in Table 3.2. The dataset is limited to the EU countries (plus Norway) included in the OECD's EPL index. We thus compare the conditions across 19 to 22 countries at three points in time: 2006 (preceding the crisis), 2009 (after the economic crisis), and 2013 (following the debt crisis and the most recent year for which the EPL index exists). It must be noted there is a lack of data for some countries in select years (the UK for 2011 and beyond in the Eurostat set, and EE, SI, LU for 2006 in the OECD set). Also, selected data supporting each pillar may be subsumed under more than one pillar. Eurostat's LMP categories 2-7, for example, contain measures which could be viewed as aspects of social security; likewise, early retirement supports could be viewed as an element of LMP.

Variable	Description	Source	Flexicurity Aspect
EPRC	EPL composite indicator (V2) of regulations for individual dismissals (weight of 5/7) and additional provisions for collective dismissals (2/7) (incorporates 12 detailed data items).	OECD	Flexibility
EPT	EPL composite indicator (V1) for temporary employment measures the EPL strictness on the use of fixed-term and temporary work agency contracts (incorporates 6 data items).	OECD	Flexibility
SERV	NRR summary measure of benefit entitlements.	OECD	Social security
LMPCAT89	Out-of-work income maintenance and early retirement supports (%GDP).	Eurostat	Social security
LMPCAT27	Activation support measures, job creation and	Eurostat	ALMP

	maintenance (%GDP).		
LMPCAT1	Activation support, public employment and other services (%GDP).	Eurostat	ALMP
PALM	Participation in ALMP (ratio of participants in LMP measures and those wanting to work).	Eurostat	ALMP
PCIPE	Participation of the employed adult population (25-64) in education and training (last 4 weeks).	Eurostat/ Labour Force Survey	LLL
PCIPU	Participation of the unemployed adult population (25-64) in education and training (last 4 weeks).	Eurostat/ Labour Force Survey	LLL

Table 3.2 Variables representing the four pillars of flexicurity: flexibility, security, ALMP, and LLL

Following others (Hastings and Heyes 2018; Manca et al. 2012; EC 2007a), we begin with a principal component analysis (PCA), a method allowing us to decrease the number of variables into a manageable set of uncorrelated components while retaining most of the explanatory capacity. We can thus better understand and visualize how countries fare with respect to different aspects of flexicurity, each other, and across time. Can we discern groupings of countries based on common LMP features? Are there any movements within and across these groups? Any patterns? The analysis may help reveal the nature of change, including any convergence trends towards a particular policy path.

All inputs were standardized prior to running the PCA (Stata 14) to avoid skewing the results. An initial analysis revealed that PCA is justified in this context. We perform a (scree) test to determine the number of components, if any, to keep. We find clear inflection points in line plots charting the number of principal components against the indicators of the degree of data variance (eigenvalues), leading us to retain three components for each period of interest. Moreover, all components (with the exception of component 3 for 2009) have eigenvalues greater than one. That is, they explain more variance than an average variable, satisfying the Kaiser rule. These components explain 71 to 80% of variance across the examined time periods.

Variable	Component 1	Component 2	Component 3
EPRC			.4664
EPT			.6505
SERV	.3831		
LMPCAT89	.5622		
LMPCAT27	.4785		
LMPCAT1	.3248		-.4149
PALM	.4377		.3754
PCIPE		.6382	
PCIPU		.6499	

Table 3.3 Component loadings for 2009 (values > 0.3) shown after rotation (Source: author’s calculations)

Table 3.3 displays the component loadings (for 2009) after rotation (correlations .3 and less are not shown). Assuming orthogonality of components, we select Varimax as

the rotation method which maximizes the correlation between the data and each principal component. This adjustment helps us to simplify the loading pattern and thus the interpretability of the relationships between the data. As apparent from the loadings, component 1 encapsulates social and employment security interventions including assistance (early retirement) and ALMP participation, component 2 captures lifelong learning, whereas component 3 encapsulates the strictness of employment regulations.

Figure 3.1 shows country scores for two of the components, where we can discern at least 4 distinct clusters, with GB and DK as outliers. To obtain a further insight about the commonalities and differences among state's flexicurity arrangements, we also conduct a hierarchical cluster analysis. We select Ward's linkage cluster method (in Stata) due to its efficiency and as we expect tighter, round groups. As input, we use the standardized data listed in Table 3.2 (excluding PALM). The clusters and their changes over time are presented in Tables 3.4a, b, and c for 2006, 2009, and 2013 respectively.

As our goal is to augment the existing analyses (such as Hastings and Heyes 2018) while taking another look at the developments across dimensions over time, we did not select the same variables and opted to operationalize them differently,¹⁰ in addition to making some different technical choices (e.g. in the rotation method). The results of the analysis are discussed next.

Analysis

In line with other studies (Agostini and Natali 2018; Hastings and Heyes 2018), our results point to some broad thrusts emerging in this highly dynamic LMP environment. In general, we observe a relative strengthening of security supports in the period following the economic crisis (in 2009). In parallel, we observe a tightening or merging of select country clusters, suggesting a level of convergence in policy responses based on the countries' welfare and employment regimes. More recently, however, there is a relative weakening in both employment protection and security elements across the majority of countries. With regards to any patterns of change, notable is the persistent diversity of labour market arrangements across states, suggesting a variance in legislative outcomes. At the same time, there is evidence of a possible departure from the customary policymaking regimes in some countries. Confirming Beramendi et al.'s (2015) observation, the data reveal an opening gap between the northern and southern countries (the latter being subsumed into the Eastern/Central European group), which may become the defining characteristic of the LMP landscape for the near term.

¹⁰ Rather than adjusted spend per person ready to work, we follow the most common approach, spend across the Eurostat's LMP categories as a percentage of GDP (as in Philips and Eamets 2007). Also, we find employees with a temporary contract data (the first year of which is 2007) not well correlated with other data and chose not to include them. Childcare indicator is also not used. Rather, we add participation in ALMP, and use both LMP categories 8 and 9.

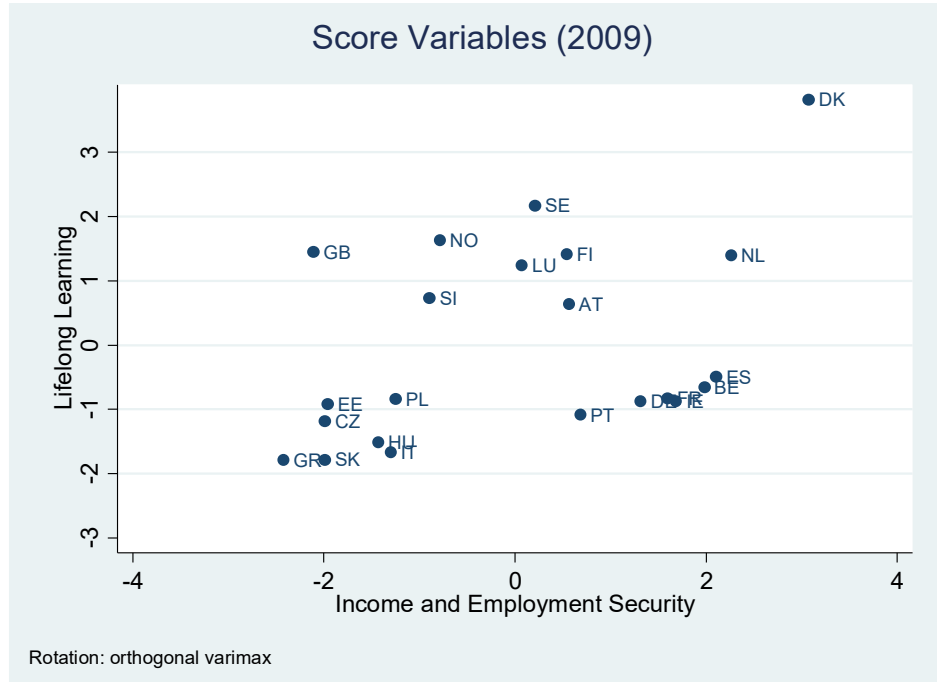


Figure 3.1 Income and employment security (comp.1) versus LLL (comp. 2) in 2009

Figures A3.1, A3.2, and A3.3 (in the Appendix to this module) contain bivariate scatter plots of the component scores (all shown after rotation). In A3.1 (2006), notable is the first scatter plot showing income and employment security versus LLL. As expected, outliers here are Denmark with its high levels of social protection and LLL, and the UK with low social protections but higher participation in education and training. Identifiable here are also groupings of Nordic, Continental, and Southern plus Central European countries. The next chart (going clockwise) plots income and employment security versus flexibility. The countries appear spread evenly across four quadrants, where the UK and Greece are outliers with their low and high employment protections respectively. When compared to 2009, notable is the UK with its post-crisis reductions in LLL. Finally, notable is the expansion of protections following the crisis. Turning to the most recent period, 2013, we note that according to the PCA in 2013, component 1 encapsulates social and employment supports, while component 2 and 3 express the levels of employment protection. Here, emerging are two main groupings of countries with higher levels of security on the right side, and lower levels on the left side (again with the UK and Denmark occupying the extremes). We also note a decreasing variance in the levels of flexibility.

Hierarchical cluster analysis (HCA), the outputs of which are shown in Tables 3.3a, b, and c, at first (for 2006) yields countries more or less grouped into flexicurity clusters familiar from above. We thus identify the Nordic cluster containing Denmark, Finland, Sweden, Norway, yet also including Austria and Ireland. There are two predominantly Continental clusters with Germany and Netherlands on the one hand, and Belgium, France, Spain, and Portugal, on other. Finally, there is the Southern cluster with Greece and Italy, and also the Eastern/Central European cluster with the four Visegrad

countries. Over time, as hinted, we observe a potential merging of the Southern and the Eastern/Central European clusters and a splintering of the Nordic cluster into more distinct groupings. Notable is the UK with enough variation to sustain its own group, rather than to maintain its association with Ireland. Also, Denmark is part of a cluster whose size is gradually shrinking possibly suggesting a greater relative stability of the Danish system over the recent period (viz. flexicurity scores in Figure 3.2).

cluster	country	cluster	country	cluster	country
1	FI	1	IE	1	CZ
1	DK	1	SE	1	DE
1	IE	1	AT	1	NL
1	SE	1	FI	1	AT
1	NO			1	SI
1	AT	2	DE		
		2	DK	2	PT
2	DE	2	NL	2	ES
2	NL			2	FR
		3	GB	2	BE
3	GB				
		4	PT	3	LU
4	ES	4	ES	3	NO
4	FR	4	BE		
4	BE	4	FR	4	EE
4	PT			4	HU
		5	LU	4	SK
5	SK	5	NO	4	PL
5	PL			4	GR
5	HU	6	SK	4	IT
5	CZ	6	IT		
		6	SI	5	DK
6	IT	6	EE	5	SE
6	GR	6	GR		
		6	HU	6	FI
.	EE	6	PL	6	IE
.	SI	6	CZ		
.	LU			.	GB

Tables 3.4a, b, c Country clusters in 2006, 2009, and 2013 respectively, based on a hierarchical cluster analysis (Source: author’s calculations)

Part II: Data and Methods

Composite indicators and indexes provide an abstraction commonly accepted as a way to facilitate comparison or as an input for further analysis. Having conducted a PCA, we have available scores for the three components that can thus be integrated further into an index. We use a weighted sum of predicted scores for each component to obtain our version of a *flexicurity index*. A brief test of the index involving its correlations with LMP outcomes was successful (it correlates well, for example, with average transition rates, as shown in Figure A3.4). Such an index can thus be employed to enumerate the general state of LMP *systems* across countries at three selected points in time (Figure 3.2). First, we may observe fluctuations in scores over time, pronounced in some countries. These include Spain, France, the UK (although its 2013 score is not available), Greece, and Sweden. On the other hand, there are countries whose score remains

relatively stable: Austria, Germany, Poland, Denmark, Netherlands, and Norway, among others. Aiming to represent countries in both categories and across flexicurity clusters, we thus select Austria, Denmark, France, Germany, Ireland, Italy, Portugal, Poland, Spain, Sweden, UK for further analysis. Our goal is to examine the intervention activity as related to the four flexicurity pillars.

We will leverage LABREF (EC 2014), DG ECFIN’s database containing longitudinal data on unemployment and other welfare-related benefits, working time, job protection legislation, active labour market policies, retirement, and wage bargaining, among other policy information. LABREF has data on all EU member states and their annual welfare policy interventions, currently from 2000 to 2017 (from 2003 for Bulgaria and Romania, and from 2012 for Croatia). While LABREF contains descriptive information, we are interested in numbers and direction (strengthening, weakening, or no change) of flexicurity-related interventions. In particular, we extract four policy domains: active labour market policy measures constituting changes to the ALMP pillar; further ALMP fields, including training measures and special schemes such as apprenticeships, shaping the LLL pillar; job protection (EPL) and working time measures relating to the flexibility pillar; and unemployment and other welfare-related benefits measures as evidence of strengthening or weakening of the social security pillar of flexicurity. Aligning with the analysis above, we are interested in pre and post-crisis activity and thus examine 2000-2007 and 2008-2013 data sets.

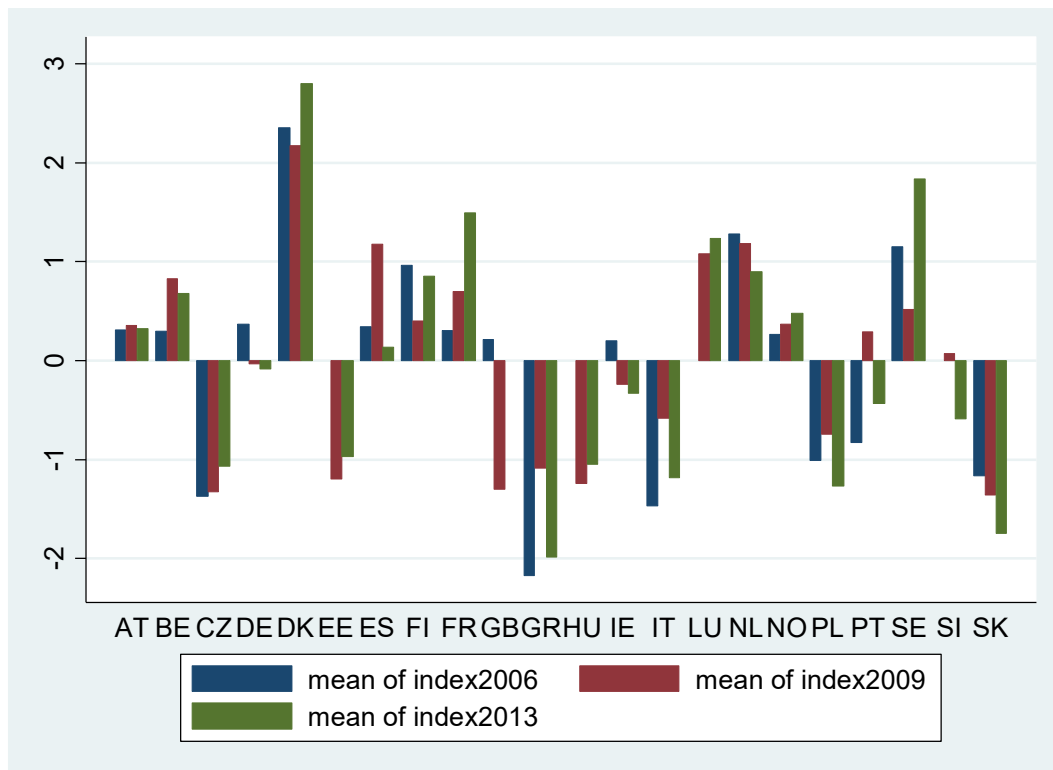


Figure 3.2 Flexicurity scores per index in select European countries in 2006, 2009, and 2013 (Source: author’s calculations)

Analysis

The types and numbers of policy measures across countries for 2000-2007 and 2008-2013 are presented in Tables 3.5 and 3.6 respectively. As we examine the data for the two time periods, we can make a number of general observations. First, the numbers suggest a recalibration of flexibility and security accompanied by an expansion of ALMP and LLL (as in Austria, France, and Germany), in line with broad flexicurity strategies. The second, a more select trend, is the retrenchment in LMP and security, particularly evident in the UK and Ireland following the crisis. Third, outstanding across the board is the ALMP and LLL activity, with countries implementing comparatively a large number of policies designed to support activation, improve employability (in many cases focused on youth), and facilitate transitions between jobs, among other goals. This activity is significant in periods both before and after the crisis. Finally, there are countries outstanding in their relatively large number of interventions across all categories, including Italy, Spain, and Portugal. These countries have had comparatively a strict EPL (often segmented labour markets) and low participation in LLL. The deregulation thus brings these countries closer to the Eastern/Central European countries and leads to the possible merging of these clusters (viz the above HCA). It must be noted that as countries responded to the crisis, they implemented a number of temporary measures, reflected also in the fluctuations of the flexicurity index. While LABREF has a temporary/permanent indicator, it is absent for many of data items, limiting our insight.

Complementing the above analysis, this exercise reveals the relative policy activity across the key domains of employment policy. Drawing on the categorization of change from earlier (Chapter 2) and considering the prevalent policy activity in each country, we have summarized reforms as primarily flexicurity, recalibration, ALMP expansion, and retrenchment (Change Summary column). The nature of change appears multi-dimensional, most commonly defined by flexicurity strategies. Often overshadowed by the more visible security and EPL legislation, the recent employability measures (as part of the ALMP domain) deserve a closer examination. Among the questions here are on the extent to which these policies are parts of integrated strategies, and on their fit with the existing skills development systems. Importantly, as many interventions were of temporary nature (and may skew the assessments of the depth of change), it is not clear whether the overall outcomes point to regime homogenization, or to some significant rearrangements of clusters. A more detailed analysis over longer time frames may provide further answers.

Country	Flexibility Str/Wkn		Security		ALMP		LLL		Change Summary
Austria	8	4	10	3	9		11	1	Flexicurity
Denmark	4	3	1	2	6		4	1	Recalibration
France	6	10	7	5	16	1	4		Recalibration, Flexicurity
Germany	4	15	3	7	20		9		Recalibration
Ireland	10	1	6	2	7		5		Recalibration
Italy	13+1nc	4	11	1	11		6		Flexicurity
Poland	9	5	3	4	22		6		ALMP exp.
Portugal	1	2	8	10	3	1	5		Retrenchment
Spain	9	7	20	1	23		8		Flexicurity

Sweden	7+1nc	3	7	7	21		4	1	ALMP exp.
UK	7	3	10		10		5+1nc		Flexicurity
Totals	80	57	86	42	148	2	68	3	

Table 3.5 Measures across flexicurity pillars taken by select EU countries 2000-2007 (nc = no change) (Source: author's calculations based on LABREF)

Country	Flexibility Str/Wkn		Security		ALMP		LLL		Change Summary
Austria	9+1nc	5	10	1	14		11		ALMP exp.
Denmark	4	1	8	6	17		4		ALMP exp.
France	8	13	15	3	17		6		Flexicurity
Germany	3	3	13	1	5	3	8		Recalibration
Ireland	3	2	3	15	12		11	1	Retrenchment, ALMP exp.
Italy	21+1nc	22	18+1nc	2	14	2	8		Recalibration, Flexicurity
Poland	4	5	9	3	15		9	1	Recalibration
Portugal	7	19	9+1nc	10	33		17		Recalibration, Flexicurity
Spain	10+1nc	30	17	5	13		11		Flexicurity
Sweden	2	3	9	1	13	1	7		ALMP exp.
UK	9	10	3	15	25+1nc	1	12		Retrenchment, ALMP exp.
Totals	82	113	116	62	179	7	104	2	

Table 3.6 Measures across flexicurity pillars taken by select EU countries 2008-2013 (nc = no change) (Source: author's calculations based on LABREF)

Part III: Qualitative Developments

Let us return briefly the discussion from the previous chapter and recall that social policy modernizations efforts are taking place against the backdrop of major structural shifts including demographic and technological change. And plans to cope with these transformations, which are now of concern to virtually all advanced industrialized countries (rather than to a few as it was several decades ago), have been echoed in the EU's Lisbon Strategy and, more recently, Europe 2020. The EC has recognized the challenges stemming from demographic change, global competition for business located across the value chains, rising unemployment, and issues with inequality and social cohesion, all more or less pronounced throughout the EU, and called for combined strategies to enhance business agility, stimulate innovation, enhance employability, expand the workforce, and ensure social security in face of the new risks (Chapter 2).

Addressing these issues demands combined strategies (which, due to politics, have no fixed labels), one of which, as hinted, involves a rebalancing of flexibility and security combined with enhancing employability. To Wiltshagen and Tros, this is flexicurity, defined as "(1) a degree of job, employment, income and combination security that facilitates the labour market careers and biographies of workers with a relatively weak position and allows for enduring and high quality labour market participation and social inclusion, while at the same time providing (2) a degree of

numerical (both internal and external), functional and wage flexibility that allows for labour markets' (and individual company's) timely and adequate adjustment to changing conditions in order to maintain and enhance competitiveness and productivity" (Wilthagen and Tros 2004, 170). How do countries fare in terms of LMP modernization? Is flexicurity a (conscious) strategy? These are among questions that naturally follow.

The above analyses reveal an evolving LMP environment, where change is expressed differently not only across polities but also across the various aspects of LMP. While no shared pattern of LMP development is identifiable across the EU (though there is a general trend towards recalibration and a strengthening of activation instruments), more explicit regularities can be found within country clusters. This is perhaps no surprise, as will be discussed, as some (Northern European) countries have undergone deindustrialization and, with it, social policy modernization before others (Chapter 4). Moreover, the social partners' role and capacity in influencing the development of LMP varies across polities, leading also to very different outcomes. On the other hand, there exist a set of shared challenges, such as the increasing share of temporary employment contracts and demographic change, which can be addressed by common flexicurity strategies (Wilthagen et al. 2014). And countries have been reaching to such strategies, whether as part of reform packages involving simultaneous rebalancing of security and flexibility (as in Austria, Denmark, or France) or by incremental implementation without targeting complementarities (Spain, Italy) (ICF 2012).

As hinted, to provide a fuller understanding of change, recent LMP studies generally combine quantitative analyses examining the bigger picture with qualitative assessment of change at a more granular level. Hence, we can find analyses of developments across clusters (Agostini and Natali 2018; Hastings and Heyes 2018) or in select countries (Theodoropoulou 2018a). An alternative perspective, to be taken here, is to focus on policy, visiting change with respect to different pillars of flexicurity. We discuss these below, acknowledging an instrument can often support more than one pillar of flexicurity.

Flexibility and Security. As Wilthagen and Tros (2014) hint in their definition of flexicurity, there exists a range of different flexibility and security types, implying both market making and market constraining functions. The past size and importance of industrial sector, paralleled by high levels of union membership, meant that the majority of labour market participants, the insiders, were able to obtain high levels of employment protection, whether at the national level or otherwise. Post-industrial business and employment is rapidly changing however. On the one hand, to obtain an advantage or to remain competitive, businesses demand the lowering of various barriers, including EPL. On the other, both the growth of the service economy and the increasing popularity to use various temporary work arrangements outside of the service sectors, means there is an increasing number of labour market participants working under flexible and atypical conditions (Voss and Dornelas 2011; Eurofound 2007) and outside of the traditional protection and security schemes. There are two general solutions which have proven effective, at least in their particular economic context. In case of Denmark, it is a wholesale flexibilization implemented "through new ways of organising work or through more diverse or flexible working time arrangements" (Eurofound 2007). Doing this, however, requires the provision of adequate transitional security. The second approach,

the Dutch model, is to ensure that employees in atypical employment have a level of social protection and also have rights to pension and social security. The goal is to attempt to equalize the treatment of the outsiders and the insiders (Eurofound 2007).

The treatment of insiders and outsiders varies across countries, many of which are continually updating their systems, not necessarily in constant direction. For example, between 2003 and 2007, countries had reduced (Sweden, Luxembourg, Austria), maintained (the UK, Denmark), or strengthened (Finland, Netherlands, France, Spain, Germany, Ireland, Belgium, Italy, Greece and Portugal) the unemployment benefits of atypical workers (Voss and Dornelas 2011), whether at the expense of insiders or otherwise. There is also much legislative activity regulating various forms of atypical employment. A selection of such initiatives is shown in the panel below.

- Telework: Hungary and Poland
- Working time arrangements: Greece, Hungary and Slovakia
- Fixed-term work: Malta
- Part-time work: Lithuania, Malta, the Netherlands and Poland
- Working time accounts where extra time worked and holiday time could be stored and subsequently ‘taken out’ in the form of free time or compensated for financially: Luxembourg
- Home working: Slovakia

Adapted from Philips and Eamets (2007, 12)

There are many other interventions under this pillar, some more customary, others innovative. Consider short time working schemes that have become the most common LMP response throughout the recent crises. These solutions allow flexibility in the number of hours worked while subsidizing or, in some cases, mandating training.¹¹ Increasing flexibility creates a number of possibly unanticipated issues requiring innovative solutions. For example, as severance pay has been determined by employment length, shorter careers mean low or no severance pay. This can be solved by personalized accounts portable across employers who contribute to these, as was done in Austria starting in 2003 (EC 2007b).

Active Labour Market Policies. Facing high rates of unemployment and fiscal challenges, governments have been seeking ways to shorten citizens’ time in unemployment. Increasingly common have thus become interventions belonging to the ALMP pillar, to some a defining feature of flexicurity solutions (Philips and Eamets 2007). ALMPs generally include public employment services (PES), matching employers with potential employees, who are also provided job counselling and interview support; employability-enhancing programs, including apprenticeships; and various employment integration, and job creation and retention schemes. More recently, ALMP has been used in combination with passive measures to help vulnerable participants, including youth (Philips and Eamets 2007). For example, in Netherlands, young people (18-27 years of age)

¹¹ While this instrument is common, there are outliers. Wilthagen et al. speak to such conditions in 2009: “1.4 million persons in Germany were in short-time work. In Germany and Italy between 2.5 and 5% of the workforce participated in short-time work arrangements in the high recession period. In the UK no formal schemes exist, but a reduction of working hours is accepted at the company level by workers on a voluntary basis (e.g. by taking up leave or holidays)” (2014, 9).

approaching their municipalities for social assistance are guaranteed some form of work or training. Implemented nationally starting 2009, this solution has been found effective by large cities for several years prior to the nationwide rollout (Philips and Eamets 2007).

The above analysis revealed that ALMP interventions dominate the recent reform activity in most countries. Efficiency improvements and special coverage stand out as key trends in these activities, as outlined in the following panel:

- More individualised services: Germany, Belgium, Italy, France
- Merging of institutions in the field of job search and PES: Estonia, Finland, Germany
- Development of integrated services: e.g. Malta
- Introduction of e-services, decentralisation: Denmark, Belgium, Italy
- Monitoring of measures, instruments and programmes strengthened: many countries
- In the field of PES, outsourcing of certain services and the introduction of competitiveness: e.g. in Belgium, Italy or Poland.
- Special support measures targeting certain categories of groups that are regarded as particularly disadvantaged or less-favoured: Hungary, Denmark
- Implementing support measures for groups previously not or partly covered: e.g. fixed-term and temporary workers in Belgium or self-employed in Austria

Adapted from Voss and Dornelas (2011, 36)

Lifelong Learning. While LLL has often been subsumed into the ALMP category, it has become a separate, and in our view an increasingly salient, pillar of flexicurity. It is no surprise as education has been seen not only as key to employability (and thus successful employment transitions) in the post-industrial era but also as an important factor of national competitiveness. What is more, LLL strategies, the character of which is determined by the corresponding systems of industrial relations, are often supported by the social partners and have become an important part of collective agreements (Philips and Eamets 2007). As a result, there are large disparities in the extent and participation in LLL across states. Figure 3.1 offers a way to visualize these differences in context of flexicurity. Apparent are four groupings of countries, with the Nordic countries standing out in their high levels of flexibility/security and LLL. On the opposite end are East/Central European countries joined by Greece and Italy. Complementing the picture is Figure A3.5 showing the participation of unemployed adults (25-64) in a training or education program (over the past 4 weeks). Visible are the extremes with LLL used highly in some countries, and quite low in others. In the latter group there are further challenges with bringing into training those who need it the most, low-skilled or older labour market participants (EC 2007b).

As in the other pillars, there is a considerable variance in solutions recently implemented across the EU. While countries are only beginning to establish national LLL policies, others are already implementing individualized strategies or focus on training of flexible workers. This is also reflected in Figure A3.5. More detail can be found in the panel at the end of this section.

- National reforms and initiatives addressing major and specific national challenges: in nearly all countries, but in particular, in the CEEC and in some Southern European Member States
- Developing a national policy of lifelong learning and introduction of structure and practice as arising from European guidelines: Latvia, Lithuania, Hungary, Croatia, Cyprus, Romania, Bulgaria and Turkey

- Moving towards the Europe 2020 targets as a political orientation: Sweden, Finland, Denmark and the Netherlands
- Focus on increasing the number of participants in tertiary education: Sweden, Denmark, Germany and Austria
- Implementing the individual right to training: e.g. Luxembourg, Portugal, Belgium and France
- Increasing the participation in CVT and LLL by new initiatives: Austria, France, Poland, UK, Belgium and Italy
- Improving the system of vocational training: Spain, France and UK
- National skills strategies and comprehensive approaches of skills development: Ireland, Austria and Denmark
- Individualised approaches of skills development (e.g. competence profiles, individual training plans, training vouchers): Belgium, France and Germany
- Lifelong learning strategies and better coverage of flexible workers: France, Austria, Denmark, Ireland and the Netherlands
- Ensuring professional experiences of jobseekers: Belgium, Poland and Malta
- Developing systems of recognition of informal and non-formal education: Czech Republic

Source: Voss and Dornelas (2011, 41).

Discussion and Conclusion

There has been a considerable social policy activity in the EU in the recent years, especially pronounced in select countries following the economic crisis. Without making any assumptions on the content of the reforms or individual strategies, we have used flexicurity as a lens to study the general LMP conditions. We have thus conducted a number of conventional analyses, familiar especially in the comparative social policy domain, with a dual purpose in mind. First we were interested in recent LMP developments: policy change and its direction across the European polity. To find the state of change of LMP across the EU, we carried out a PCA for different points in time. Country scores plotted against the PCA components helped us visualize flexicurity groupings and the types of change. An independent HCA was used to validate the clustering and any movements among them. To enumerate the state of flexibility, we created a custom flexicurity index which was partly used in the country selection in the ensuing section concerned with intervention activity. This exercise helped us understand better the type and number of measures across countries and across the sample as a whole. Finally, we have examined qualitatively a select number of countries standing out from prior analyses. On the whole, the analyses point to both stability and change. Change is more common in countries with less developed LMP, many of them appearing to move closer together. On the other hand, the early LMP modernizers appear more stable. Despite, or possibly because, of their short time frame, the analyses opened questions on the persistence of the regimes of flexicurity as generally known.

Equally relevant, the second goal of this module was to confront the empirical limits to comparative LMP analyses. While some scholars remain in the realm of policy instruments as they try to map and describe LMP within or across jurisdictions, the ultimate scientific goal is to connect these with outcomes and thus help inform policy. A closer look at some of the empirical issues reveals this is a tall order. Consider the methods used in the above analyses and the data on which these depended. To review, as a proxy for numerical flexibility we reached to the OECD's EPL index, which has been the most commonly used EPL indicator in both academy and practice. To measure the

state of ALMP and partly of social security, we used Eurostat's LMP expenditure data with % GDP as a unit of measure. And for LLL, we incorporated Eurostat's Labour Force Survey data on recent participation in training for both employed and unemployed adults. These data became the basis for the PCA, HCA, and the construction of the flexicurity index. Finally, our activity analysis was based on the LABREF database.

While all analyses are subject to trade-offs and various data limits, a few stand out in particular in this context. Firstly, comparative analyses relying simply on the incidence of LMP interventions can be misleading. Following other scholars, we have used here a descriptive database to extract the types, directions, and the counts of interventions for a particular timeframe and country. Such analyses assign the same weight to all interventions, regardless of their magnitude or implications. Further, measures may be temporary, a frequent strategy throughout the crisis, and implementation start dates may vary. Yet, we cannot take these reliably into account in this analysis, as in both cases many of these data points are missing. Hence, we obtain at best a very rough overview of LMP developments, or a pointer to a further inquiry.

The second issue stems from gauging economic security, often assessed by the magnitude of social outlays as a proportion of GDP. This crude indicator is problematic for a number of reasons (per Bertozzi and Bonoli 2009): aside from capturing the size of social investment, these measures also reflect other conditions such as types and levels of unemployment and demographics; it may not be commensurable due to differences in economic performance across polities; social payments may be subject to different tax treatments across jurisdictions, varying the financial conditions of the recipients; and, importantly, there may be a significant time lag between change in policy and expenditure profile making cross-national comparisons problematic. Indeed, issues regarding the chronology of a policy intervention and its outcomes point to more fundamental challenges: Can outcomes be traced to particular measures?

The third issue is related to the popular EPL indexes, criticized for their reliance solely on policy statements. More specifically, the index neglects the fact that an apparently same legislation may have varied outcomes across jurisdictions, since its implementation and enforcement may be carried out very differently; or that there may be other forms of protections established outside of legal provisions, most prominent being the collective agreements (Emmenegger 2009). And, as any index whose components are weighted subjectively, there will always be debates on the relative importance of each element.

Subjectivity, is, of course, more or less inherent to all research, whether in data or methods. Philips and Eamets (2007) comment on subjectivity in data reduction techniques and cluster analyses, also at play in context of this module:

The most significant limitation in this respect is that both of these methods are highly subjective. For example, in the factor analysis, deciding on how many factors to retain, which rotation method to use, which variables are considered to be connected to which factors, as well as the names of factors are all highly subjective. Hence, *different solutions may be found from the same initial data*. The cluster analysis can be characterised as atheoretical, exploratory and descriptive; moreover, it has no statistical basis on which statistical inferences can be drawn from sample to population, which makes it difficult to generalise the sample-based results in relation to the whole population. (27, emphasis added)

Hence, as revealed also by this exercise, the findings across analyses are highly dependent on which variables are selected and how they are operationalized. Note, for example, the differences between this analysis and Hastings and Heyes' (2018) results, particularly on the types of clusters and their constituent countries. For example, the authors identified Poland, UK, and Ireland as outliers, while ending up with a large (and, when compared after the crisis, relatively stable) cluster of Continental and Nordic countries.

Often, as was also the case in this analysis, the selection of variables is driven by the availability of data. Here, the goal was to make an assessment of the recent LMP developments and identify any trends or patterns of change. The policy making activity intensified by the recent crises offered a unique opportunity to analyse policy commitments and to understand better the character of change. To observe any movements and regularities, we needed to compare data, ideally outcomes across flexicurity categories, over time. Unfortunately, indicators better supporting these aims, such as the Transition from unemployment to employment (Eurostat), are available only selectively (the employment transition data begin in 2011 and do not include all EU countries). Other important data also have gaps. For example, LMP spend (Eurostat), a central indicator in many analyses, does not have data for the UK (among other countries) from 2011 onwards. At the same time, the most recent OECD's EPL indexes are from 2013. Finally, the European Lifelong Learning Indicators (ELLI), a multi-dimensional learning index that would provide a comprehensive proxy for the LLL pillar, is now only available for 2011 and not for all EU countries.¹²

Overall then, analyses and, in practice, monitoring efforts are limited by data, and, in particular, by the absence of comprehensive measures taken with reasonable frequency. Despite the EC's calls for a joint monitoring of employment policy, there has not been much progress in making available the relevant indicators. No doubt, there is more than one reason for this. Speaking of measuring flexicurity, Chung (2012) recognizes that

...this task of deriving flexicurity indicators is a highly politically sensitive one. This is especially true for the list of indicators that will be set up by the European Commission. The CEC indicators will also be used to evaluate and assess the positions or the pathways the member states are in, as well as their policy outcomes, and will be the basis for policy recommendations. Due to this reason, it will be crucial that there is first an agreement among the member states on what the definition and goals of flexicurity or measuring flexicurity across countries are. (169)

Unfortunately, it is far from certain whether a consensus will ever be reached on a common formulation of a flexicurity strategy. Arguably, while the proximate reason for the inertia may be political, the roots of such issues are ultimately empirical. Consider there is already a significant disagreement about the effects of employment deregulation (Piasna and Myant 2017), among other current LMP strategies. How much deregulation is optimal in a particular context? Can we assume interventions have linear effects?

¹² Not to forget, subjectivity is also at play at the measurement, or data, side. This is namely when surveys are used to assess individual outcomes (for example, one's perceptions of security, employability, or social mobility, among others are recorded and aggregated to represent the situation at a macro-level). To be sure, these often do not correspond well (or are not correlated) with objective measures. For example, Bertozzi and Bonoli (2009) find that perceived job security and official EPL are not well correlated, not the least due to the fact that not all individuals enjoy the same labour market status.

Nevertheless, policy makers continue to advance flexicurity recommendations at the EU level or implement new interventions domestically despite having at best a blurry understanding of their outcomes.¹³ And advocacy organizations continue to challenge these decisions, working with different assumptions, though within the same empirical confines.

Cognizant of the above issues, some have argued for a rethinking of flexicurity as a capability-based approach (Lehweß-Litzmann 2014), dependent on deliberation over *feasible* alternatives in search of better outcomes (ones emphasizing individual freedom). However, while introducing normative elements to policy designs, this forward-looking approach also relies on “empirical investigation, involving not just sociological, but also macro-economic reasoning and research” (Lehweß-Litzmann 2014, 261). No doubt, any strategy seeking an improvement is dependent on reliable knowledge and methods to obtain it. Yet, if we lean back on the traditional approaches (even while supported by better data), as we tried to show in this module, we may well find ourselves treading water in terms of building the foundations allowing to find a common ground to solve LMP challenges. Perhaps a good way to move forward is by making sense of policy change we found to be ubiquitous and multi-dimensional. How can we explain LMP stability and change? Do we fare better with explaining change over measuring it? This is the concern of the next module.

¹³ It is subject to further debates whether or under what conditions we can reliably establish links between interventions and their effects in social systems. This will be revisited in later modules (Chapter 6).

Chapter 4. Views on Stability and Change in Welfare Systems

Earlier, we discussed a set of far-reaching structural shifts, the prime movers of the advanced industrialized countries into the post-industrial age. We also hinted at welfare state reforms—policy changes identified as recalibration, retrenchment, or readjustment—being enacted in this context. And we explored empirically the bigger picture, recent LMP activity across the EU, observing not only these strategies but also some broad patterns, more pronounced in some groups of countries over others. In this module we seek to engage the explanations to these changes, as we ask: *How do the main theories of social policy explain its stability and change? What do studies of its atypical outcomes reveal about the dynamics of social systems and the future of the scholarship?*

Scholars have used a number of theories to understand social policy change, generally the same models which have proven valuable in explaining the development of the industrial welfare state. These are the neo-functionalist, conflict, and institutionalist explanations, the latter complemented by ideational reasoning (Starke 2006). The theories each emphasize a different explanatory variable: problem pressure, political mobilization, and institutional effects respectively (Armingeon and Bonoli 2007). While individually insightful, the emerging, integrative perspectives have been shown to offer a more complete explanation of the multi-dimensional politics of the contemporary welfare states. Yet, there are also unforeseen cases of significant change in (social) policy. Explaining these, as some scholars argue, require us to shed a number of conventional assumptions on interests, intentionality, and equilibrium, bringing us closer to an evolutionary view of the political, or more broadly, social world.

Theoretical Foundations

Neo-functionalism. As discussed, advanced industrialized countries have been facing tertiarization of their labour markets, relatively low economic growth, high unemployment, and demographic change. The increasing feminization of employment, precarity, shifts in typical family structures, and poverty, have created a set of palpable socio-economic challenges. Fiscal constraints, thought to stem from both the states' shrinking revenues as well as from the demands of economic integration, coupled with new risks and growing outlays, are thus placing dual pressures on governments. And the neo-functionalist view sees these internal and external pressures as key to explanation of the observed policy action (Starke 2006).

While connections between new social and economic pressures and policymaking have been observed—in, for example, studies on welfare state resilience due to new social risks (Scarborough 2000), or on social expenditure and economic integration (Cameron 1978; Rodrik 1998)—debates continue about the theoretical capacity to predict the direction of change. One insight, particularly pertinent in the context of austerity, stems from the observation of political “blame avoidance” or “credit claiming” (Weaver 1986; Pierson 1994). Whilst the politicians are eager to take credit for enacting popular programs, they generally opt to avoid blame for the unpopular ones by making incremental changes and further obscuring these changes through various strategies including delays or conditionality. It has been argued, however, that in exceptional circumstances such as financial crises and/or when pertaining to the commitments to a

larger project (such as the European Monetary Union), the politicians may push forward unappealing agendas while taking credit for them (Bonoli 2012). In sum, the neo-functionalists draw a causal connection between the underlying socio-economic conditions and the policy solutions while treating the institutional aspects only as secondary (Starke 2006). Though debates are ongoing, some have provided support to the neo-functionalist thesis with the observation that “difference in timing reflects the different degrees of development of post-industrial social policies” (Armingeon and Bonoli 2007, 16). Hence, for example, Sweden experienced the symptoms of post-industrializations much ahead of other industrial countries and thus began to address its new social risks decades before these became salient in other countries (Armingeon and Bonoli 2007).

Conflict theories. An alternate view sees social policy outcomes as determined by a struggle between social groups with conflicting interests and different material and political power. For Korpi (2000), policy change, including the rise of the welfare state, is driven by unequal and unstable distribution of power among classes within the state. It is the working class’s capacity to mobilize that determines the extent of social protection and redistribution. Esping-Andersen (1990) considers group-relational aspects, such as interactions between the agrarians, the urban workers, political organizations, and social movements, as key to outcomes. In this view, political change is a result of power coalitions among such groups. The worlds of welfare is not only useful in the understanding of welfare state outcomes, but also, as the author argues, can offer insight into their persistence in the age of increasing fiscal pressures.

The risks of welfare-state backlash depend not on spending, but on the class character of welfare states. Middle-class welfare states, be they social democratic (as in Scandinavia) or corporatist (as in Germany), forge middle-class loyalties. In contrast, the liberal, residualist welfare states found in the United States, Canada and, increasingly, Britain, depend on the loyalties of a numerically weak, and often politically residual, social stratum. In this sense, the class coalitions in which the three welfare state regime-types were founded, explain not only their past evolution but also their future prospects,

explains Esping-Andersen (1990, 33).¹⁴ Esping-Andersen's identification of a coalition driven change (as well as Korpi's focus on the working class power) may have served well in explaining the industrial welfare state at a time when limited number of actors and interests (primarily the wage-earners seeking security) had less possibilities for coalitions.

In general, these perspectives have been challenged due to their neglect of gender and the non-distributive aspects of welfare states (such as education and health-care). More specifically, it has been argued that power resource theories are inadequate in explaining the outcomes of the “new politics” (Pierson 2001). Pierson (2001) claimed that political parties, employer associations, or unions do not play a large role in the outcomes of the post-industrial welfare politics. There is a dual rationale for this argument. “Theoretically, [it] is based on institutional feedback mechanisms, and empirically, it is closely tied to the fact that we observe different, ‘unexpected’ actor configurations for or against recent reforms, with e.g. left-wing parties supporting retrenchment or certain employer associations supporting expansion,” explains

¹⁴ As quoted by Starke (2006).

Häusermann (2012, 112). Likewise, these views have been contested as scholars argued that actors continue to matter or matter in a different way (Starke 2006).

Importantly, the function of some actors is not well understood. For example, the role of trade unions “has been somewhat neglected in cross-national research on retrenchment,” comments Starke (2006), adding that the

[t]rade unions still appear as the main organized defenders of the central institutions of the welfare state, especially where they are involved in administering pension and sickness funds as in e.g. Germany or France. We still know very little about the conditions in which some interest organizations become crucial for the politics of reform, whereas others remain politically marginal. (108)

Recent research has argued that actors continue to hold an important role in welfare state politics. Given the differences in the contemporary social and economic landscape, however, the interests and ideas of actors as well as their functions have changed also (Häusermann 2012).

Institutionalism. Early explanations of policy outcomes were based on the pluralist view of society in which cooperating and competing groups push their policy prerogatives. In this interpretation, the government is assumed to be neutral. Despite some steps forward in the pluralist thought addressing the differences in power among groups and the active role of government, this interpretation has soon began to test its limits. The increases in the policymaking intensity of the 1960s and 1970s (as evidenced by the Great Society program in the United States and the constitutional reform in West Germany, for example) have not been met with widespread success. "Despite unprecedented popular support for using the tools of government to improve societies...many of these programs did not achieve their ends," notes Immergut (2008). Among the most salient examples are the implementation failures of an agreed upon and well-funded federal program in Oakland, traced to organizational problems (Pressman and Wildavsky 1984), and, ultimately, flaws in local political structures (Immergut 2008). Motivated by these lapses, scholars started to pay close attention to the role institutions have in shaping people's decisions and behaviours and their impact on policy development more broadly. "Institutions have affected policies, and policies have changed our understandings of institutions. Indeed, policy studies have led to an institutionalist interpretation of politics, and new theories about democratic governance," observed Immergut (2008, 557). Incorporating institutions into analyses thus enhanced our capacity to understand the origins and evolution of policies as well as policymaking systems and, in turn, the influence these have on institutions.

What explains the differences in social provision across states? Why do some advanced economies lack national healthcare? The state structures, it was recognized, provide an important medium and context to the political process, making them integral to explanation. Neo-institutionalists thus began to consider the connections between actors' behaviour and institutions; attach importance to the imbalances in power when contemplating institutional change; put emphasis on history and path-dependence; and pay attention to other variables (such as ideas) that mould political outcomes (Hall and Taylor 1996).

The scholarship's diversity is reflected in the many ways institutions are conceptualized. The definitions range from Streeck and Thelen's (2005) "building-blocks

of social order," representing "socially sanctioned, that is, collectively enforced expectations with respect to the behavior of specific categories of actors or to the performance of certain activities" (2005, 9); Ostrom's (2007) "shared concepts used by humans in repetitive situations organized by rules, norms, and strategies" (2007, 23); North's (1986) economic view of "regularities in actions...customs and rules that provide a set of incentives and disincentives for individuals"; Mahoney and Thelen's (2009) "*distributional instruments* laden with power implications" (2009, 8, emphasis original); to Hall's (1986) frequently cited institutionalist view of "formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units of the polity and economy. As such, they have a more formal status than cultural norms, but one that does not necessarily derive from legal, as opposed to conventional, standing" (1986, 23).

As apparent, there is no consensus on what an *institution* is and how it should be studied. Further, some authors deliberately leave their definitions open. For completeness, we make several clarifying points. First, institutions may be viewed not as things but widely shared prescriptive *processes* shaping and influencing human behaviour (see Bell 2002). Second, there is not a clear analytical distinction between institutions and organizations. The latter may be seen as "nested within and shaped by wider institutional arrangements" (Bell 2002). Given institutionalism's status as a mid-range theory, it is useful, however, is to draw analytical boundaries between institutions on the one hand, and actors and macro-structural factors on the other (Bell 2002). Third, distinguishing between formal and informal institutions will be determined by analytical needs. For example, authors studying larger macro-institutional or politico-legal questions (like Streeck and Thelen 2005, for example), will focus on formal institutions dominating this locus. Fourth, institutions are predictably enforceable, whether by actors themselves, or others. For many authors enforceability is important (Ostrom 2007; Streeck and Thelen 2005) as it separates institutions from mere social conventions. Finally, there is the question of whether a policy is or should be treated as an institution. For Streeck and Thelen, only policies "which stipulate rules that assign normatively backed rights and responsibilities to actors and provide for their 'public', that is, third party enforcement" are considered institutions. Cognizant of some of the above mentioned points, Streeck and Thelen (2005) view institutions as part of a *social regime*, capturing the interaction of those making the rules (including regulations, codes, standards) and those that employ the rules within a larger social context. This view of institutions is important in the area of social and labour market policy, where, as will be discussed, it has been analytically useful to distinguish between different *welfare* (Esping-Andersen 1990) and *employment* regimes (Gallie 2009).

Using institutions as an independent variable, political scientists have been able to establish basic connections between political institutions and policy performance (Lijphart 1991), the number of veto players and policy stability (Tsebelis 1995), or constitutional design and policy outcomes (Gerring et al. 2008; Haggard and McCubbins 2001; Cox and McCubbins 2001), among others. Yet, given the large number of combinations of different institutional rules and norms across polities, or even differences within one polity over time, in addition to the contingencies rooted in the decisions different actors make to pursue their interests, it is not feasible to produce a general specification of which socio-institutional configurations yield what policy outcomes.

What is possible, however, is to develop explanations and learn more about the causal mechanisms at play in these processes. In the context of social policy, or welfare state studies more broadly, scholars have focused their attention at two kinds of institutions, the political and welfare state institutions (Starke 2006).

In terms of the former, the focus has been on the distribution of political power and its effects on social policy outcomes (Starke 2006). Immergut (1992) conducts a comparative study of the politics of the French, Swiss, and Swedish health insurance systems, representing different health insurance solutions in terms of the role of the state in the provision of health care (hybrid, most privatized, and most socialized respectively). The author finds that differences between policymakers' ideas, political partisanship, or preferences of political factions could not adequately explain the divergence in policy outcomes across these countries. It is a close consideration of political institutions, Immergut argues, that better explains the outcomes. Specifically, Immergut emphasizes formal (constitutional) rules that (dis)allow the politically powerful to change policy, and electoral results that give rise to informal rules influencing how the formal rule are applied. These two classes of rules thus together structure political decisions. The key premise is that rather than singular choices made at a particular time, these decisions consist of series of choices, *all* of which must be favourable in order for the legislation to be enacted. The author thus introduces a concept of a veto point, a critical step in the sequence of democratic decision making, and applies rational choice logic to understand the political calculi made. Importantly, in Immergut's (1992) analysis, veto points are not "physical entities, but points of strategic uncertainty that arise from the logic of the decision process itself" (66). This is because veto points locations are not static, instead changing dynamically based on the constitutional rules and electoral outcomes.

In a related work striving to overcome one of the main challenges of comparative politics, the small sample size, Tsebelis (1995) advances an alternate explanation for policy stability and change. Going beyond the commonly used pairwise comparisons at the macro institutional level, Tsebelis incorporates all institutional arrangements in his analysis as he seeks to determine the systems' *capacity* for policy change (1995, 292). The author generalizes the veto point concept (Immergut 1992), and introduces a formalized veto player, defined as "an individual or collective actor whose agreement is required for a policy decision," (293) present across various institutions. Using this concept, Tsebelis shows a positive association between policy stability and the number of veto players, and the disagreement or cohesion among these players. Central to this analysis is thus the *number* of veto players and the relationships within and among them in a given polity, rather than a focus on the kinds of political institutions within a particular jurisdiction. Hence, in systems where power is concentrated in the hands of fewer actors, the possibility for reforms increases. However, a smaller number of actors mean that the voters can hold them to account more easily. Given these competing forces, the direction and depth of change is difficult to predict (Starke 2006).

Building on Tsebelis's (1995, 2002) veto players, Haggard and McCubbins (2001) elaborate upon the theory of institutional change. The authors argue institutions should be examined at a more granular level than the macro-institutional presidential or parliamentary designs. The key to their approach is the recognition political systems may be distinguished not only by their separation of power but also the separation of purpose. Separation of power is essentially "the extent to which different components of

government have the ability to exert influence through the exercise of a veto on the formation of public policy" (2). Orthogonal to the separation of power is the concept of separation of purpose, or the existence of specific institutional arrangements representing the diversity of interests within a society (such as political parties). The authors show that combinations of separation of power and purpose have "systematic effects on policy making" and thus are able explain differential policy outcomes across polities. In the same volume, Cox and McCubbins (2001) further argue these configurations impact whether the policy outcome is regarding of the private or public interests. Thus, the more veto actors, who receive narrow policy concessions in exchange for their support, the less public regarding the policy will be. Here, the US tax code, a 4 million words long collection that is obscure and ridden with exceptions and loopholes added to satisfy the lawmakers' sponsors, serves as a prime example of private-regarding outcomes (Zakaria 2016).

Similarly, Gerring et al. (2008) study the connection between constitutional design and policy outcomes, particularly in the political, economic, and human development areas, and find a positive relationship between parliamentary systems of government and the quality of governance. Parliamentarism is "a more reliable vehicle for good public policy [in] its capacity to function as a coordination device" (2008, 353), they conclude, (re)interpreting the role of institutions as facilitators and arbiters of conflict arising from coordination problems. The authors suggest a number of reasons for good governance: "stronger political parties, corporatist interest organization, tighter principal-agent relationships within the various arms of the bureaucracy, centralized (national-level) electoral accountability, the capacity for flexible policy making, a more institutionalized political sphere, and decisive leadership" (2008, 353). More empirical studies (like Smyrl and Genieys's work described below) are needed, however, to examine the causal mechanisms driving good governance. These must consider the economic, historical, political, and cultural context (Gerring et al. 2008), integral to a more complete understanding of institutional evolution. Such research would also allow testing the theories of welfare state we discuss here. Under what conditions are problem pressures the main drivers of change?

Important to the study of welfare systems has also been the recognition that states have evolved distinct "structures of social provision which are frequently described in terms of welfare 'regimes'" (Starke 2006, 109). In his prominent work, Esping-Andersen (1990) identified three "worlds of welfare" emerging from the settlements among coalitions of actors who have come together in different ways across countries. These regimes have developed different systems of social and employment protection. It has been shown such structures matter in the study of change, given they vary in their capacity for adaptation (Armingeon and Bonoli 2007, 24). We will return to different *welfare* and *employment regimes* in the next chapter as we explore the reasons for the potentially persistent differences in the welfare state arrangements across countries.

Ideas and Understandings

In recent decades ideas have assumed a prominent role in the study of politics and policy. Scholars have realized that reaching to groups, power relations, or rationality of actors could not account fully for many political and policy outcomes, and thus started to

include ideas into their analyses. Specifically, scholars have taken interest in explaining ideas (Berman 2010), as well as explaining *with* ideas (Stone 1989; Kingdon 1995; Bleich 2002; Béland 2005; Béland and Cox 2010; or Boothe 2013).

As with the above discussed institutions, "ideas" is a broad term suffering from the lack of a common definition. Some see ideas as "casual beliefs," products of human cognition capturing our connection to the material world through interpretations and guiding our action (Béland and Cox 2010). Others view ideas as "the subset of institutions (practices, symbols, norms, grammars, models, identities) through which people interpret their world" (Parsons 2007, 100). Nevertheless useful, these definitions reflect the wide range of interpretations of what ideas are. An apt way to make sense of the ideational universe is to recognize ideas may reside at various levels of abstraction, from those capturing a particular solution to broadly shared subjectivities including philosophies and worldviews.

In the policy process context, Mehta (2010) assigns ideas into three types: policy solutions, problem definitions, and public philosophies (or zeitgeist). Policy solutions are specific roadmaps to meet a set of problems in line with broader social objectives. For example, a carbon tax becomes a solution to reducing greenhouse emissions. Problems, derived from a socio-cultural understanding of reality, are also ideas. As Stone (1989) argues, difficult conditions can become problems only once the society has a means (and thus a choice) to do something about them. Having new, alternate sources of energy, for instance, means that it can be possible to start thinking of an environmental problem and the solutions based on the elimination of fossil fuels. Finally, public philosophies are the values, norms, and broader understandings. This includes, for example, the *laissez faire* belief that markets best operate without interference from the government; that is, the state should not disrupt the functioning of the markets through interventions such as regulations or subsidies.

Such a typology leads to a number of questions, the first of which regards the mechanics of defining a problem. Here, Mehta (2010) begins to connect the dots in the literature and identifies six factors determining the problem formulation. The first is the power of the actors promoting their formulation of the problem. Such power, however, need not be material but may be of political or moral nature. The second is the portrayal of issues which may involve a spectrum of devices or strategies including crafting causality (Stone 1989), using metaphors, shifting the burden of proof as, for example, in the EU precautionary principle doctrine (Tosun 2012), constructing target populations (Schneider and Ingram 1993), among others. The third is the context or venue. Here, Baumgartner and Jones (1991), for example, have established a relationship between policy images, or ideas expressed about the policy, and the political institutions, which they term as the venues of policy action. The authors argue that problem perception (and thus the support for its solutions) varies depending on the venues. As new venues are created, or as the function of existing venues changes, so do problems and solutions. This explains, as Baumgartner and Jones argue, policy stability and change. The fourth factor is the ownership of the problem. The way the problem is framed is also related to the actor who gets to define it. This is increasingly important in the ever more technical nature of issues inherent to the transnational environment (global finance, for example). The availability of solutions is another factor determining the formulation of the problem. As hinted earlier, a problem may not be perceived as such until there exists a possible

solution. Hall (1993), in his study of paradigm change, argues that the shift away from Keynesianism in the 1970s depended on the availability and the feasibility of a new idea, monetarism, and the associated political contest over it. Finally, there must be a fit between the problem definition and the environment. The environment, or the context, includes the public, the media, the political class, and, not to forget, cultures and histories that give problems their salience, meaning, weight, and urgency.

The second question arising from Mehta's typology is which policy solutions get adopted and how. Here, Kingdon (1995), Hall (1989, 1993), and Oliver and Pemberton (2004), among others, offer answers. Kingdon's seminal model provides a twofold contribution to ideational scholarship. The author brings our attention to human *agency*, in particular through the actions of policy entrepreneurs in the early stages of the policy process, and also shows that solutions may be ready or formulated well before the problems become salient (Mehta 2010). Specifically, Kingdon's (1995) analysis identifies three streams and asserts that the opportunity to (re)set the policy agenda occurs at their confluence, or a policy window. The first is the problem stream, a process during which problems are recognized and defined. The second one is the policy stream, where solutions are devised to one or more problems. Finally, the politics stream involves political actors and their interactions within the larger media, popular, and political environment effecting one or more policy actions. Importantly, the policy entrepreneurs, actors who leverage a variety of channels and opportunities to push their prerogatives onto the policy agenda, may be active in all three streams, but they are especially important in the former two, where they play a role in "softening of the system," or preparing the ground for policy action.

In another visible contribution to our understanding of the role of ideas, Hall (1998) analyses the post-war transition to Keynesianism. Drawing on the contributions in his edited volume, Hall identifies three factors of particular importance in policymakers' decision to adopt the new set of economic ideas. These are economic viability, or the (perceived) capacity of the ideas to resolve economic issues; administrative viability, or the ideas' compatibility with the ingrained administrative biases and their feasibility of implementation; and political viability, or the values and rationales embodied in the ideas and their capacity to appeal to constituent groups, establish coalitions, and effect change. Yet, as Hall notes, these factors alone do not explain the rise of Keynesianism. The orientation of the party in power, the structure of the state-society relations, the structure of the political discourse, and the second world war, all contributed to the intake of the new approach to economic policy (and represent a class of factors important to change in economic policy generally).

Finally, we question how public philosophies, the mood of the times—providing the context for the way the society understands and prioritizes the problems and their solutions—shift and change. An apt example here is the shift towards postmaterialism, an important development which becomes relevant also in the understanding of the contemporary political developments. In his study of party platforms, Inglehart (1997) notes a turn away from consumerism and social conservatism toward inclusiveness, equality, and environmental consciousness. The author sees this shift in public philosophy rooted in the high levels of existential security experienced by large parts of citizens in the industrialized countries in the 1960s and 1970s.

From the discussion above it is apparent that ideas matter; highlighting the goals and interests of actors, ideas are often used to provide more complete understandings of political and policy outcomes. Reinforcing the complementary nature of ideational explanations, Bleich (2002) suggests that cross-national differences in race-policies cannot be explained solely by institutional, power-interest, or problem solving perspectives. Rather, these must involve ideas or "frames" in turn rooted in history: in the British case, their trans-Atlantic relationships, and in case of the French, its war experiences. Similarly, Béland (2005) makes a case for the integration of ideas into historical institutionalism. Focusing on social policy, Béland argues for a closer consideration of agenda setting processes overtime, while paying particular attention to the interactions between the framing of policy options (or the actors manipulation of "the symbols available in existing ideological repertoires") and the institutions which obstruct or facilitate an opportunity for action.

Asking why welfare state is more limited in the United States than in Europe, Alesina and Glaeser (2004) find ideas—general attitudes toward the poor, views on effort versus luck in individual success, and perception of social mobility—rather than economics to be behind the persistent differences between the welfare states of the US and Europe. The authors add that proportional representation and parliamentarism, macro-institutions which have shaped ideas in Europe, have not developed in the United States. Importantly, Alesina and Glaeser argue reinforcing *feedback* effects exist between ideas and the systems of redistribution.

Yet, in some cases, another class of ideational explanations, the cognitive aspects, becomes a dominant factor. Acknowledging ideas are vital, Jacobs (2009) asks about the mechanisms through which ideas affect actors' preferences, aims, and beliefs. Similarly to Weyland (2005), who finds cognitive biases to be of primary importance in explaining pension reforms in select Latin American countries, Jacobs focuses on mental models in explaining outcomes in German pension politics overtime. These mental models, a class of cognitive mechanisms at an individual level acting as guides in establishing causal connections and filters, (dis)allow select ideas to be brought into the foreground.

Finally, seeing the traditional conception of material and instrumental power as insufficient in explaining institutional outcomes, Ziegler and Woolley (2015) examine post-enactment outcomes and show *intellectual* resources come to be of equal weight as material resources. Specifically, Ziegler and Woolley observe the financial crisis and the ensuing reforms spawned two types of advocacy networks, the "stability alliance" and the "self-regulation alliance," playing a decisive role in the post-enactment debates. The authors then challenge the traditional views of regulatory capture through two apt case studies and show that in the post-enactment politics involving complex rules and regulations, the capacity to marshal intellectual capacity to be as vital as structural power.

Ideas have also been found key to explanation of the development of the European employment policy (Schellinger 2016), an important contribution to the literature on Europeanization to be discussed in the ensuing chapters.

A Case for Synthesis

Earlier, we have described welfare states as systems—coevolving tapestries of institutions, programs, policies, and actors crafting different ways to realize their

prerogatives all the while limited by past choices—and explored how select scholarship is making sense of their outcomes. The ongoing debates on how to best *simplify* the study of the welfare state politics are often distracting from the fact that conventional theories are meeting their limits when faced with the multi-dimensional reality of welfare state modernization. Consider Häusermann’s (2010) statement identifying the obstacles to progress in this research area:

The failure of the existing literature to provide a conclusive explanation for postindustrial reforms results from the fact that most authors tend to adopt too narrow a focus – directing their attention either to a single dimension of the reforms (e.g., retrenchment or new social risk policies or privatization), or to a single explanatory factor (e.g., power resources or institutions or electoral risk or structure). Although each of these theoretical perspectives may explain a part of the ongoing dynamics in continental welfare states, their *interrelations* are key in accounting for the whole picture. (6, emphasis added)

Whether we can ever account for the whole picture is challenging, nevertheless the reliance on theoretical or analytical mono-cultures is quite constraining. Indeed, it is a similar issue lamented by many policy convergence scholars (Heichel et al. 2005; Drezner 2001, 2007). Hence, as hinted earlier, for Häusermann (2010, 2012), the study of contemporary social policy change begins with a recognition of “reforms simultaneously pursuing several objectives” (Bonoli and Natali 2012). So rather than viewing change along a single dimension—either creating new policies or diluting or expanding the conventional, “old” schemes—the post-industrial welfare reforms must be understood as multi-dimensional, originating “and politicized in one and the same policy reform space” (Häusermann 2012). This opens a new perspective on policy change and its study for two reasons. First, it compels us to reconsider the analytical importance of actors, as their often unexpected coalitions, formed to pursue modernizing policies, come into focus. Second, it naturally leads to theoretical pluralism, given actors are influenced and motivated by structural conditions and their actions are modulated by institutions.

In this vein, Häusermann (2010) advances an analytical model of institutional change producing a more complete explanation of post-industrial transformations of the welfare state. The model guides its user through a three stage process, first bringing attention to the relationship between structural change and existing institutions, then highlighting the conflict lines with actors, and finally building of coalitions, all of which determine the policy outcomes. Hence, the change process starts with an emergence of conflict dimensions. Structural shifts, including technological, demographic and social change, challenge the existing institutions, many established to cope with the issues of the industrial age. As these institutions prove to be either financially unsustainable or ineffective in dealing with new social risks, pressures for reforms arise. The effects of structural change may only be understood with respect to existing institutions. In the author’s example, the rising divorce rates may not be an issue in social democratic regimes which are egalitarian and universalistic and cover single individuals but pose significant challenges to the models relying on familial social security and a sole, mostly male, source of income.

Issues borne of the existing policy shortfalls then create the need for reforms and animate various groups to push for change. Important here, as noted, is to recognize that a “variety of different institutional misfits... translates into a plurality of potential reform dimensions and conflict lines” (29). The conflict lines, some between different types of

labour market participants, other between business organizations, all exposed differently to risks, then vary greatly. The politics of reforms will thus take place, as the author argues, in a multidimensional space, an environment that departs significantly from one found in the pluralist conceptions. Hence, for example, groups such as irregular workers or students can have a disproportionate impact on outcomes when compared to the traditional power players.

Finally, realized in the last stage of Häusermann's model are the actual policy reforms. Welfare modernization reforms affect many traditional and non-traditional constituencies, all within an environment of diminishing fiscal capacity. Their enactment requires broad support across coalitions, which may be facilitated by the complexity of the policy space opening "possibilities for political exchange" (7). There is much space for coalitional engineering as the policymakers may opt strategically to combine various reform packages in joining or splitting the coalitions in order to achieve their policy goals. However, as Häusermann argues, there are two additional factors in coalition formation. The first is the cohesion of business, labour, and political parties. With higher fragmentation it may be easier to strategically peel off or add various groups in search of a particular agreement. The second factor is the number of veto points (Tsebelis 1995), which can pose a barrier to reforms, as noted earlier.

Positing "that conflict lines, which crosscut labor and capital, are inherent in the post-industrial class structure itself" (9), Häusermann takes a revised pluralist view of politics while integrating it with elements of institutionalist and functionalist scholarship. And taking note of the multidimensionality of the policy spaces as related to various cross-class coalitions points to a previously unexpected range of outcomes within the realm of not just the pension politics, the focus of the scholar's research, but also of welfare modernization more generally.

Nearing Reality

Häusermann's work (2010) provides a compelling rationale of theoretical and empirical synthesis, increasingly needed in explaining the complexities of change in contemporary political environments, defined less by conflict among key classes than by diversity of interests. Perhaps intuitively, as the range of constituencies, some interested in maintaining the status quo, others determined to effect change, grows, our analyses may naturally lead to bottom-up interpretations of change. In this view, modernizing change is not possible without the conflict arising from structural pressures on existing institutions (both formal and cultural) and the coalitional politics that follow. Yet, as some scholars observe, social and other policies may change significantly even without these conflicts and the settlements in resolving them, challenging the bottom-up explanations of politics; change may also occur in the absence of exogenous shocks or shifts in institutional underpinnings (Smyrl and Genieys 2008), challenging, too, other prevalent explanations including those discussed above. What explains these theoretically unexpected outcomes? This question is of concern to Smyrl and Genieys (2008) and their contributors, who supply a complementary view on policy change, stimulating further reflection on the socio-organizational aspects of policymaking.

Like Häusermann (2010), Smyrl and Genieys (2008) begin with an observation that despite the ubiquity of change in policy, we lack the capacity to explain it

adequately. But rather than to attempt a “theoretical retrofitting” in explaining the unanticipated outcomes in policy making, the authors make the case for thinking differently about policy development. In this author’s synthesis, Smyrl and Genieys make three overarching points. First, scholars’ explanations should acknowledge that the political world, just as the social world into which it is embedded, is fluid and uncertain. This means, for example, that the interests of political actors, who are limited in what they can know about their future needs and outcomes, are far from stable; instead, interests evolve as actors learn and interact. Further, we must not overestimate the intentionality of actors, tempting though it may be to associate past choices or events with present day outcomes. We should recognize that an intervention into social systems, replete with interdependencies and feedback loops, often brings unintended consequences (Pierson 2000). Finally, unlike in science, there is no shared reality in politics. Rather, there are competing “rationalities,” views on what constitutes a problem and on how to solve it. The authors propose that actors can choose to assume one among a number of competing “spheres of rationality,” each associated with a particular policy area (12).

Smyrl and Genieys recognize that the two major research streams in institutional change—institutional evolution and punctuated equilibrium, seeing change respectively as cumulative and constrained by path-dependence, or abrupt and revolutionary—are compatible (but also limited by a shared assumption that policy change can happen only with change in institutional structures). Mindful of the above discussed realities, the authors see policy change as “an evolutionary process” that is “systematic but not teleological, and involves both shock and adaptation.” And elite actors, including elected officials, civil servants, social partners, political parties, or businesses, who compete to retain their authority in policy making, are at the center of this process.

This competition, to adopt Joseph Schumpeter’s metaphor for the dynamic of capitalism, imposes a logic of creative destruction; actors must innovate in order to preserve their existing positions. Change in policy outputs, even under conditions of institutional stability and in the absence of unambiguous external stimulus, is the inevitable conclusion,

explain Smyrl and Genieys (10). Change may thus be a product of proactive efforts of forward-looking actors who seek to maintain their status, instead of reactive adjustments driven by the electorate or markets. “The creative destruction of political competition takes place in and is constrained by the familiar world of institutions, path-dependent procedures, and the clash of established ideas” (10). Innovation then can be seen as the result of “tensions among various cognitive and normative frameworks in order to maintain or regain control over any process that has implications for their relative authority position” (11). This contest over “who decides” unfolding within the bounds of formal and informal institutions, a battle at once over “ideas and institutionalized power,” is, in the authors’ view, the definition of politics. In this reading, the actors’ interests become indistinguishable from ideas. “By studying the struggle over ideas, including the idea of “interests,” we can bring elements of human agency and power politics back into an increasingly sterile institutionalism,” maintain Smyrl and Genieys (2008, 11), advancing the type of hybrid analysis needed to understand a political world that is closer to its evolutionary image.

Conclusion

If the goal of the previous module was to attempt to appraise changes in social and labour market policy and weigh in on our capacity to measure them, the focus here was to engage their explanations. Major theses have held that either the political settlements among groups with fixed interest, objective problems or needs, or relatively stable sets of rules, formal or informal, explain the outcomes in social policy. More recently, scholars have recognized that ideas matter and begun to augment their analyses with cognitive factors. The major theories fared well in explaining the origins of institutions and their stability; however, the recent decades, which have seen a significant reorganization of the welfare state, have exposed their shortcomings. Some of the modernization's multi-dimensional reforms have been at times counter to the interests of the traditional welfare constituencies (Häusermann 2010), whereas others have been shown to occur in the absence of apparent demands or pressures (Smyrl and Genieys 2008). How can we make sense of these changes?

To explain these non-intuitive outcomes, scholars have been forced to admit to both a rapidly changing environment and its increasing complexity. Many have thus accepted policy outcomes are not only unpredictable, they cannot be explained with a universal thesis. Further, there are voices challenging the assumptions of stability, equilibrium, rationality, and even intentionality (Smyrl and Genieys 2008; Pierson 2000; Hall and Taylor 1996)—facilitating analyses, yet incompatible with the view of an evolving world. At the same time, some are taking a closer look at useful notions such as path dependence while developing more sophisticated understanding of their relationship to change (more in Smyrl and Genieys 2008). In all, it appears that scholars aiming to understand the outcomes of national politics, increasingly diverse and interrelated, revisit the assumptions which have made the social world appear much different from its evolutionary reality. Is this also the case in studies concerned with the bigger picture, cross-national policy development? This is a question for the next chapter.

Chapter 5. Lessons from Cross-National Policy Research

Earlier, we have established that political and welfare institutions, along with cognitive factors, such as the ways citizens and policymakers engage with ideas, play an important role in the processes of change in social policy. It is not only as the systems experience and adapt to new risks differently but also because the structures of the welfare states shape—through policy feedback—the public opinions and thus the political environment (Armingeon and Bonoli 2007; Alesina and Glaeser 2004). Across states, there are disparate welfare constituencies, disparate ways of funding social programs, disparate views of the public and policymakers on social responsibility, among others, all creating differential potentials for modernization suggesting persistent differences. On the other hand, there are powerful pressures to conform in adopting like policy instruments or to achieve similar policy outcomes or across states, increasing the likelihood of at least a partial convergence. No doubt, there are many outstanding questions in this area, particularly as streams of research concerned with cross-national policy change are relatively new.

In what follows we explore these differences as arguments for persistent divergence before discussing key reasons for a possible convergence in policy in the next section. These are to provide a useful contrast in engaging convergence research, the focus of the second half of the chapter. *What can we learn from the arguments and theories explaining similarities or differences in policy outcomes across countries? What does recent integration research suggest about how we approach and study the social world?* On this reading, it appears that it is the integration scholars in particular, who recognize that change was not a product of one but multiple interacting factors and begin to call for pluralist approaches to explanations (Bache et al. 2012). Ultimately, however, this trend may lead to a rethinking of some basic analytical precepts and priorities of research in convergence and beyond.

Persisting Differences?

Despite many of the shared problems, pressures and available ideas, governments have implemented diverse social policy solutions (Wood 2001). To explain these developments, some point to the varieties of capitalism research (Hall and Soskice 2001) and note there exist multiple paths to prosperity emerging over time through various contests and settlements. Specifically, there are states with either *liberal* market economies (LME) or *coordinated* market economies (CME), distinguished by the way “in which firms resolve the coordination problems they face” (8) across areas of industrial relations, vocational training and education, corporate governance, inter-firm relations, and employees. Such countries are seen to have evolved different institutional architectures and correspondingly different policy approaches; and systemic institutional changes which could result in policy convergence, for instance in industrial relations or corporate finance policies, carry high costs and are thus difficult to change (Turner and Greene 2008). It follows these economies will have varied responses to economic integration, for example in their internal support for deregulation. “This challenges the view that a common pressure will necessarily lead to a common solution—rather, different solutions may rationally result,” note Turner and Greene (2008, 15). Economic

(and political) integration will thus impact differently countries representing different varieties of capitalism.

Comparative welfare state research has also established states differ in their systems of social protection and their commonly used instruments. One such a mapping was used in an LMP analysis earlier (Chapter 3). More prominently, Esping-Andersen (1990) has identified three main welfare regimes that emphasize different “pillars” of security (1990). Let us briefly discuss the differences in the welfare state designs, given it is pertinent to an understanding of new social risks, post-industrial reforms in social policy, and to the comparative study of welfare states and their disparities.

Esping-Andersen’s (1990) analysis of the “variations in social rights and welfare-state stratification” identified “qualitatively different arrangements between state, market, and the family” (26). The author found a pattern in how these three pillars are configured across states in delivering social security. Rather than evenly distributed, the countries studied cluster around three regime types.

The first cluster is the Nordic countries with their *social democratic* model of welfare. Here, the state, rather than families or the markets, plays a central role in the provision of social security. Welfare responsibilities are thus ‘defamilialized’ with a goal to promote equality and independence and to relieve families from the pressures of being a providers of security (Esping-Andersen 2002). The citizens rely less on the markets for their welfare, a decommodification intending to give individuals the opportunity to maximize their skills and employability (Esping-Andersen 2002). An outstanding feature of the Nordic systems is the “triple accent on universal income guarantees, ‘activation’, and highly developed services” (Esping-Andersen 2002, 14). These benefits complement each other, creating an egalitarian, inclusive system with low poverty rates. For individuals, income security coupled with skills development and other job supporting services means they can take risks in the labour markets. It also allows for more flexibility in labour markets, welcomed by the employers.

The second cluster is constituted of many countries of continental Europe embracing the *Christian democratic* models of welfare. A combination of corporatist and Catholic influences has produced a less inclusive and unequal system in which family is expected to serve as a provider of social protection. Families have generally depended on a single, generally male, breadwinner, who, as a labour market insider, enjoyed employment security and income insurance derived from employment. The benefits are commensurate to one’s earnings helping to maintain social stratification. Many of the childcare and old age services available in Nordic countries are not available in these regimes given they have traditionally been provided by families, and primarily by women. But, “[i]f strong reliance on the family absorbs many of the risks of social exclusion, it simultaneously negatively affects women’s search for economic independence” (Esping-Andersen 2002, 16). And because continental labour markets have traditionally been more rigid with high entry barriers, those with irregular work histories have little choice but to take unstable and lower paying jobs (Esping-Andersen 2002). This is resulting in labour market segmentation and adds to inequality.

Finally, there is the *liberal* model of welfare common to the Anglo-Saxon countries. Here, the markets and the private sector form the main pillar of social security. The role of government as a welfare provider may be limited to those of old age—and possibly only in a manner supplementing private sources of retirement—and to the

disadvantaged by way of means-testing. Also, there are often numerous conditions and rules attached to welfare benefits. As a result, “this type of regime minimizes decommodification-effects, effectively contains the realm of social rights, and erects an order of stratification that is a blend of a relative equality of poverty among state-welfare recipients, market-differentiated welfare among the majorities, and a class-political dualism between the two” (Esping-Andersen 1990, 27). While labour market rigidities are minimal in such systems, the employment associated benefits (such as employer provided health, dental, or drug coverage) create their own rigidities as they constrain mobility and reduce the citizens’ capacity to take risks.

Given the differences in generosity, inclusiveness, and financing, countries across the three clusters have experienced differently the challenges borne of the post-industrial era. The states have encountered a variety of new social risks and, because of the existing institutional differences and the timing of when these risks became prominent, have had varied options and capacities to cope with them.

Social democratic welfare regimes are perhaps in the best position in terms of dealing with post-industrial social risks. First, their broad collective agreements and active labour market policies help reduce the risks of labour market participants in the era of tertiarization (Armingeon and Bonoli 2007). Second, the Nordic countries experienced the transition to post-industrial era much sooner than other countries. This was prior to the time when demographic shifts began to create budgetary strains, hence allowing for expansion of coverage and services thus addressing more easily the emerging social risks (Armingeon and Bonoli 2007). Finally, Nordic systems of social security are not contributory, that is they are not based on one’s employment, making them not only more inclusive but also more financially viable, particularly in an era of irregular and low wage jobs.

On the other hand, in the continental regimes, the dependence on the pay-as-you-go system of social insurance has been a challenge in several aspects. As Esping-Andersen (2002) explains, such a system

offers inadequate security for those with a tenuous connection to the labour market, such as women and for workers with irregular careers. Worse, social insurance responds poorly to the emerging demographic and employment structure. Since entry into stable employment is ever-more delayed, and since work histories are becoming more unstable, citizens will face difficulties accumulating sufficient pension credits. And to cover financial shortfalls in pensions, the tax on employment is rising and this helps price the young and the less productive job seekers out of the market. (16)

Unfortunately, a deep reform here is very difficult, given, for example, the double payment problem. This issue stems from the fact that an establishment of an alternate system would require the present day workers to pay twice: to contribute to the pay-as-you-go scheme supporting those already retired while also paying into a new system that would provide for their own retirement (Starke 2006).

This brings us to the key reason to expect a persistent divergence in welfare arrangements, the *path dependence* and related processes of *policy feedback*, both important concepts in the study of social policy. At its most basic, path dependence means that initial conditions affect or constrain the choices available for the subsequent decisions (Pierson 2000). Path dependent processes, along with the feedback effects these generate, determine what changes are possible and affect the capacity of welfare regimes

to adapt to structural developments. Aside from the above pay-as-you-go example, consider changing unemployment insurance. In their comparative study of unemployment policy reforms, Clasen and Clegg (2007) find that in countries which have “partially detached traditional unemployment insurance from the sphere of electoral conflict and competition,” (193) as in the case of social partners’ involvement in the management of unemployment insurance in Germany and France, “labour market policy has to date proved...least susceptible to being swept up in an overarching ‘new politics’ of postindustrial labour market regulation” (193). This is in contrast to countries such as Denmark and United Kingdom, where the delivery of such services is in the purview of government making reforms easier (Clasen and Clegg 2007). Hence, path-dependence alters the options and possibilities of reforms in social policy (and other areas).

Indeed to recognize the feedback policies create, for example by establishing various welfare constituencies with entrenched interests in maintaining their protections, is to understand a more fundamental systemic property. It is to appreciate system elements as co-evolving, mutually affecting their development. As Wood (2001) argues

On the one hand, variables such as the model of employment relations, the structure of bargaining systems, codes of employment protection, and types of non-standard employment fundamentally shape welfare state institutions and activities. On the other hand, welfare programmes construct incentives and constraints that impinge upon the terms and conditions of work, unemployment, and non-employment, as well as the transition between them. (368)

This is also a reason some scholars have identified institutional and policy configurations "relating to work and employment, including the principles underpinning employment policies (such as the priority accorded to full employment) and the extent of welfare support for the unemployed" (Heyes 2013, 73), conceptualized as *employment regimes* (Gallie 2009). Gallie (2009) names three types of employment regimes differentiated by the capacity of social partners to influence policy outcomes. Dualist regimes do not prioritize the overall employment, and only the labour market insiders are afforded high levels of employment protection (as in Germany). Market regimes do not offer much protection or benefits to any labour market participant (as in the UK). Inclusive regimes, as the name suggests, prioritize full employment and protections for all workers (as in Sweden). This suggests that the inclusion of various stakeholders in the policy process, whether through bargaining or deliberation, has a positive impact on social and employment policy outcomes. On the other hand, a lack of institutionalized dialogue, whether formal or informal, means policy is made mostly by the government, leading to regimes with minimal interventions and a low capacity to deliver sophisticated LMPs including continuous skills development programs (Heyes 2013).

Going beyond the political economies, there are also political institutions translating demands into solutions (Chapter 4). The responses to common pressures then vary based on the institutional characteristics including veto player arrangements (Tsebelis 2002), access of various actors to the policymaking processes (Gallie 2009), or the availability of venues (Baumgartner and Jones 1991) within which policy advocacy may be more or less effective. Hence, the theories and arguments presented thus far do not favour convergence in social policy, tightly coupled to the structural arrangements of states. Yet, as we discuss next, there are powerful pressures that may lead to similitude.

Paths to Convergence?

Thus far we pointed out that demographic and technological change and the processes of global economic integration are creating similar policy challenges across states. They are also generating pressures on governments to address various problems while offering policymakers possibilities for learning. As well, there are the processes of European integration unfolding at various levels across domains affecting policy outcomes of the member states. This evolving environment then gives rise to many questions, including on under what conditions may we expect convergence in regulation? What is the impact of transnational institutions on domestic politics? What circumstances impact a state's sovereignty in policy development?

Such puzzles have stimulated interest in convergence research (Heichel et al. 2005) which has advanced our understanding of outcomes in regulation globally (Mattli and Woods 2009; Drezner 2007), made progress in identifying variety of mechanisms of policy convergence in general (Holzinger and Knill 2005), or as part of the processes of Europeanisation (Knill and Lehmkuhl 2002; Bulmer and Radaelli 2005). As a result, there exist a number of theoretical approaches to predicting or explaining outcomes of various processes spanning borders. That is, processes leading to changes in commonalities or differences in public policies across nations. Specifically, this section aims to explore the research and its limits in the area of policy convergence, defined as

any increase in the similarity between one or more characteristics of a certain policy (e.g. policy objectives, policy instruments, policy settings) across a given set of political jurisdictions (supranational institutions, states, regions, local authorities) over a given period of time. Policy convergence thus describes the end result of a process of policy change over time towards some common point, regardless of the causal processes. (Knill 2005, 768)

Although convergence has a central role in the study of comparative public policy, merely finding a common ground on conceptualizing (note the broad definition above), measuring, and explaining it has been daunting. This is because of the relative complexity (and even ambiguity) of the locus of discourse involving: interactions of public, private, domestic, and transnational actors of varying power and motivations and subject to more or less apparent constraints; institutions and paradigms of different intensities; and policies which could be viewed as *systems* or individually as instruments or settings. Notably, it is the students of Europeanization, who have early recognized these complexities and began steering the attention to new ways of studying integration and its relationship to policy outcomes. Encountering such limits, a number of scholars, as we argue, begin to prepare the ground for new understandings and tools in studying policy outcomes.

Globalization and Convergence

Though globalization has been considered a driver of convergence, the pace and the extent of change continue to be debated. Indeed, a number of theories have emerged claiming to predict or explain policy outcomes across polities. Broadly speaking, the explanations crystallized around actors and their capacity to retain agency in face of structural constraints. Scholars in international relations further divide on their view of

forces behind interstate politics. Neorealist hold the economic power, rather than ideas as in constructivists' view, is the source of pressure on state-based policy developments.

These distinctions form the basis of a typology of theories with a capacity to explain policy convergence as formulated by Drezner (2001, 2007). As shown in Table 5.1, a four-cell grid captures the combinations of the above mentioned positions. The scholars asserting the dominance of structural forces (the second column), whether influenced by economic or ideational factors, are the most common (Drezner 2007). On the other hand, both the mainstream international political economy (IPE) and global civil society (GCS) theorists favour the actors' independence of choice while accepting influence of economic and ideational factors respectively (the first column). All approaches are detailed below and their assessment provided in the last section of this module.

	Agency	Structure
Economic Factors	Mainstream IPE / Revisionist	Race to the bottom/top
Ideational Factors	Global Civil Society	World Polity

Table 5.1. A typology of theories of policy convergence (adapted from Drezner 2001, 2007).

Mainstream IPE theories recognize the primacy of economic factors and the relative agency of the primary actors, the states. Within this school, there exist a variety of views on the dynamics of the international order: the institutionalist and the realist views emphasizing the role of institutions or the state respectively as the key to explanation. Institutions-oriented IPE scholars incorporate game theory models to understand the interactions between states and various supranational rulemaking entities. In this view, the types of interactions between states and institutions are more relevant than the states' intrinsic power and preferences.

Revisionist model. Responding to the limitations of the mainstream IPE approaches is the revisionist model of policy coordination (Drezner 2007). It was developed to explain regulatory outputs in the context of international regulatory regimes and transnational institutions. The model reaffirms the central role of national governments in the world-order and their strength and influence commensurate to the size of their economies but departs from the IPE approaches in the goals and assumptions. Drezner theorizes that preferences and capacities of governments are determined by their domestic situation. Specifically, the author hypothesizes that

government preferences can be derived from the visible adjustment costs that economies face under the prospect of regulatory cooperation. Economic globalization increases the gross rewards for policy coordination, but does not lessen the domestic adjustment costs that come from regulatory change. (Drezner 2007, 32)

This claim is the basis of the author's classification of global governance processes capturing the relationship between the interests of international actors and the great powers, and the associated standards. Overall, the model contributes to the understanding of roles and effectiveness of non-state actors, the extent of regulations' enforcement needed, and the existence of "club" behaviour among powerful actors.

Global civil society. While the early scholarship on global civil society was primarily descriptive, eventually scholars have been able to theorize that ideas— channelled through various non-governmental organizations, international communities, transnational networks, social movements, and others¹⁵— influence and possibly dominate the state decision-making. Drezner (2007) observes that most of the GCS scholarship is centered on the concept of a network, a set of interacting groups in voluntary, horizontal associations. There is a positive relationship between the network's density and its ability to effect change. This includes enabling multilayer governance, allowing for partial privatisation of governance, and recreating shared identities and citizenship (Scholte 1999).

Race to the bottom. The race-to-the-bottom (RTB) theory is the most widely mentioned and possibly the oldest explanation of policy outcomes. At the core of RTB is the assumption that capital and trade are mobile and sufficiently large to be beyond the control of any individual state actor. In this view, capital seeks out jurisdictions with the highest rates of return and thus operates in areas offering the lowest taxes, environmental or labour policies, and other barriers to trade. States, therefore, are compelled to engage in a race of regulatory competition for the lowest standards to attract or retain business (Drezner 2007). RTB, popular across disciplines, has been used to explain the effects of globalization, argue against decentralization, or explain policy developments in federated environments (Drezner 2006). Drezner (2006) claims there are three trends should be apparent with RTB in action: states open to global trade should have relatively lower standards ultimately resulting in convergence to the lowest-common denominator in regulation policy; a negative correlation between capital inflows and strength of regulatory standards; and states reacting to another state's adjustment of standards by making a similar policy adjustment. Although many policy areas may be subject to RTB, the research has been focused on environmental and labour standards. Drezner (2001, 2006), however, finds no empirical evidence for RTB in his evaluation of research on labour standards of Export Processing Zones (EPZ) and environmental regulation.

On the other hand, the race to the top (RTT) predicts strengthening of standards overtime. The research has thus far examined a race to the top in compulsory environmental standards in developed countries or voluntary ones in developing countries. Saikawa's (2013) unique research reveals RTT in emission regulations globally. Though Saikawa's research focuses on a different domain, the underlying dynamics are useful in understanding the RTT. The primary driver of RTT in emissions regulation is global competition and namely direct and indirect export pressures.¹⁶ In the former case, a firm that exports to a market with strict emissions standards is forced to adopt such standards if it is to retain the business. The stricter standards require investment into technology which then becomes an impetus to pressure the exporter's government to implement regulations nationally. In the indirect case, an export firm chooses to implement advanced emission reduction technologies as it seeks a competitive

¹⁵ Such as Greenpeace, World Wildlife Fund, CARE, Oxfam, but also various social resistance groups like the Occupy movement, etc.

¹⁶ Saikawa also considers factors such as learning, normative emulation, and international pressures. Learning, however, as enabled by a country's IGO membership, is the only one with statistically significant impact on diffusion in both developed and developing countries.

advantage. The government then implements corresponding standards with a goal to stay ahead or to remain competitive.

World polity. Rooted in sociological institutionalism, the world polity theory has gained a significant following since its formulation by Meyer et al. in the 1970s. An observation that education systems in Sub-Saharan Africa were very similar to their western counterparts despite the diverging needs of their local economies gave the impetus for further study. In time, the research explored other apparent similarities in, for example, government structures, institutions, civic rights policies, or stances toward the environment, namely of states with strong international links (Schofer et al. 2012). The similarities, in this view, are driven by internationally shared norms diffused by networks of various governmental and non-governmental actors, so called world polity.¹⁷ Meyer et al. (1997) explain "...world-society models shape nation-state identities, structures, and behavior via worldwide cultural and associational processes. Carried by rationalized others whose scientific and professional authority often exceeds their power and resources, world culture celebrates, expands, and standardizes strong but culturally somewhat tamed national actors" (173). In contrast to the earlier discussed realist approaches, which see states as unitary entities of varying influence, the world polity paradigm sees countries as disjointed and unstable structures. The theory thus predicts countries' policies emulating the prevailing trends as embraced and disseminated globally, rather than driven by the need of a dominant power. Hence, states grow more alike overtime, possibly accelerated by other forces of globalization.

Europeanization and Convergence

"A functioning novel polity without a state" (Sabel and Zeitlin 2010), "the most advanced form of regional integration in the world" (Terpan 2015), "a policy-oriented transnational polity and legal system" (Tuori 2016), "a community of law, a democracy, a post-national sui generis polity" (Scicluna 2015), "a multi-level political system of cooperation" (Tosun 2012), a governance system (Börzel 2012), or simply a federation (Bednar 2009) are among the many ways scholars describe the EU. Apparent from these varied definitions is the uniqueness of the European polity, different from others in its purpose, governance, constitution, and politics. Perhaps unsurprisingly there is a similar lack of consensus on what it means to study the implications of European integration, or Europeanization as it has been called.

In this regard, Featherstone (2003) identified four main foci of interest across literature concerned with Europeanization. The focus of the first category is on European history, and namely the rise of European culture and identity, and the export and adaptation to these outside of the continent. The second category is focused on "the diffusion of cultural norms, ideas, identities, and patterns of behaviour on a cross-national basis within Europe" (7). While questions range from European identity and citizenship to political culture, the concern here is not explicitly with the EU. On the other hand, the third category deals with the EU and its impacts on domestic actors and institutions. Scholars ask questions on the effects of European integration on administrative

¹⁷ Many scholars, including Drezner, use the terms world polity and world society interchangeably. There is an argument to be made, however, in favor of separating the concepts and allowing the former describe the state and the latter (civil) societal aspects of the global institutional system.

institutions, government processes, the establishment of new modes of governance, and on changes in the power relations and strategies among existing or new EU actors. Finally, the fourth and the largest area of scholarship is concerned with policy and the related national and transnational processes. Here, the research focus is on the establishment of areas of competence and the associated policies at the EU level as well as coordination, learning, and other processes influencing the development of national policies. Convergence and the conditions leading to convergence is thus of much interest for these scholars (Featherstone 2003).

While the voluminous research has not led to a shared understanding of Europeanization, it is generally taken as adaptations and responses occurring at the national level (Graziano and Vink 2007). Transnational processes, on the other hand, are within the domain of European integration. Nevertheless, the lack of consensus is revealing of a key reality: These two processes are inextricably connected and should be considered together (Menz 2008, among others). Cognizant of this reality, some scholars have reconceived Europeanization as an analytical framework, particularly needed in making sense of policy change (Bulmer and Radaelli 2005). The framework is based on an understanding that EU policy must first be negotiated and established, i.e. “uploaded” to the EU level. Only then can it be “downloaded,” or adopted at the domestic level.

How can we make sense of the downloading phase? Bulmer (2007) summarizes Bulmer and Radaelli’s (2005) “ideal-typical modes of governance in the EU” which serve as the framework’s basis (Figure A5.2):

First, where the EU has strong powers and applies them through positive integration, namely through creating a detailed policy regime such as in European Monetary Union, goodness of fit provides a good ‘default’ account of the pressures for domestic adaptation. In other words, the positive integration typically associated with market-correcting measures brings with it a strong policy template. However, secondly, in many areas of strong supranational powers, such as the market-making rules relating to the internal market, there is a minimalist policy template and considerable discretion left to economic actors in the member states. Under these circumstances regulatory competition offers a better default explanation of adaptational pressures than goodness of fit. Thirdly, there are the many areas of EU policy where supranational powers are limited or even non-existent. These include traditional intergovernmental coordination, such as in foreign and security policy as well as newer approaches to policy exchange through benchmarking and peer review, generally termed the Open Method of Coordination (OMC). In these cases Europeanisation takes place through policy coordination and the default explanation for domestic adaptation rests with policy learning. (Bulmer 2007, 43)

In sum, Europeanization may result in domestic change on account of compliance, changing internal “opportunity structures,” or by a shift in ideas and expectations (Knill and Lehmkuhl 2002). Yet, as Knill and Lehmkuhl (2002) remind us, in reality the outcomes are a result of *mixture* of these mechanisms. Interestingly, the authors note that such mechanisms are more relevant in explanation than considering a specific policy area (where, intuitively, we may expect some policy types to be more amenable to particular change).

While the above addressed the downloading side of policy, in need of explanation is also the uploading side. In this regard, there are several major perspectives on European policy, most based in the traditional models of European integration. These include intergovernmentalism, institutionalism, and various constructivist accounts (Schellinger 2016; Graziano and Vink 2007). In the first view, represented by liberal

intergovernmentalism (Moravcsik 1999), European policies are products of bargains among states. This model separates the preference setting and bargaining phases, whereby the states' preferences are first set by their economic conditions and governing parties. These preferences along with the relative strength of the state then determine the outcomes. For example, the European employment policy, the Employment Chapter in the Treaty of Amsterdam, is explained as the product of a settlement among the key powers France, Germany, and the UK, whose stances were determined by the contemporaneous political circumstances (Schellinger 2016).

The intergovernmentalist explanation sees states, rather than supranational institutions, as key to outcomes, and hence view the outcome of European integration as open, without an endpoint (Graziano and Vink 2007). This is in contrast to the neofunctionalist view that sees European institutions as the main drivers of change. Such explanations elevating institutions that both enable and constrain actions thus belong to the institutionalist tradition. While sharing the focus on institutions, the approaches may lead to competing accounts, however, as outcomes in the same area may be explained either with reference to facilitating functions of supranational institutions (such as the EC), or as rooted in historical designs and the path-dependencies these have created.

Finally, there are constructivist models, elevating ideas and understanding as major factors in Europeanization of policy. The importance of ideas—including the interpretation of problems and hence solutions, and the larger guiding paradigms which make only certain options viable—at all levels of political processes were discussed earlier (Chapter 4). And, for some, they offer better explanations of the development of select European policies than the alternatives. Schellinger (2016), for example, saw ideas as central in the emergence of European employment policy. The author first examines the development of two contrasting orientations toward employment issues within epistemic communities. Due to a confluence of events, one of these orientations came to define a new EU policy *paradigm*. Finally, Schellinger (2016) shows these views to have persisted due to preferences of actors' as well as EU institutional arrangements.

In all, the complexities of the integrating European landscape make it increasingly evident that its analyses are better served by approaches going beyond the traditional theories. It requires frameworks applied at another level of abstraction, ones prioritizing context and paying attention to mechanisms, ideas, actors, and their interactions (hence the popularity of constructivist approaches). This, as we discuss next, also becomes evident in the more advanced, more general approach to policy convergence.

Policy Convergence and Its Mechanisms

Above, we have discussed two main research camps concerned with the larger, cross-national picture. One, composed primarily of the institutionalists, emphasises differences and their persistence. The other, made up of globalization and Europeanization scholars, is focused on similarities across jurisdictions, stemming from various integrative activities, whether political, economic, or informational. There are yet other models of cross-national policy change: policy transfer, diffusion, and policy convergence. As these are often conflated in research, it may be useful to draw a line between them.

Dolowitz and Marsh defined policy transfer broadly as "a process by which knowledge about policies, administrative arrangements, institutions and ideas in one

political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system” (2000). Policy diffusion, in comparison, has two conceptions in literature differing in their scope: One sees it simply as a process of policy dispersion, whereas the other considers it a specific causal factor behind policy convergence driven by voluntary policy adoption (Knill 2005). Hence, in delineating the difference, Knill establishes that “transfer studies investigate the content and process of policy transfer as the dependent variable, while the focus of diffusion research is on the explanation of [general] adoption patterns overtime” (2005). Note this statement is in contrast to Dolowitz and Marsh's (2000) position that policy transfer can be considered both an independent and a dependent variable. James and Lodge (2003), for example, criticized this notion for its circular relationship between cause and effect, i.e. explaining policy transfer and policy failure. Separating the concepts of policy convergence and policy transfer and setting a boundary around the latter addresses this concern.

A further issue was Dolowitz and Marsh's continuum conflating various levels of coercion with types of rational reasoning involved in policy-making. James and Lodge (2003) and Holzinger and Knill (2005) note the continuum's limits in explaining voluntary policy adoption. Holzinger and Knill resolve this issue by identifying a strong set of causal mechanism associated with a particular motivation or rationale (as shown in Table A5.2 and described below).

Finally, attempting to capture differences in the content transmitted, Dolowitz and Marsh (2000) establish four “degrees of transfer:” copying (an adoption of identical solution); combination (adoption of multiple policies); emulation (transmission of ideas only); and inspiration (using model policy as inspiration for change only). Holzinger and Knill capture the notions of inspiration and partial adoption through the lesson-drawing mechanism, do not consider their combination, and interpret emulation differently.

In summary, Holzinger and Knill made notable conceptual and methodological improvements over prior research. Specifically, the key is the recognition that policy transfer and diffusion focus on processes, whereas convergence is concerned with changes in policy similarities. Consequently, we study policy convergence as a result not only of transfer or diffusion but also of different mechanisms.

Mechanisms and Factors

According to Knill (2005), convergence research can be classified into two related categories: the study of causal mechanisms behind policy change and the facilitating factors influencing the effectiveness of such mechanisms. Causal mechanisms, as identified by Holzinger and Knill (2005), include imposition, international harmonization, regulatory competition, transnational communication, and independent problem-solving. Note the first four terms could be viewed as the underpinnings of internationalization, a process describing the effects of global factors on domestic policy developments. Acknowledging the importance of each of these categories in resolving many issues inherent to other approaches, we describe them in turn.

Imposition, as the name suggests, occurs in a situation where one or more external actors compel other states into adopting certain policies. The policies may be imposed by a country or an international government organization (IGO) on another state. Due to the

nature of this mechanism, the receiving country mostly has no choice in altering the policies resulting in a high-degree of similarity. Convergence in this case depends on the number of countries involved, the nature of the policy (human rights or environment versus trade), and the level of regulation.

International harmonization describes a condition under which states voluntarily cooperate in regulatory and jurisprudential activities. Thus, harmonization differs from imposition in that it affects only countries participating in the international agreements or institutions. States may share the same issues (such as a need for interoperability in finance or communications) and may surrender some their sovereignty willingly by joining supranational bodies.

Regulatory competition describes a situation in which economically integrated countries seek a competitive advantage by readjusting their policies. States, for example, may lower their labour or environment standards (seen as barriers to trade) to attract or retain investment. This process could result in national policies converging as product of a regulatory race-to-the-bottom.

While *communication* may play a role in imposition, harmonization, or regulatory competition, their main drivers are political, legal, or economic respectively. Hence, the purpose of the transnational communication category is to encompass diverse, non-coercive mechanisms based solely on cross-national exchanges of information. This category includes lesson-drawing, transnational problem-solving, emulation, and international policy promotion (Holzinger and Knill 2005). Here, noteworthy is the placement of the long-established lesson-drawing (Rose 1991) mechanism into a larger context. The authors distinguish Rose's rational learning process resulting in action or inaction from transnational problem solving (joint development); emulation (copying with the intent to conform); or international promotion (satisfying the GCS and world polity models discussed above).

Finally, a recognition that national policies may become similar through *independent* problem-solving is an important and distinguishing mechanism from transfer or diffusion. Countries, and especially those at the similar level of economic development, face similar problems and may arrive to similar solutions independently of others.

Facilitating Factors. The effectiveness of mechanisms behind policy convergence, outlined above, may vary based on the existence of facilitating factors. The first set of factors includes institutional, cultural, and socioeconomic similarities. Institutions, and their compatibility, play an important role in cross-national policy adoption (Knill 2005). In a negative case study, Dolowitz and Marsh (2000) show how British policymakers looked to their linguistically and culturally similar American counterparts for inspiration in the creation of the British Child Support Agency. The reason behind the ultimate breakdown of this policy, the authors argue, was a misalignment among institutions (namely in the role of courts).

The second set of factors is related to policies themselves, particularly policy types and dimensions. For example, policies with greater distributional consequences differ in their convergence potential from policies not as "taxing." Furthermore, there are some claims that policy instruments have a greater chance of being adopted than ideas, which are seen as more difficult to dislodge (Knill 2005).

Towards an Evolutionary View

Many of the above-mentioned convergence theories have not gone unchallenged, opening new questions on how to approach the explanations of cross-national policy change. For example, Drezner highlights a number of theoretical and empirical issues with the mainstream IPE, world polity, GCS, and revisionist models.

With regard to the institutional stream of IPE, its overt focus on institutions precludes the possibility of non-cooperation due to conflict in actors' preferences. Also, the common emphasis on a single institution is limiting. Similarly, the state-based theories center on the global power center, the United States, which becomes a key element in their accounts of cross-national policy developments. While relevant to understanding global security, Drezner shows there are shortcomings of such theories in explaining the outcomes in political economy globally.

The revisionist model has been criticized for its disregard of domestic regulatory capacities and underestimating the potential of global civil society. And because of its specific focus on global regulation of trade, finance, and investment, the model will complement, rather than supplant other approaches needed to explain the supranational impact on domestic policy in areas such as health, education, social insurance, or innovation (Drezner 2007).

Though RTB continues to be popular within and outside of academia to support various policy arguments, there are reasonable objections to its explanatory power. Drezner (2001, 2006) highlights three assumptions made by RTB scholars, challenging its theoretical robustness: corporations will always select locales with the lowest standards; the states respond to capital demands over those of interest groups, voters, or bureaucracies; and the fact capital dominates states' economies regardless of size. Drezner shows these assumptions to be questionable and suggests the outcomes could be the opposite; that is, there may be a “positive relationship between trade flows, foreign direct investment, and effective regulation” (2006).

The GCS theories are also problematic. In his study of the impacts of the GCS on the outcomes of Trade-Related Aspects of Intellectual Property Rights (TRIPS) negotiations, Drezner (2005) pointed out some methodological issues. GCS scholars try to find and describe GCS activity at the expense of other explanatory variables. As a result its effects on policy outcomes are at best overstated, or possibly non-existent. In the TRIPS case, the author concludes that although the GCS had an impact on intellectual property rights policy, the role was exaggerated. He argues for the existence of other frames beyond the public health frame created by transnational activists (Drezner 2005).

Finally, Drezner (2007) levels two main critiques against the world polity perspectives. First, similarly to GCS, there are methodological issues in determining causation. For example, trends in participatory activity in broader domains at the global level are used as the determinants of more specific “forms of policy coordination” (18). Second, the theory leads scholars to overstate the effects of ideational forces and suppress the importance of other factors. Among the many counterexamples is the evidence of institutional path dependence in countries with a legacy of self-governance (Drezner 2007). In such cases, world polity approaches come short in predicting policy and institutional outputs.

Hence, we have a number of theories, each providing a level of explanation for convergence due to trans-national factors, yet each, too, carrying its own empirical concerns. As Drezner (2007) concludes:

The literature on global civil society is correct in asserting that globalization has increased the number of nonstate actors in world politics. The world polity approach is correct in pointing to the proliferation of intergovernmental organizations and agreements that dot the global stage. The race-to-the-bottom argument dramatically overpredicts its primary hypothesis, but provides some empirical leverage in highlighting the possibility of regulatory slack. The state-based approaches make more sensible assumptions, but can suffer from a narrowness of theoretical and empirical vision. (25)

Given thus the variety of factors and processes at play in policy outcomes across the globe, it would be deceptively convenient to seek a satisfactory explanation of relative change in any one these theories. In fact, scholars willing to move beyond these theoretical boundaries are finding a different picture.

Consider Bulmer's (2007) example of passenger air transport liberalization in the EC. The author considers the role of globalization, Europeanization, and international agencies—often used individually to explain convergent outcomes—in understanding how the UK and Germany ended up with a deregulated commercial airline sector. Partly inspired by the US deregulation of the said sector, some European governments began to proactively push for deregulation. Given the EC did not have competence over these policies, governments took their ideas to a relevant transnational conference, the European Civil Aviation Conference (ECAC), while also establishing bi-lateral agreements. These, however, were found in breach of rules of competition by the European Court of Justice (ECJ), making the EC (and later the EU) a key actor in this area. An ensuing series of legislative acts at the EC level ultimately resulted in the deregulation of air transport. Importantly, the roles in and postures towards liberalization differed among countries, with Germany, unlike the UK, liberalizing only due to action at the EU level. Hence, as Bulmer (2007) argues,

globalisation, bilateralism, Europeanisation and the role of international agencies and bilateralism (here ECAC and the British/Dutch governments) were closely inter-twined. The threefold classification of drivers of policy convergence may not be so discrete in empirical accounts as is the case analytically. The air transport case is by no means exceptional in this respect. Comparable circumstances also applied in other utilities sectors, although the exact balance between the dynamics differed.

And given that starting from these broad theoretical positions leads to an exaggeration or misidentification of causes of policy convergence, Bulmer argues for process tracing of transfer of policy (while advancing a policy transfer framework).

Policy convergence in the EU area, as Bulmer explains, is often a product of intertwined factors, only one of which is Europeanization. To demonstrate the added complexity, let us consider the development of the politico-legal dimension of Europeanization, the polity's constitution. According to Tuori (2016), the EU contains not one but at least three constitutions: those of the individual states; the European constitution consisting of a varied set of sources of constitutional norms and doctrines, as well as constitutional law; and the constitutional space combining the two. The constitution of the EU is thus quite unlike the traditional constitution of a state, a singular legal

document, concerned primarily with the rules of the political and legal system. Given the “universality of the political and legal claim to authority” (Tuori 2016) of state constitutions, a codification of specific policies is neither necessary nor practical, it is left to legislatures. This cannot be said of the EU system operating at an intersection of the national and transnational. As a result, the EU constitution is defined by a variety of political and economic treaties, regulations, directives, and legal precedents set by the European courts.

Tuori (2016) argues the European constitution can be understood as having several dimensions, each of which could also be taken as its separate instantiation: juridical, political, economic (with distinct macro and micro economic dimensions), social, and security constitution. These dimensions have evolved asynchronously, though *not separately*, from each other. The author thus contends that the European constitution must be viewed as a “multidimensional and multitemporal process of constitutionalization.”

This ongoing process is thus non-linear, punctuated, and accelerated by various crises critical to the development of the EU as well as its constitution. Five such events can be identified (Tuori 2016) since its establishment: the empty chair crisis along with the Luxembourg compromise in the 1960s that gave the impetus for the juridical constitution; the German reunification and the Maastricht Treaty in the early 1990s that accelerated the political and (macro)economic constitution; the terror attacks of the 2000s that pushed forward the security constitution; the Eurozone crisis in 2010 which altered the (macro)economic constitution; and the recent refugee crisis expected to affect the security as well as the economic constitution (possibly by altering the flows of people across the European space).

Moreover, Tuori (2016) observes each time period to be defined by a prominent constitutional dimension, in turn reshaping other dimensions. Hence, the period of the EU establishment following the signing of the Founding Treaties of Paris (1951) and Rome (1957) is one of microeconomic and the associated juridical constitutionalization. By rejecting much of the Council’s legislative capacity, the Luxembourg compromise (1966) elevated the role of the ECJ thus building up the juridical constitution. Maastricht times (1992) were dominated by political constitutionalization while creating a new macroeconomic constitution (the Economic and Monetary Union). Finally, the macroeconomic and security constitutions have been in prominence in the recent decade on account of the Eurozone and refugee issues respectively.

We may drop yet a level of abstraction lower, and, through the discussion of some landmark ECJ cases show the less salient facets of constitutionalization. *Viking* and *Laval*, for example, are not only notable as cases where the ECJ set precedent in its ruling on the conflict between the right to establishment and free movement of services, and the right to take to take union action to enforce domestically-negotiated collective agreements; they are also known for the clashes of interest among national governments, businesses, unions, and many advocacy groups and coalitions at different levels (more in Lindstrom 2011). These dynamics reveal an environment that is not only far from homogenous and unpredictable, but also one where the social, the juridical, and the economic spheres come together in various ways as part of the complex processes of constitutionalization and, more broadly, Europeanization.

Given the above discussion, it is not difficult to observe that integration scholars have struggled to establish *causality* in outcomes, particularly in the institutionally-dense and highly coupled European context (Exadaktylos and Radaelli 2002). As one scholar explains:

Cause and effect in the 'Europeanization' process can be deceptive: for example, relatively 'small' and technical EU obligations may have widespread domestic ramifications in certain settings and be a subterfuge for further changes. Further, the relationship between structure and agency is by no means simple. Actors can be of different types: individual, collective, or corporate. Within the process of 'Europeanization', structure and agency are best understood as being inherently relational concepts. Agency within the 'Europeanization' process is not only structured, but may also be structuring, as actors 'lead'. Dauntingly, the study of 'Europeanization' does not fit easily 'the language of dependent and independent variables and the logic of regression analysis'.¹⁸ Transformation may occur on the basis of 'a multitude of coevolving, parallel and not necessarily tightly coupled processes'.¹⁹ (Featherstone 2003, 4)

Featherstone, as do authors mentioned earlier (Chapter 4), takes the note of the non-linear nature of interventions into social systems, and the interrelated, co-evolving nature of their constituents. It is no coincidence these observations are made in context of Europeanization, a set of boundary-spanning processes involving interacting actors at different levels interpreting information flows in varied contexts, and *giving rise* to different forms of organization (e.g. networks and communities) and shared meanings, all with feedback dynamics. As we will discuss (Chapter 6), admitting to irreducible emergence and non-linearity makes explaining both change and inertia in institutions (and other social phenomena) highly challenging. Interventions into these systems may have disproportionate outcomes due to feedback loops (Chapter 1, 6). Chronology is thus also an issue, as the response may not come in timeframes that are intuitive.

This is not to say that all puzzles are facing the same empirical challenges; traditional theories may work well in research concerned with discrete, relatively insulated subjects (for example studies of independent bodies such as the ECJ and ECB and their interfaces with outside actors). Yet, studies of the origins and change in policies, encapsulating rules, values, and ideas (Bulmer 2007), and inherently of systemic nature, face deep challenges. To cope with these, scholars have sought new perspectives, such as critical realism (Bache et al. 2012 in context of Europeanization), which are cognizant of some of these realities. Arguably, progress in policy research (and political studies more broadly) must be sought outside the box. This may begin with a view seeing policy (organizational and economic, and like systems) as evolutionary. In the next, concluding section we explain better this view and its disciplinary rationale.

Conclusion

This and the prior chapters started deliberately with the traditional views and their challenges and took the reader through to the more recent approaches, increasingly sensitive to the special properties of policy (and social) systems and the challenges with causality these pose. This trend is no coincidence, as new technologies and institutional arrangements are giving rise to a growing number of CAS (Chapter 1, 6), pushing

¹⁸ Quoting Olsen (1996, 271).

¹⁹ Quoting Olsen (1996, 271).

existing theories (despite their number and variety) and methods over their limits. Our goal, as apparent from these presentations, was to prepare the ground for a new view making further progress possible.

Just as their counterparts from other domains, contemporary policy studies set out to identify causes and connect them with effects, all in pursuit of two overarching empirical and theoretical goals. The first is the desire to *predict*, or gleam insight into the future by extrapolating trends. Can we expect the institutional differences among countries to persist? We know that polities have over time developed different institutional structures, maintained by various feedback loops and dependencies. This also means that stakeholders will have different needs (for example, as they do not experience the same risks across polities) demanding, in turn, different solutions. Hence, it is perhaps expected to anticipate persistent divergence in the trajectories followed by social policy makers. Yet, as Beramendi et al. (2015) argue, “the key distinction for the current development of advanced capitalism is that between the (Northwestern) core countries and the (Southern) periphery. Compared to the gap between these two sets of countries, all other distinctions that have dominated comparative political economy so far pale to relative insignificance” (382). This opens a number of empirical questions on how to assess differences and what time frames are relevant. As a result, we may establish convergence at one level of analysis, divergence at another, or a disjoint development altogether. Since there is a lack of common ground and, as discussed earlier (Chapter 3), comprehensive measurements, there will ongoing debates over these matters. The more fundamental issue, however, is whether outcomes in social systems can be predicted. We have hinted to the answer to this question at the outset (Chapter 1; more in Chapter 6). And we made a further point here that outcomes are dependent on the ever-evolving context, challenging the sweeping (universal) theorizing and diminishing our predictive capacity. What can we do to advance?

The second broad quest is one of *explanation*. How can we explain the adoption of (dis)similar policies across jurisdictions? Why do countries adopt solutions seemingly inappropriate to their condition? Not to forget, how can we explain the apparent non-responses or inactivity in face of pressures to change? Thus far we have painted a picture of social policy reforms driven by factors with roots both inside and outside of national borders. For some scholars, these may include demographic and technological shifts, demands of neoliberal globalization, or the emergence of transnational political order, all extending pressures on policy makers. Others may focus on actions and motivations of domestic elites and use these to explain the many atypical social policy outcomes (Chapter 4). And there is no shortage of theoretical models that may be leveraged in explanation, in turn challenged on conceptual, methodological, and empirical grounds—surely hinting to the variety within and complexity of the social world. The efforts to seek generalizations do not seem to abate in their intensity, however, despite the fact that scholars are beginning to discern a different picture of the social world—one in which causality is elusive at best. To us, the key to progress is found in another frame of reference, one justifying new approaches and new priorities for research.

We may begin with a (re)conception of policy as an evolutionary system, inviting us to think differently about the social systems around us. Hence, we can embrace the view of policy as a set of instructions associated with one or more goals (a code created for purpose). Both are informational constructs depending on actors’ interpretation and

execution in a particular context that is far from static. The goals may change over time with changing environment and with newly created tools and knowledge; so may the instructions, which may change either reactively or proactively.

The established sets of instructions, in other words policy designs, may not be efficient or optimal and neither are the mechanisms in determining their fitness (intent in this view is marginal). This is due not only to the *unpredictability* of the effects the instructions may have; it is also because choices depend on prior decisions and trajectories (instructional histories). The reason for both is that instructions are related to other instructions producing various interactions and dependencies with each other and the environment.

Fitness is established by their *interpreted* capacity to achieve the intended goals. Instructions may experience changes slow or abrupt; they may be reinterpreted or replaced due to the continually changing context. Though parameters of these designs are indeterminable, their development is systematic, following regularities identifiable over time. A view not unlike one assumed by a student of biology is thus useful here, an approach inspired by the evolutionary theory, or, more specifically, its *generalization*. While there is a little possibility for formalizations, universal laws, and predictions, there are new tools which can be tapped for explanation, design, and even a type of forecasting. We begin to engage these in the next chapter which opens the second part of this study.

Chapter 6. Public Policy and the Edge of Knowable

The peculiar trail of progress in political studies left by periodic debates between the competing schools of thought over the last century tells an important story. Invariably, as one perspective becomes prominent, the others recede into the background or take a back seat to their rival. In one view, the first half of the century has seen clashes between the idealist and realist schools of thought, followed by the often uncomfortable debates between the behaviouralists and traditionalists, positivists and post-positivists, and most recently among those in the rationalist and reflexivist camps. Curiously, it has been politics, and more generally geopolitics, rather than sensibility that has determined the prevailing view. This has been quite apparent in the United States, where, for example, the "encounter with totalitarianism" in the 1950s and 60s, offered a powerful motive to reject the state apparatus as an independent source of influence, and thus as a subject of analytical interest (Cieply 2000), in favour of individual actors and their preferences. It was only the salient failures of the mounting policymaking activity of the 1960s and 70s that led to a refocus towards the state and its institutions. Yet as perhaps expected, as the calls of those who wanted to "bring the state back" into analysis (Skocpol 1985) were answered, others, aiming to take a class-oriented view, were left on the sidelines (Cammack 1989).

Throughout, the leitmotif of the dominant paradigms in social sciences has been to follow natural sciences in their reductionism and in the emphasis on observation and measurement and hence in the preference of correlational methods. These ostensibly value-free perspectives became convenient vehicles to carry out various political agendas (Hawkesworth 2006) while constraining the range of inquiry. To be sure, there have been attempts at diversification, for example in the form of the *Perestroika* movement, which have fast shown their limits. What accounts for such inertia in social sciences? The current state of play, we believe, is mostly due to the lack of a consistent engagement with the fundamental assumptions about the nature of social systems, ultimately challenging the adequacy of the conventional views. Rather than unarticulated or taken for granted as these mostly have been, all assumptions should be made clear at the outset of all social science research. In this way, scholars may begin to realize that an alternate meta-theory, one that does not assume away the special properties of social systems, is not only more suitable but also necessary as we seek innovative ways to understand and solve issues in governance and regulation while accounting for the limits to the knowable in the increasingly complex environment of today. Among the chief aims of this module is to advance this view in the way we study, influence, or make public policy. Guided by a different frame of reference, the new view unlocks a set of related conceptual and practical tools expanding our horizons in how we understand and effect change in policy, and social systems more broadly.

The argument is developed across three related parts. The first part begins with a challenge to the key assumptions defining the prevailing worldview in social sciences. This provides an opening to the discussion of an alternate frame of reference changing significantly the way we view and study the social world. This perspective reveals the limits to what may be known and done about outcomes in social systems, and leads us to appreciate their dynamics. Section two thus opens with an example of such dynamics as evidenced in the historical patterns of politico-economic development in the United

States. At the same time, we recognize that technologies, both tangible and intangible, including policies, are at the core of these developments. We hence make the case to view these systems through the shared lens. Part two closes with an example of an evolved approach to policy, a novel “technology” reflecting an updated understanding of social systems. The approach is also relevant in section three exploring a set of novel tools developed in innovation research and their application in the study and development of policy. Ultimately, we argue policies, as other creative systems, exhibit patterns in their evolution. This promises to provide a better insight in policy research, including in comparative studies as well as more specific research such as welfare state modernization.

Part I. Alternate Views

Assumptions in Social Sciences

Among the persisting questions in political studies is how to explain the creation and consolidation of democratic regimes. Acemoglu and Robinson's *Economic Origins of Dictatorship and Democracy* (2005) can be seen as one of the more prominent attempts to provide an answer. Privy to the magnitude of this assignment, the authors employ Occam's razor, an idea championed early by an English friar-philosopher William of Ockham, stating that "entities must not be multiplied beyond necessity."

Given the complexity of the issues with which we are dealing, we frequently make use of this principle in this book not only to simplify the answers to complex questions but, perhaps even more daringly, to also simplify the questions. In fact, in an attempt to focus our basic questions, we use Occam's razor rather brutally and heroically. We abstract from many interesting details and also leave some equally important questions out of our investigation,

explain Acemoglu and Robinson (2005, 16). The authors thus embark on their study informed by a non-scientific heuristic which has been applied for centuries across disciplines in guiding inquiry. Occam's razor has been used to simplify the object of study, as in the case of Acemoglu and Robinson. It has also been invoked to adjudicate among several theoretically grounded explanations of a given phenomenon. The most parsimonious explanation is to be preferred over one which appears complex or excessive.

On display here is a philosophy that all sciences can be *reduced* to physics, that is, we can understand all complex phenomena in terms of the properties and interactions of their constituent elements. Impressed by the successes of reductionism in physical sciences, whose fundamental laws elegantly describe the tangible realities, scholars across sciences have thus been driven in the same direction. In social sciences, this reductionism became an analytical drive either downwards to an individual level, as in the rational choice theories, or upwards to larger abstractions, as in the structuralist approaches (Walby 2004). Scholars have thus been welcome to condense a set of complex social interactions—which unfold over time within different institutional contexts among numerous factions with varied interests and interpretations—into parsimonious models. Acemoglu and Robinson model a contest between two economically motivated groups, the citizens and the elites, ultimately arguing that

conditions leading to democracy, including the level of inequality, economic stability, or the ability to organize, are predictable. But can political, economic, socio-cultural, and other complex systems be reduced into a few elements and their outcomes reliably predicted?

Pierson's work (2000a, 2000b) hints at an answer to this question. Speaking in context of formal institutions, Pierson (2000b) points out the shortcomings of the predominant explanations of their origins—mostly viewed as useful products of intentional, far-sighted actions of rational agents. The author shows that even if we concede the (unlikely) instrumental behaviour of institutional designers who plan for the long-term,²⁰ institutions carry extensive *unintended* consequences. "[W]e should expect that social processes involving large numbers of actors in densely institutionalized societies will almost always generate elaborate feedback loops and significant interaction effects which decision makers cannot hope to fully anticipate," explains Pierson (2000b, 483). The author also points to the difficulties with the *functional* views of institutional evolution, and shows that institutional learning and enhancements are not only difficult but also constrained by the grip of path-dependence, self-reinforcing feedback mechanisms limiting available options. "Actors do not inherit a blank slate that they can remake at will when their preferences shift or unintended consequences become visible," adds Pierson (2000b, 493). Thus to make progress in the understanding of institutional origins and change, Pierson calls for a new approach taking into account "dynamic processes that can highlight the implications of short time horizons, the scope of unintended consequences, the emergence of path dependence, and the efficacy or limitations of learning and competitive mechanisms" (2000b, 494).

Similarly, Weyland (2002) discusses the limitations of the prevalent (rational choice) theories as applied to Latin America, and its very complex, diverse, and dynamic political landscapes. These approaches, as the author argues, place too much emphasis on elections and parliaments and microfoundations and overestimate the impact of formal rules (also in Hall and Taylor 1996), hence providing an inadequate explanation of institutional origins and change. "Politics seems too complex and context-dependent to fit general laws. Causal heterogeneity often prevails as factors that are decisive in one setting have less impact in others," observes Weyland, inviting us to expand our toolkits in the quest for solving the difficult puzzles of the socio-political outcomes (2002, 78). Thus as these and other scholars recognize nonlinearity, multicausality, emergence,²¹ nonadditivity, path-dependence, and the importance of context—key elements of complexity research—as integral to explanation in their domains, they begin, if not necessarily conspicuously or completely, assume a different frame of reference. The goal of the next section is to provide a fuller picture of this paradigm informed by complexity research and the study of complex adaptive systems in particular.

²⁰ While these assumptions are mostly challenged in politics, scholars in economics and international relations have drawn on the mechanism of "credible commitment" (North 1993) to support the feasibility of bargains for the long-term (Pierson 2000b).

²¹ The use of the term as well as the assumptions behind emergence in social sciences remains contested. Here, it is used here to mean the formation of macro-social phenomena irreducible to properties or behaviours observed at the micro-level.

Complex Adaptive Systems

There exist multiple perspectives on complexity in social sciences, not the least due to its relative novelty and its inherently transdisciplinary application. Let us begin by pointing out the ongoing confusion with chaos theory, a formal study of behavior in deterministic dynamical systems, and complex systems research or CAS. There are historical reasons for this as, according to Sawyer (2005), systems thinking has made it into social sciences in three different waves. Parson's cybernetics-inspired structural functionalism, and systems and chaos theories defined the first and second waves respectively. The third wave is the contemporary CAS-driven focus on emergence, and the relation between the individual, social, and interaction levels of analysis (more in Sawyer 2005).

Hence for clarity, it is important to describe and differentiate CAS class of systems from those complicated, chaotic, and closed. A key starting question here is: What is the structure of a complex system and how does it behave? Complex systems are composed of *many* networked objects or agents that are *interacting*. A large number of agents or interaction rules are fundamental—necessary but not sufficient, however—features setting complex systems apart from those that are merely complicated. The interactions may be physical or informational, taking place primarily among neighboring agents or groups of agents. Extended interactions are possible with signals generally transformed, i.e. attenuated or intensified en route. The interactions are *nonlinear*, where the output is disproportional to the input, and *recurrent*, where the feedback involving one or more agents can occur in reinforcing or inhibiting loops. Also, the agents' actions are constrained on account of their histories and thus their present choices cannot be understood apart from their past ones (Cilliers 1998; Johnson 2009). This path-dependence, as we will discuss, is among the key insights of this line of research. Given the nonlinearity, feedback, as well as temporal considerations, the behavior of the agents, and by extension of the system, is sensitive to *initial conditions*. This means that even a miniscule change in initial conditions can lead to dramatically different outcomes. Note the characteristics presented thus far could be subsumed under *chaos theory*, a stream within dynamic systems theory seeking deterministic models of systems behaviors, which provided an impetus for the study of complex systems.

There are several important properties distinguishing CAS from the above perspectives. First, complex systems lack a clear boundary separating them from their environment and other systems, rendering them *open*. Unlike closed systems, assumed to be self-contained for analytical convenience, the environment becomes a critical determinant of CAS. Second, CAS operate in states that are far from equilibrium, moving in parts or as a whole between disorder and order. Such transitions are crucial as they allow us not only to understand change but to manage and possibly steer CAS (Johnson 2009). Third, the interactions between the system components, each individually unaware of the totality of the system in which it operates, give rise to a variety of unpredictable, *emergent* phenomena. "When we look at the behavior of a complex system as a whole, our focus shifts from the individual element in the system to the complex structure of the system. The complexity *emerges as a result of the patterns of interaction* between the elements," explains Cilliers (1998, 5, emphasis added). Importantly, this implies there is no "invisible hand" or central coordinator that organizes the agents and orchestrates emergence (Johnson 2009). Finally, CAS have the capacity to self-organize which

"enables them to develop or change internal structure spontaneously and adoptively [sic] in order to cope with, or manipulate, their environment" (Cilliers 1998, 90). This self-organization is itself a property emergent from the interaction of networked agents, their ability to retain information and learn through feedback loops. Hence, we say the systems are adaptive.

Social Complexity: Theory and Practice

We set out in this project to make the case for a new view on change, enhancing both the theory and practice of policy development. Policies are products of social systems into which they are intended to intervene; and understanding how policies are created, how they function, and evolve depends on our assumptions on social systems, including the macro phenomena and their connections to the micro elements. We argued that any advanced understanding of policy requires us to admit that social systems are complex and adaptive, as are other evolutionary systems, demanding commensurate frameworks and tools. We have thus briefly introduced CAS and discussed their key properties, including nonlinear dynamics, self-organization, sensitivity to initial conditions, and multiple-equilibria, setting such systems apart from their mechanistic counterparts. If these properties make CAS difficult to study in biological and ecological environments, social CAS pose even greater challenges, both in theory and practice. This is due to a number of their unique characteristics, enumerated below by Helbing (2012).

1. The number of variables involved is typically (much) larger (considering that each human brain contains about one thousand billion neurons).
2. The relevant variables and parameters are often unknown and hard to measure (the existence of "unknown unknowns" is typical).
3. The time scales on which the variables evolve are often not well separated from each other.
4. The statistical variation of measurements is considerable and masks laws of social behavior, where they exist (if they exist at all).
5. Frequently there is no ensemble of equivalent systems, but just one realization (one human history).
6. Empirical studies are limited by technical, financial, and ethical issues.
7. It is difficult or impossible to subdivide the system into simple, non-interacting subsystems that can be separately studied.
8. The observer participates in the system and modifies social reality.
9. The non-linear and/or network dependence of many variables leads to complex dynamics and structures, and sometimes paradoxical effects.
10. Interaction effects are often strong, and emergent phenomena are ubiquitous (hence, not understandable by the measurement and quantification of the individual system elements).
11. Factors such as a large degree of randomness and heterogeneity, memory, anticipation, decision-making, communication, consciousness, and the relevance of intentions and individual interpretations complicate the analysis and modeling a lot.
12. The same applies to human features such as emotions, creativity, and innovation.
13. The impact of information is often more decisive for the behavior of a socioeconomic system than physical aspects (energy, matter) or our biological heritage.
14. The "rules of the game" and the interactions in a social or economic system may change over time, in contrast to what we believe to be true for the fundamental laws and forces of physics.
15. In particular, social systems are influenced by normative and moral issues, which are variable.

Source: Helbing (2012, 3)

The task of studying this environment is largely with sociologists, economists, or students of politics or political economy. Working from a variety of traditions, these scholars study the relationship between social systems and their constituents with hopes of explaining the origins and change of institutions, cultures, and organizations as well as the roots of social and individual lapses, among others.

For the structuralists, the key to analysis of this environment is its structural properties. This approach sees material resources, rules, hierarchies, and other social structures as the determinants of actors' behaviour. For the individualists, it is the intentions, rationality, and actions of individual actors that are sufficient to the understanding of global characteristics. Others argue that structures and actors are both integral to analysis and must be considered together. Still, for other scholars, there exists a crucial causal layer in between the individual and the structure—the level of interaction. The interaction approach, with its focus on communication, processes, and mechanisms, thus offers an innovation over the deterministic perspectives, as it is better able to deal with contingency and change (Sawyer 2005). In all, these views—which can be classified into the Structure or the Interaction Paradigm (Sawyer 2005)—derive from reductionist assumptions neglecting the kind of irreducible complexity of social systems. Overton (2015) speaks to the implications: "Whether the atoms of inquiry were the material *particles* of the early physicist, the *genes and DNA* of later day molecular biologist, the *neurons* of the neurophysiologist, the *elements of consciousness* of the early structuralist psychologists, the *responses* of the later behavioral psychologists, or the *output* of contemporary cognitive psychologists, these were the bedrock material elements that, interacting in linear combination with causal forces, generated the illusion of transformational change and complex organization" (15, emphases original). Hence, in the social realm, phenomena arising from complex social interactions as well as the environment within which these interactions take place are treated as aggregations of individual interactions. This implies that "all compositionally complex structures and systems can be explained, without remainder, by appeal only to the properties of their simplest components" (Mitchell 2012, 24). As a result, we can have "a privileged level of description in which all levels of complex structure and behaviour can be restated and thus reduced" (Mitchell 2012, 23). This is contrary to the complexity view which sees global properties, or emergent phenomena, as irreducible (and unpredictable), forcing us to revisit a range of ontological and epistemological assumptions, and even rethink how we view science.

Before we engage these assumptions, let us briefly discuss two key contributions of complexity research taking some matters from the realm of philosophy into the realm of science, furthering this the case for the importance of the alternate worldview. The first were the Gödel-Turing-Post discoveries of "incompleteness and algorithmically unsolvable problems, where, for the first time, the logical impossibility limits to formalistic calculation or deductive methods were established" (Markose 2005, F160). To show the limits to computability meant to explain that novelty production (or self-organization more generally) in complex systems was an emergent process that could not be understood by an appeal to their individual parts (Markose 2005).

The second development were advancements in computing technology enabling Holland-Bak-Arthur to employ computer models in simulating interactions of many autonomous agents and to obtain insight into system behaviours (Markose 2005).

Enabled by multi-agent systems (MAS) technology, these simulations were a powerful innovation over the prior approaches to modeling social systems, enabling the study of the emerging, macro-structural phenomena (more in Helbing 2012). The results of even the basic of simulations reveal that “objective structures can emerge, and the existence of those structures can constrain individual agents (via changes in patterns of local interactions), even when agents have no internal representations” Sawyer (2005, 161). Moreover, they demonstrate “that when the agent communication language changes, the processes of emergence change, and the global properties that emerge often change as well” (2005, 170, emphases added). These are important findings as they challenge both the predominant, methodologically individualist explanations of emergence and the postmodernist views—in which structures are not real.

The said research thus provides an empirical basis to a position that “individual-society relation cannot be explained without recourse to sophisticated theories of communication and of emergence from communication” (Sawyer 2005, 191), requiring a different paradigm and methods. This can be found in the Emergence Paradigm, Sawyer’s synthesis of the Structure and Interaction Paradigms, both deficient in addressing the micro to macro links. The Emergence Paradigm introduces two intermediate levels of social reality, stable and ephemeral emergents, between the individual and structure, emphasizing the mechanisms of emergence and interactional processes (Sawyer 2005, 191). Specifically, the approach “argues that the causal power of emergents cannot be explained solely in terms of individuals’ representations of them, their demonstrated orientations to them, or their subjective interpretations of them. Properties at higher levels have autonomous causal force. They are unintended emergent effects, and they are causal even when individuals have no knowledge of them,” as the author explains (Sawyer 2005, 191).

<p>Social Structure (Level E) Written texts (procedures, laws, regulations); material systems and infrastructure (architecture, urban design, communication and transportation networks)</p>
<p>Stable emergents (Level D) Group subcultures, group slang and catchphrases, conversational routines, shared social practices, collective memory</p>
<p>Ephemeral emergents (Level C) Topic, context, interactional frame, participation structure; relative role and status assignments</p>
<p>Interaction (Level B) Discourse patterns, symbolic interaction, collaboration, negotiation</p>
<p>Individual (Level A) Intention, agency, memory, personality, cognitive processes</p>

Table 6.1 The Emergence Paradigm (Source: Sawyer 2005)

As shown in Table 6.1, the paradigm uses a stratified ontology, dividing social reality into 5 levels, each involving different phenomena. It separates what has been traditionally generalized as structure into levels C, D, and E, distinguishing between the “dynamic and processually emergent” (211) properties at levels C and D, and the largely stable emergents existing in “objective material form” or “codified externally through writing technology: schedules, project plans, organizational charts, procedural and operations manuals, audit procedures, legal codes, constitutions” (219) at level E.

The approach is consistent with social realism, admitting to the existence of social structures with independent causal powers. Moreover, it assumes we can discover and explain these causal forces drawing on a range of more or less evolved tools and methods, including computational simulation using MAS. Many of the Emergence Paradigm’s features, such as its ontological depth, are shared with critical realist approaches (Sayer 2010; Sayer 2000), seen also by some as providing a fitting philosophical underpinning to the complexity view (Byrne 1998). Critical realism sees reality as consisting of the real, the actual, and the empirical, separating “the realm of objects, their structures and powers,” the implications of these powers when activated, and their observations and measurements respectively (Sayer 2000, 11-12). “A crucial implication of this ontology is the recognition of the possibility that powers may exist unexercised, and hence that what has happened or been known to have happened does not exhaust what could happen or have happened,” explains Sayer (2000, 12). Scholars thus carry out context-specific explanations (hence accounting for open systems), seeking to identify causal mechanisms and analyzing if and how they have been activated (Sayer 2000). Causality does not follow the linear cause and effect model, precluding prediction; explanation is possible, though as part of an ongoing process of search and refinement.

We briefly discussed critical realist and the more recent Emergence paradigms, the latter representing the theoretical and methodological state of the art and its limits. The value of these CAS meta-theories lies not in answers, but instead in their conception of the features and properties of social reality and our study of them. CAS challenge the role science held since the times of Newton—that of a predictive endeavour—and compels us to embrace a more accommodating view of scientific inquiry, where explanation and description play an equally important role. Moreover, such approaches bring subjectivity (in delineating system boundaries) and “irreducible uncertainty” (in CAS behaviour) to the foreground (Kupers 2014, 20), forcing us to make explicit our assumptions and make *pragmatic* judgments.

Concerned, as we are here, with policy, and not only with its study but its design and implementation, we must also think in practical terms.²² What can we *effectively* know about the world?

And, moreover, given these limits, how can we move forward in the study and analysis of policy? Viewing the social world through the prism of CAS and their application promises answers to these questions. Consider complexity policy scholars Colander and

²² Note further that the Emergence Paradigm is concerned with levels A to D of its ontology. It views Level E phenomena, including in them policies as well as “technological and material systems of a society,” as relatively fixed and “not subject to normal social emergence ... because their emergence from interaction is lost to history” (Sawyer 2005, 219-221). This hence demands a different approach, a macro theory of historical emergence, though policies, we might argue, require a special treatment. Policy origins and change involve a number of processes (including post-enactment politics) which are, in some areas highly dynamic, and involve other phenomena, such as shared rationalities (Chapter 4), from Level D.

Kupers (2014), who identify a set of CAS *patterns* relevant to policy and its design. One of them, also briefly engaged above, is chaos and nonlinear dynamics. Though chaos has over time taken on many meanings, it can be understood from the perspective of complex adaptive systems, said to exist at the “edge of chaos,” as a phase of disorder. It may also refer to chaos theory that, as mentioned, has shown that nonlinear dynamical systems are very sensitive to initial conditions. And given such systems are closed and deterministic, we should, in theory, be able to calculate their outcomes. This, however, is not practicable. Colander and Kupers (2014) explain the implications of sensitivity to initial conditions to how we approach policy:

For one, such an effect makes forecasting difficult, if not impossible, as you can’t link cause and effect. For another it means that it will be very hard to backward engineer the system— understanding it precisely from its attributes because only a set of precise attributes would actually lead to the result. How much time is spent on debating the cause of a social situation, when the answer might be that it simply is, for all practical purposes, unknowable? (115)

Indeed then, engaging difficult policy questions, we are faced with *parts* of the social world that are either theoretically calculable or altogether unknowable. Practically, however, there is often no meaningful difference among these. Advancement in the study of social systems, and particularly where it matters most, in policy, thus leads us to a rethinking of our approaches to analysis and design. Perhaps we can begin with another look at the behaviour and properties of CAS, where we find patterns of complexity that become a key to understanding. Such patterns reveal conditions, frequency, and anatomy of change, and point us to the tools to study change. In what follows, we assume the complexity lens as we take a different look at social and economic change. We begin with scholars who recognize some of these patterns in their analyses, though more or less privy to CAS. Ultimately, we argue, similarly to others (Colander and Kupers 2014), we can leverage patterns and see policy development policy differently. Finally, we can connect the dots in the broader disciplinary space, expanding our understanding of policy change.

Part II. Creative Systems

Patterns of Change in Socio-Technical Systems

In his analysis of historical developments in the United States, George Friedman (2009) observed a pattern of game changing social and economic crises “defined by the struggle between a declining dominant class linked to an established economic model and the emergence of a new class and a new economic model” (122). Occurring with a surprising regularity, the crises bring about shifts in the leading worldviews and significant political and policy change. At a high level, demographic and economic change creates problems which cannot be handled using existing structures, leading to a crisis and its resolution. “Over the next generation, the solution to the old problem generates a new one, which intensifies until there is another crisis and the process repeats itself,” notes the author attempting to explain these cyclical historical processes (121).

Friedman has thus identified five such cycles unfolding since the founding of the American republic, discussed in turn. The first five decades of the young nation

experienced a rising conflict between the needs and views of the wealthy founding class and the underprivileged and increasingly numerous immigrant settlers. The 1828 election of Andrew Jackson, a leader representing the interests of the new classes gradually gaining in their political strength, concluded the first cycle. “Jackson’s predecessors had favored a stable currency to protect investors. Jackson championed cheap money to protect debtors, the people who voted for him” (123). The second cycle thus saw an increasing affluence of farmers, now able to turn profit and save, and the rise of small towns. But low interest rates, appropriate in the times of early westward expansion, became an obstacle to investing the savings and growing the economy. The 1876 election of Rutherford B. Hayes, whose administration pushed for the gold standard to control inflation and provide sound currency, brought to an end the second cycle and opened a new era of investment and industrialization. This third cycle was defined by fast growing industries throughout the country. City migration and immigration that accompanied industrialization changed the demographic balance along with the political fault lines. As well, the investor-friendly policies “encouraged savings and investment but limited consumption and credit,” diminishing the purchasing capacity of workers to buy products, in turn affecting the manufacturers making those products (124). This ultimately led to the Great Depression and the rethinking of economic policy.

The 1932 election of Franklin Roosevelt began the fourth cycle, taking the country through a set of social policy and regulatory reforms and other projects (the New Deal), the war, and the post-war economic growth. The priority became employment and consumption, both of which were also the goals of the New Deal and the post-war policies. Wage and employment protections combined with high-taxes, however, reduced investment and curbed economic growth. The stagflation, a situation of low-growth and inflation, became resistant to and exacerbated by the traditional interventions focused on stimulating consumption.

Assuming presidency in 1980, Ronald Reagan thus saw the beginning of the fifth cycle. The new recipe was supply-side economics, reduction of taxes in order to encourage investment. Reagan also saw the transfer of political power away from the cities into suburbia, with its wealthier professional and business classes borne of the post-war economic policies and advantaged by the new economic policy. This shift in focus meant Reagan “was seen by some as betraying the heart of American society, the cities, and the soul of American labor, unionized workers,” notes Friedman, adding that “Reagan had no more choice in the end than did Roosevelt or Hayes or Jackson. Reality dictated this evolution” (126).

Finally, if the above five instances are an indication, we find ourselves nearing the beginning of the sixth cycle that could begin in a decade. This means “the current structure of American society is in place until approximately 2030, and that no president, regardless of ideology, can alter the basic economic and social trends” (127). But it also follows we are to expect a catalyst, a set of issues forming the roots of the next crisis soon. Friedman sees demographics (the historically unprecedented shortages of labour will lead to inflation and fiscal issues in supporting retirees), energy (the unsustainability of hydrocarbon resources), and the declining productivity growth as its driving trifecta (2009).

To some readers, these cycles may be reminiscent of more general wave-like patterns, an idea made prominent by political economist Joseph Schumpeter. Known as

Kondratiev waves, such cycles, thought to span about fifty-years, have been used to describe the economic development trajectories of industrial countries.²³ While the notion did not (yet) gain a broad purchase, it has found support in the field of evolutionary economics (Chapter 7) as its students also recognized that technology carries implications to institutional innovation. Speaking of some key work in innovation economics, Hård and Jamison (2013) explain:

For Freeman, the long waves were characterized by different "technoeconomic paradigms," and he and other economists in the 1980s looked to the emerging information technologies as the central core for a wave of industrial development. The technoeconomic paradigms were seen as structuring devices for the economy as a whole, and they were related to different core technologies and supporting innovations, as well as involving different sorts of institutional frameworks. (55)

Importantly, as Hård and Jamison add, the low points of the waves are also "characterized by rather intense intellectual, cultural, and social activity," (55) giving rise to "influential intellectual responses to technological development, identifying problems but also pointing to new solutions" (55-56). It is from these challenges to the status quo that emerge the defining ideas of the next cycle.

While the above interpretations can be contested, not the least on the duration of the cycles, they are presented here with two goals in mind. First, they highlight the relationship between society, technology and the economy. Explicating the connection between the latter two, a prominent complexity scholar begins by defining the economy "as the set of arrangements and activities by which a society satisfies its needs" (Arthur 2009). These constructs may

include hospitals and surgical procedures. And markets and pricing systems. And trading arrangements, distribution systems, organizations, and businesses. And financial systems, banks, regulatory systems, and legal systems. All these are arrangements by which we fulfill our needs, all are means to fulfill human purposes. (Arthur 2009)

Arthur thus sees all such *purposed systems*, which include both devices and methods, as technologies. "As the collective of technology builds, it creates a structure within which decisions and activities and flows of goods and services take place," a structure we understand as the economy (Arthur 2009). Of course, there are feedbacks between the economy and technology, where the economy affects technology, in turn recreating the

²³ This scholarship can be situated in a broader evolutionary theorizing in social sciences informed by biology and systems theory, much of which emerged from the aforementioned second wave of systems thinking. Inspired by the work of biologists Maturana and Varela (1992) on autopoiesis, or self-production of systems through their co-evolving subsystems, Luhmann (1995) and later Jessop (2001) theorized long-term social developments in terms of key function systems. Autopoiesis was also used by Arthur (2009) in understanding technologies as "creations of history," where "every technology stands upon a pyramid of others that made it possible in a succession that goes back to the earliest phenomena that humans captured." Also prominent is Wallerstein's (2004) world-systems theory focused on explaining the politico-economic development of the last 500 years, later extended to historical macro-analyses more broadly (Denemark et al. 2000). Finally, scholars, including Reed and Harvey (1992), began to conceive of the social world as a kind of a dissipative system existing far from equilibrium and transitioning from chaos to order based both on exogenous and endogenous factors. The goal was to appreciate the novelty generating mechanisms in the social order. Overall, the theme is to view the social world as a set of co-evolving elements, or subsystems, and to find structure or structuration mechanisms in its long term development.

economy. It is important to note, however, these cycles can be discerned only over extended periods of time (Arthur 2009), as shown in Friedman's (2009) example.

This brings us to the second aim of the above discussion: To demonstrate the complex and adaptive behaviour of social and economic systems, with implications to understanding change. As hinted, such systems evolve from phases of disorder towards periods of order and stability. That is, from a phase when technology gains purchase and enters the growth phase to its depletion and a period of instability. It is during the phases of disorder that novelty is created allowing in time for major change.

Evolving Policy

The above sections have focused on complexity research and its guiding paradigm and discussed their implications to our study of the world. We have also hinted at the relationship between technology and the economy, coevolving complex of systems purposed to address the needs of the society (Arthur 2009). Among the questions which come to mind is what policy system or paradigm is the next step in its evolution. And, more fundamentally, is there some order to policy change? May we, over time, expect policies to improve in their effectiveness? Before we answer these questions, let us look briefly into a possible future of public policy.

David Osborne, the author of "Reinventing Government" (1993) (and a book with Gaebler), begins his article with a proclamation of a historic and revolutionary government transformation in progress. The author then provides a set of intuitive and appealing principles of entrepreneurial government. Briefly, Osborne argues for government that is catalytic, one that steers rather than rows; community-driven, one empowering rather than serving; competitive, one with less public monopolies; mission-driven, one with less rules and more missions; results-oriented, focused on outcomes and not inputs; customer-driven, one enabling choices; decentralized, one in which information flow allows independence and freedom to make decisions that best fit locally; and one that is market-driven. Though these simple recommendations on improving public sector performance were soon met with many rejoinders, they could teach us much about regulation, particularly following the global financial crisis. In a departure from the conventional debates on what rules have to be changed or added to avert another crisis, Paul Romer (2012) advanced a solution channeling some of these principles. The proposal was partly inspired by Myron Scholes's observation that "[a]symptotically, any finite tax code collects zero revenue" (2012, 112). This, what Romer calls, Myron's Law describes a reality where a set of fixed rules will always be rendered ineffective by the actions of opportunists quick to find loopholes to their advantage.

Romer thus argues for a regulatory system which *evolves* in response to the fast changing world, shaped by the adoption of "new technologies, increases in the scale of social interaction, and opportunistic attempts at evasion" (2012, 112). This is especially important in domains which are global, large scale, and highly technical. Hence, rather than taking a process-oriented approach, which provides a codified set of processes to be followed (and which are open to being gamed), the regulatory rules in finance should be centered on *goals*. Indeed, this is not a new model as there are domains which have used these alternate systems with success. We can thus find inspiration in aircraft

manufacturing, for example, where the Federal Aviation Administration (FAA) specifies outcomes and holds individuals responsible for decisions leading away from these outcomes.

The general requirement that the FAA places on a new plane is that the manufacturer demonstrate to the satisfaction of its examiners that the new airplane is airworthy. The examiners use their judgment to decide what this means for a new type of plane. Within the FAA, the examiners are held responsible for their decisions. This changes the burden of proof from the regulators of a new technology to the advocates of the technology and gives FAA examiners a large measure of flexibility,

explains Romer (2012, 116). Instead of discrete checklists to be followed by the FAA and the manufacturer, there is a set of objectives: to demonstrate the airplane is and *continues to be safe to fly*.

Similar systems, as Romer reminds us, are implemented by the U.S. Army to ensure combat readiness or by the Federal Reserve to provide economic stability. These organizations share the same type of hierarchical structure designed to promote responsibility. People at the lower levels of the hierarchy have the authority and responsibility to respond quickly in order to meet the stated goals. Instead of relying on courts to challenge the enumerated processes, a time and resource consuming effort, individuals closest to the issues are given the authority to decide if acts meet intended outcomes. The superiors in turn make judgments and decide on the adequacy of their performance. Finally, at the top of the hierarchy, are appointed administrators accountable to the people through the Executive and Legislative branches of government (Romer 2012).

While Romer admits there is space for the traditional, rule-centric policies, the author, after all writing in response to the financial crisis, argues to establish a better system of regulation. And, with its updated assumptions on the behaviour of social systems, the complexity paradigm opens new possibilities for thinking about policy and governance. Specifically, Colander and Kupers' (2014) work on reframing policy is an important step forward in this context, not the least as it opens a new view on the purpose and goals of policy, including on the role of policymakers and the government. The authors recognize that our thinking about policy as well as the behavior of people and organizations has been influenced by economics and its assumptions on individuals making rational choices; economic systems exhibiting linear, predictable behavior amenable to control; markets operating independently of governments; or unchanging institutions. These simplifications inform, what the authors call, the standard policy frame giving rise to two ideational centers of gravity and setting the boundaries for all discussions about policy.

Hence, debates on policy revolve around two contrasting views: the market fundamentalist position which sees self-organizing and efficient markets working ideally without state interference, and the dominant government control position where government intervention becomes essential to functioning markets (Colander and Kupers 2014). In this view, the government is needed to address market failures such as negative externalities, informational asymmetries, lack of competition, or public goods, and to stabilize the economy. The underlying problem here, as Colander and Kupers note, is that both views neglect crucial realities, including not just the nonlinear dynamical qualities inherent to economic systems but also the institutional characteristics, norms and morals,

various feedback effects (for example herding), irrational behaviors, and the idea welfare may have other than material dimensions.

Cognizant of these shortcomings, the authors advance the *complexity frame*, a new paradigm for thinking about economics and policy more generally. It is based on a recognition that the institutions of the state “developed to assist the market, and theoretically are as necessary to the functioning system as the market” (46). If markets and governments are functionally and analytically inseparable complex systems, we must revisit our approach to control and regulation. Assuming the complexity frame, according to Colander and Kupers, thus means a change of thinking along several dimensions. First, complex social systems cannot be fully understood nor controlled but rather *influenced*. This can be done not only through traditional incentives but also through a conscious approach to shaping the institutional development. Also, as hinted, markets and governments are complementary rather than opposite systems, and, by extension, properly operating markets are the result of properly developed market institutions overtime. Yet rather than the development of *specific* policies and rules, the aim is to design the right *ecostructure*, an environment “within which people operate and the normative codes that they follow” (182). The focus is on evolution of both top-down policies establishing the ecosystems and bottom-up policies emerging from them. Hence, there is no policy prescription to advance, or preferred policy model, as decisions are always made in context of the changing environment. Finally, path-dependencies, nonlinearities, and lock-ins, inherent to social systems, can be recognized and managed through an appropriately designed policy approach (Colander and Kupers 2014).

We now return to Romer and his proposal for a new model financial regulation, an approach not unlike the complexity frame. Here, rather than to produce specific rules and regulations—whose mere interpretation might lead to undesirable behaviors—the government would establish a set of goals to be met. At the same time, it would create an environment of empowerment and accountability, ensuring practices and outcomes were aligned with the desired goals. In these examples, many of the key goals, such as flight safety or trading system stability, are relatively agreeable and unambiguous. Others, however, may be less clear and evolve dependent on the circumstances. “Actual goals emerge from vague conceptions of goals, and a too early formal specification of goals, as top-down control structures require, can undermine the emergence of society’s actual goals,” recognize Colander and Kupers; complexity frame is thus “also about a better way to determine what those goals actually are” (2014, 215).

Policy and Technology as Creative Systems

Thus far, we have discussed CAS offering an alternate set of assumptions for the study and regulation of social systems. More practically, we have explored some works reflecting this worldview, analyses suggesting the existence of regularities in the evolution of social systems while identifying technology, embedded in the broader social and economic environment, as the key driver. We have also introduced an alternative take on policy, a new system for governance and regulation informed by the same worldview. Bringing these together leads to important questions on evolution in policy systems and its possible logic and direction. Thinking of policy as technology will help us answer them, as we will discuss.

Not the least due to historical legacies, technology has a variety of conceptions. A more narrow definition is technology as applied science. We must appreciate, however, that “most of the technology in the world is not science based; it is largely empirical in nature,” just as it has been prior to the rise of science (Martino 1992, 1). As well, following from our discussion above, we recognize that our technologies go much beyond physical systems. We thus understand technology as “the tools, techniques, and procedures used to accomplish some desired human purpose” (Martino 1992, 1). This means that human institutions including norms and cultural elements are also technology, a social technology. Hence, we can follow DeGregori, and view technology more generally as a tool, a solution to a problem that involves “the use of ideas to transform the material and nonmaterial world” (1985, 35).

We can thus go further, and, as does DeGregori, equate technology with policy. This is as policy “is created to solve problems; it is transferable, produces winners and losers, and can be created to improve on previous policies that respond to old problems or to handle new and challenging ones through trial and error” (Williams 2009, 450). Moreover, Williams’s (2009) comparison of DeGregori’s (1985) and Rose’s (1993) views on how technology and public policy respectively are developed, “reveals that the invention processes and by-products of public policy and technology are often indistinguishable” (450). This also means the way policies are adopted and technologies transferred, in response to a shared set of issues yet with adjustments to a particular context, are similar processes (Williams 2009). Finally, both technology and policy are subject to various feedback loops and path-dependencies (Pierson 2000a), constraining choices and favouring some sets of options over others.

Technological and institutional innovations, however, open new possibilities lessening the grip of the path-dependent processes or bringing their trajectories to an end. Consider, for example, the classic examples of the VHS system and the QWERTY keyboard. The former is a winning technology that has relatively quickly been supplanted by a series of innovations in home video. These products were new solutions, independent of VHS and its commercial path. And QWERTY, a layout that is viewed by some as locked into permanence is also being challenged by the fact users can now easily select their layout of choice through software. What is more, in both examples, there is an emerging paradigm shift away from devices, such as storage discs for video capture and distribution, or keyboards for data entry, towards cloud computing and new modes of interactivity with digital devices including voice control.

Going further, we may think of policy as a socio-technical, or what we call creative, system. These can be defined as systems, *whether physical or informational, created for purpose and shaped by human creativity, imagination, and learning*. Public policy is developed to address a particular problem, a social construction which can be made only once the society has the intellectual or technological means to do something about it (Stone 1989). Policy formulation and implementation, and ultimately its outcomes, depend largely on other systems including those of governance and enforcement and on technologies, which pose both a challenge and an opportunity. And the evolving technology drives not only the economy but also changing rules that may be created or updated to reduce social risk, obtain a competitive advantage, or regulate technology. Importantly, whether we speak of welfare, employment, or financial regulations, policies themselves must be viewed as collections of instruments, together

constituting solutions, programs, or, as discussed, regimes. Creating possible complementarities and contradictions, policies exist in concert with other instruments, legacy or new, all dealing with a common set of issues. Studying how technological systems evolve can thus help us understand better developments in policy and thus obtain insights into policy change.

Part III. New Tools

From Innovating to Directing Evolution

Whether motivated by the need to develop a competitive advantage or to enhance their effectiveness in delivering services or products, organizations have sought to assert a better control over their future. This demanded improving both the problem solving and prognostic capacities, particularly critical with the rising intensity and importance of technology over the last century when the success of firms, and indeed whole nations, have come to depend on innovation. Various innovation and forecasting tools have hence emerged, though of limited utility given their reliance on subjective inputs.

Starting from a belief that innovation processes could be improved, Genrich Altshuller set out in 1946 to conduct a systematic analysis of technical patents from across the globe. His findings led him to a formulation of the Theory of Inventive Problem Solving, or TRIZ (Altshuller 1984, 1999), built on the premise that “technological systems evolve not randomly but according to objective patterns of evolution” (Clarke 2000, 133). Having examined to date over two million innovations, history of technology, and research into the evolution of markets, practitioners have refined and expanded upon this work adding various tools and methods, building up the capacity to shape the evolution of technological systems (Clarke 2000). Out of the range of tools developed for forecasting and innovation (more in Rantanen et al. 2018), it is important to highlight the two central ones, the Patterns of Evolution and the associated Lines of Evolution.

As hinted, it has been found that rather than random, change in technological systems exhibits certain regularities. These have been analyzed and classified into eight Patterns of Evolution (Zlotin et al. 2011; Clarke 2000): Stages of Evolution, Nonuniform Development of System Elements, Evolution toward Increased Dynamism and Controllability, Increased Complexity then Simplification, Evolution with Matching and Mismatching Elements, Evolution toward the Multilevel, Evolution toward Decreased Human Involvement, and Evolution toward Increased Ideality. Thus, for instance, creative systems tend to grow in complexity, which is followed by a phase of relative simplification, all the while retaining or expanding their functionality. Since higher complexity means greater costs, lower reliability, and a potential for more harm, simplification while maintaining the requirements leads to a greater *ideality* (Rantanen et al. 2018, 72). The concept of ideality, more formally “a ratio of a system’s useful effects and harmful effects” (Clarke 2000, 140), is central to evolutionary conception of technological innovation.

Related to the Patterns of Evolution are Lines of Evolution found at a lower level of systems abstraction. Currently, more than 400 of such evolutionary sequences have been identified, together serving as a comprehensive guide through the solution space.

This is because, as part of inventive design, the Lines of Evolution “provide a means to fill in the gaps and thus envision the possibilities” (Clarke 2000, 142). In sum, both of the regularities can be used “to find hints about how any situation could be improved and to obtain suggestions about how the system could be changed to become more ideal” (Rantanen et al. 2018, 15). An introduction of additional tools and methods led to the development of Directed Evolution, “a systematic approach aimed at identifying a comprehensive set of potential evolutionary scenarios” and at deciding and implementing one or more of such scenarios (Zlotin and Zusman 2001, 19).

Directed Evolution thus means a shift of focus from predictive innovation to strategic evolution of systems. This first requires obtaining a thorough understanding of the historical development and the present condition of the system, an analysis based on a number of assumptions and tools both shared with and complementary to the evolutionary and complexity work discussed here.

It has long been observed that the growth of natural and technological systems is bounded, often following S curve, or logistic, trajectories. Growth in these systems is thus first slow, then takes off and accelerates, before it slows down and tapers off. Observing S curve growth in human populations, scholars of long term change have, for example, been driven to examine “the dimension of population and its interrelations with the other features of the world system,” such as environmental sustainability (Chew 2000, 219). Others have used S curves to conceptualize the growth and, more prominently, in forecasting of the developments in many social, cultural, and economic phenomena including incomes, school attendance, output and consumption, energy use, engine performance, or patenting activity (more in Smil 2019). And in Directed Evolution, the S curve was used to help identify the stage of evolution in a system and its elements.

As hinted, these tools derive from a number of assumptions, the key of which, in this context, is nonlinearity in evolutionary systems. Such systems, as was discussed, alternate between phases of stability and growth following the periods of decay, crisis, and resolution, reflected in their S curves. For example, a declining growth pattern indicates that a chaotic phase, a period of change, is near (although we cannot know its onset), while accelerating growth suggests system is entering its stable phase (thus enhancing our predictive capacity) (Linstone 1999).

A system may be replaced by a new system or, adapted, (re)enter its pattern of growth. Progress is thus a cyclical process, which can be expressed by a series of S curves “with stable growth followed by bounded randomness followed by stable growth, and so on” (Linstone 1999, 82). It was found that unpredictable behaviour occurs at each end of the curve, as “[i]ncreasing obsolescence or inadequacy of an established pattern leads to a critical situation where a minor event can suddenly push the system into chaos” (Linstone 1999, 80). Such regularities may also be discerned at the socio-techno-economic level and connected more broadly to the Kondratieff cycles. Figure 6.1 displays past and projected global per capita energy consumption as a series of S curves. Two possible future scenarios are shown: an efficiency scenario in which energy consumption per capita levels off and the long-wave scenario indicated by a new growth pattern (Ausubel et al. 1988). While this is a very general example of patterns of development, we may appreciate that a detailed analysis of related subsystems complemented with other data can tell us much about the nature and direction of change.

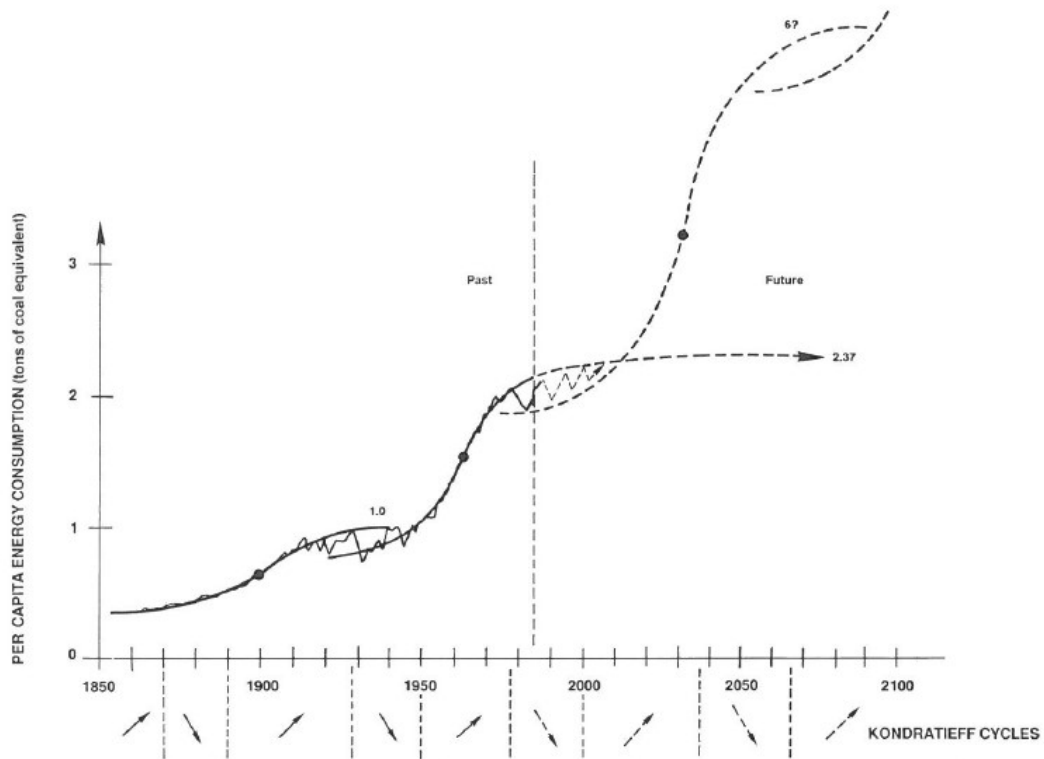


Figure 6.1 Past and projected global per capita energy consumption visible as a series of S curves. The periods of discontinuities and growth coincide with Kondratieff cycles charted below (Source: Ausubel et al. 1988).

As well, practitioners and policy makers recognize that human organizations, such as states or companies, also evolve through stages of stability (alternating between centralization and decentralization) and instability, and information technology is now inextricably tied to this development (Linstone 1999). Understanding such coevolution and making changes to optimize the organizational structures has the potential to enhance innovation and competitiveness. Although working from a different starting point, scholars have, for instance, explored the emerging complementarities among the university, industry, and government, the so-called triple helix, seen as key to growth in advanced economies (Etzkowitz 2017). This and related work would benefit from paying closer attention to innovation research presented here, to both appreciate the ongoing nature of these transformations and set them in a broader evolutionary context.

Finally, evolutionary perspectives on progress reveal not only its patterned characters, but also that it stems from “the conjunction of order and chaos, stability and instability, self-organization and chance” (Linstone 1999, 88). The practitioners thus want not only to be able to identify the phases correctly but also to know the conditions under which transitions occur. Especially important is a better grasp of what happens during the innovation-determining chaotic phase. For example, in cases of early competing technologies we know the winning product is not necessarily the best product, but rather one able to capitalize on “network externalities,” such as its greater

compatibility with existing products (Arthur 1994). How can these externalities be leveraged (namely within ethical and legal bounds)?

In sum, emerging from our discussion of different streams of evolutionary research and practice is a common theme: there are regularities in the development of evolutionary systems which can be leveraged in both study and practice of change. The next section provides an introduction to the Patterns of Evolution in socio-technical systems.

Public Policy and the Patterns of Evolution

The previous sections explored some cyclical patterns in the evolution of social and economic policy in the context of the United States, and in the evolution of the economy as observed more generally, and explored one possible step in the evolution of policy. Informed by the complexity worldview, this can be considered a glance into the future of regulation, a paradigmatic change in policy systems.

A point was made that transformative change is a product of struggles between competing “technologies” in the context of a changing environment. It generally occurs at a point of depletion of existing solutions, a crisis. To be sure, scholars have identified other types of technological and policy change (Dicken 2011, 76; Hall 1993) affecting systems whose evolution is more or less dynamic. Here, we go beyond these as our concern is innovation, an outcome of an evolutionary process of trials made within the limits of past choices, yet punctuated by paradigm-shifting events opening new possibilities.²⁴ Below, we return to the eight Patterns of Evolution we applied to policy (summarized in Table 6.2), offering both a new insight into policy change and a fundamental tool in design and development of policy. We provide examples from the past and present, and, drawing on the complexity policy we discussed above, discuss possible future steps in the evolution of policy designs.

Pattern	Description	Example
Stages of Evolution	Evolution of a policy system follows an S curve.	Keynesian policy systems matured in the 1960s and saw their decline and replacement in the ensuing two decades.
Nonuniform Development of System Elements	Each component of a policy system has its own S curve, producing contradictions.	The ALMP component of Danish flexicurity developed asynchronously from the flexibility and transitional security policies.
Evolution toward Increased Dynamism and Controllability	Policy systems tend to improve in their capacity to perform intended functions and manage processes.	Evolution towards the <i>complexity frame</i> for policy. Replacement of process-oriented with goals-oriented policy.
Increased Complexity then Simplification	Programs alternate between phases of functional complexity and simplicity.	Transition from the discriminatory, rules-ridden schemes of social-relief to universal systems with minimal conditionality.
Evolution with Matching and	The elements of policy systems	Deployment of public service

²⁴ Also, in March and Olsen (1989), who note a stabilizing effect of institutions in this process.

Mismatching Elements	are combined in various ways throughout the lifecycle to meet goals.	algorithms with inadequate privacy protections and remediation mechanisms.
Evolution toward the Multilevel	Starting from top-down, macro-solutions, policy systems become distributed and increasingly responsive at multiple levels.	Transition from hub-and-spoke to network model of training development and delivery. Individualization.
Evolution toward Decreased Human Involvement	Relying increasingly on technology (social, automation, etc.), policy solutions tend to depend less on human involvement.	Reducing the need for juridical interventions by allowing discretion and negotiation throughout policy execution.
Evolution toward Increased Ideality	A policy system tends to increase its ratio of positive to negative effects.	Alternate means of public service delivery expands the range of services while stimulating efficiency.

Table 6.2 The Patterns of Evolution as discerned in policy systems

Stages of Evolution. The evolution of a policy system, sets of related interventions aimed at achieving one or more objectives, follows a nonlinear, S curve trajectory. This means all policy systems can be located at a particular stage in a lifecycle, starting with an introductory or slow growth phase and continuing with a take off and growth, maturity, and the decline and replacement phase. The nonlinear growth is due to the complex adaptive behaviour of policy systems, where systems alternate between periods of stable growth and novelty-generating instability. Moreover, the nonlinearity results from various feedback effects causing lock-ins and path-dependent growth, constraining the frequency of major shifts in policy (Chapter 7).

Nonuniform Development of System Elements. Each component of a policy system has its own development trajectory, a particular S curve. As subsystems, these “system components reach their inherent limits at different times, resulting in contradictions (paradoxes),” addressing of which leads to qualitative improvements (Clarke 2000, 140). An apt example here is the development of the Danish system of flexicurity, where the active labour market (ALMP) component was added only after the flexibility and transitional security components, and its developments were initially independent of the other sides of the “golden triangle,” as the model has come to be called (Madsen 2008).

Evolution toward Increased Dynamism and Controllability. Policy systems tend to improve in their adaptability and the capacity to manage processes and meet their intended outcomes. Consider the complexity frame, which recognizes the complementarity of the top-down and bottom-up approaches to policy. In an example of regulation of social media—platforms whose impacts are far from clear to policy makers and hence difficult to regulate from the outset—we would like both to have a way to establish the right regulatory goals (decide if social media are publishing companies, virtual forums, or special purpose enterprises serving public interest) and to create the right top-down structures to allow for regulation against these goals.

Increased Complexity then Simplification. Policy systems alternate between phases of growing complexity (increasing number of rules, processes, and functions) and simplification (where similar outcomes can be achieved with less), though maintaining or

improving their capacity to achieve outcomes. As Rantanen et al. (2018) explain, “[t]he parts of the system become more interactive with each other. The system is expanded and convoluted. It is improved by adding more and more features, then combining all the features into a new, simpler system that has all the benefits without all the complexity” (15). The German pension system, once built entirely upon the relatively simple pay-go instrument, serves as an example. Reforms, taking place between 1992 and 2004, have diversified the design into “a highly diversified system” consisting of “on a combination of minimum pensions, regular insurance benefits, and capitalized funding” (Häusermann 2010, 3). A forward looking example is the case of financial regulation (as discussed in section Evolving Policy). In its traditional process-based form, such regulation leads to increasing complexity (and posing increasing demands on maintaining compliance) and of limited effectiveness. A simplified solution, the goal-based approach, sets goals and provides for appropriate structures empowering stakeholders to enforce these goals.

Evolution with Matching and Mismatching Elements. As resources, knowledge, or innovations become available, elements of policy systems may be (re)combined in various ways throughout the lifecycle in order to reduce inefficiencies or meet the desired goals. A usual sequence consists of “(i) unmatched elements; (ii) matched elements; (iii) mismatched elements; and (iv) dynamic matching and mismatching” (Clarke 2000, 141). One example is the deployment of public-service algorithms in welfare administration, specifically in monitoring and compliance, as done by Udbetaling Danmark, an agency tasked with dispensing public benefits. The algorithms create lists of suspect recipients who can be investigated for compliance by officials at the Danish municipality level (Mchangama and Liu 2018). And, in this case, the agency has been able to circumscribe the policies for the protection of personal data. The lack of visibility into how these algorithms operate and what data they access, and the associated lack of remediation procedures, result in policy contradictions. These are unmatched elements waiting to be matched, evolving with it the Danish welfare policy and its outcomes.

Evolution toward the Multilevel. Given the limits to centralized, macro-solutions, policy systems become increasingly distributed and responsive at local or individual levels. Consider, for example, public or private systems of skills development, which have traditionally developed in an uneven manner (Rantanen et al. 2018). “A training program can be segmented (transition to microlevel) and integrated to larger systems (transition to macrolevel). Programs tend to expand and then inevitably be compressed so that efficiency is maintained or increased,” note Rantanen et al. (2018, 15-16). This dynamic is reminiscent of the Danish system of vocational training delivery that, in 2010, established 13 VEU centers tasked with regional coordination of training institutions in providing “a more stable and flexible supply of continuing vocational education” (Cedefop 2019). In 2017, an agreement was reached to create a new system which is to replace the hub-and-spoke VEU model with a network of individual partnerships between institutions, now taking on different roles in program development and marketing.

Evolution toward Decreased Human Involvement. Relying increasingly on technology (which may include social technologies such as shared beliefs) and automation, policy solutions tend to depend less on human involvement. Here we may return to the example of the application of computing technology, and now big data and artificial intelligence (AI), in delivery and enforcement of public services. Less apparently, consider the 1973 US *Endangered Species Act* (ESA), a legislation depending

solely on regulation in protecting biodiversity. Aside from its coercive nature and focus on the private sector rather than the state to share the costs of protection, among the central issues with the legislation was its use of nondiscretionary language. This meant that resource consuming litigation between private individuals or businesses and the government took a central role in the disputes between the stakeholders resulting in almost “legendary economic and political costs” (Illical and Harrison 2007, 390). The possibilities of a better functioning solution become particularly evident when contrasted with the *Canadian Species at Risk Act* of 2002, for which the ESA served as a primary source of negative lesson drawing (Illical and Harrison 2007).

Evolution toward Increased Ideality. Policy systems produce both positive and negative consequences. The overall direction of system outcomes is towards greater ideality, represented, as noted earlier, as a proportion of good versus adverse effects. Without a doubt, assessing ideality poses as extra challenge in open systems, as compared to their closed counterparts, not the least as assessing consequences is highly dependent on the system’s context, the socio-technical environment constantly in flux. For example, a system of generous unemployment benefits with little or no conditionality has less adverse implications to both labour markets and the public budgets at times of low unemployment. With changing economy, facing, for example, structural challenges, a different policy, one combining conditionality with skills development, may yield an equal or greater ideality. Yet, we can assess ideality also in a broader historical context of, for example, the welfare state development. What began as dual-track systems of social and health insurance, often exclusionary or punitive, became universal, tax-funded systems providing a universal standard of care. Here, the trend of reducing adverse effects while increasing positive ones is clear.

Conclusion

As we try to study and understand policy outcomes, crises, or various social phenomena, we are increasingly cognizant of the difficulty in sustaining the conventional assumptions in social sciences. Rather than a result of purposive actions of strategic actors (Hall and Taylor 1996), who often underestimate uncertainty and the wide potential of unintended consequences, change may be a result of trial and error, or even inaction. While deep change could be seen as a product of slow, ongoing processes, policy paradigms are subject to greater structural forces permitting shifts only at particular points of social and economic cycles. Just as in technology, making policy is often a matter of incrementalism, as we are more likely to witness minor alterations, such as adjustments to instruments and settings. If we accede the goal of policy, and technology overall, is to solve a particular set of problems—and with time do it better—we can assume policy systems *evolve* towards ideality. And with this, we must ask a different question of policy making—a question on the *structure* of policy change. Would we arrive to better solutions, including ones within new paradigms, faster with an evolutionary understanding of policy?

This long-term, evolutionary view of policy opens doors to updated assumptions and new possibilities and tools in studying progress (Chapter 7). We can thus extend our understanding of the *what* in policy change. Moreover, assuming the complexity frame of reference offers a complementary view on *how* policies change. Hence, we now speak of

socio-technical coevolution, in which, for instance, we observe social organizations, such as states or companies, evolve through stages of order and chaos, stability and instability, or differentiation and integration, with technologies as drivers of these processes (Linstone 1999). These insights go beyond technology planning and force us to rethink the role of policy and policymakers altogether, pointing to the next stage in the general evolution of policy. In this article we have shown that updated assumptions open new avenues to studying and developing policy—offering rationale for evolutionary views of policy and giving us a glimpse of the future in policy development. This surely invites more research drawing on the tools for which we have made a basic case in this module, novel instruments that have thus far seen valuable application in other domains.

Chapter 7. Towards a Unified View of Evolutionary Change: Theory and Application

A passenger traveling in the New York transit system at the turn of the 20th century would be subject to an experience hardly fathomable in contemporary America. To speed up departures and reduce crowding at the stations, transit operators used special attendants, then called “sardine packers,” to prod passengers along the platforms and into the cars, often with force and without much regard to human safety.²⁵ Despite some early legal challenges, these methods were used for decades, even in other US cities. How was this possible? One does not have to travel through time to get a better sense of such interventions. Uniformed and equipped with white gloves, the platform staff of Tokyo’s train and subway system stand ready to push people into rail cars so that their doors can be closed. Their priority is expeditious travel and punctuality. To be sure, the *oshiya*, as they are known, have less work today than a few decades ago. In the 1970s, Tokyo’s rush-hour trains were packed to over 200 percent of their capacity, demanding extra effort on part of the pushers. Today, following major expansions in the overall transport capacity, institution of policies providing incentives to travel at different times, as well as the country’s economic slowdown, the peak loads have been reduced (Schaefer 2000) and, with these, the need for large numbers of *oshiya*. Nevertheless, the passengers of the Tokyo subway, still among the busiest systems in the world, can continue to expect an attendant’s push in case of congestion. And while platform attendants have been employed in coping with various overflows in other cities around the world, Japan and, increasingly, China stand out in how these policies are implemented.

Though at first glance peculiar, the above example serves as an important illustration of a complex of developments, where shared challenges may lead to both similar and different solutions, all dependent on various factors. In each case, technology, culture, policy, and economics come together in different ways leading to shared choices and, in time, very different outcomes. Consider that in both cases the growing urban economies created significant pressures on public transportation systems, exacerbated by the fact that most industrial passengers did not have the option to travel off-peak. As adding capacity is not only expensive but also subject other constraints including the physical ones, a solution was found in special staff steering people along at the expense of safety and comfort. A constellation of economic change, innovations, and changing attitudes made it possible to begin to limit, or, as in the US case, eliminate such interventions. Though in the latter case these policies became culturally unacceptable, it is not possible to know if and how the same may occur in Japan.

As apparent, such outcomes cannot be explained solely by cultural differences, forcing us to consider a set of interrelated strands, society and technology developing together within the context of the broader economy (Steinmo 2010). We may further begin to recognize these shifts may be unfolding in a systematic manner, given, for example, that more sophisticated policies aiming to change travel patterns en masse cannot be implemented if a large part of the local economy demands that participants work in similar or the same work schedules. Finally, we may thus observe that the emerging arrangements may not be optimal, and possibly far from intended, yet

²⁵ Drawing on ABCNews, “Professional Pushers Shove Passengers Onto Busy Tokyo Train,” and Wikipedia.

developing in a general direction of increasing refinement. Indeed, viewed this way, such dynamics are not unlike those witnessed in evolutionary biology.

As, in the previous modules (Chapter 4, 5), we engaged work in comparative policy and studies of policy outcomes, more generally, we found select scholars encounter such a multi-dimensional environment with outcomes not amenable to explanation with conventional models of politics and policy; they thus call to broaden our theoretical and methodological horizons. Heeding these calls, we went beyond the convention in Chapter 6, offering an alternate way to view the social world and, with it, to understand policy. We also advanced an alternate interpretation of change based on an evolutionary understanding of socio-technical systems. The goal in this module is to go further both theoretically and practically. *What is an evolutionary thinking in policy studies? Can we extend this thinking and obtain a unified view of evolutionary change?* Answers to these questions, as we show, can enhance our understanding of the relationship between the theory and the application of complexity and evolutionary views, approaches that must be understood as complementary in an effective inquiry into policy systems and the social world, more generally.

Part I. Theory

Evolutionary Thinking

As hinted earlier, scholars' attempts at *reducing* the physical world to its basic elements and searching for universal laws have been met with success. To a point, organizing the world based on an assumption that objects in it possess some essential qualities also helped the scientific inquiry. Though, as became evident, these views were deficient in the study of life, where the attempts at finding model species in order to develop various taxonomies proved to be an obstacle to progress.

It was Darwin's refocus from an individual to a population and from an intermittent change to a process of continuous selection and adaptation that allowed the formulation of the theory of evolution. To be sure, it is not uncommon to encounter evolutionary thinking throughout the long history of natural philosophy, as "various thinkers have seen that we must include within that natural flow the emergence and development of life, of animal forms and sentience and ultimately of a consciousness" (Hutcheon 1996, 483). But it was only Darwin's paradigmatic work that provided a broad inspiration to scholars of human development, psychology and social behaviour, who gradually came to appreciate the applicability of the evolutionary view of causality, causality "after the fact, with effects being contingent on the environmental conditions as altered by the consequences of previous actions," to their domains (Hutcheon 1996, 485). Thinking in *evolutionary* terms meant to embrace the significance of connections between elements, of their relationship to the environment, and of the novel (and causal) properties arising from their interactions, and thus of importance of time and history. It meant to appreciate *adaptive complexity*. Arriving to such views has been all but straightforward, and many questions on evolutionary aspects of social and biological systems remain. Yet, insights from the study of creative systems can provide us with more general understanding of evolution, answering a number of outstanding questions.

Philosophers, at least since the antiquity, have taken interest in change, opining not only on the structure of the natural world around them but also thinking about what happens when humans come together in increasing numbers, develop ways to communicate, build shared meanings, and begin to form social structures, all tools in solving collective challenges. They thus thought of the emergence of human societies, cultures, and technologies. And with the rise of cities, states, and economies, scholars started in turn paying attention to their development. In our reading, evolutionary thinking across sciences has centered on two main questions: *How does evolution work?* and *What is the direction, and, ultimately, the endpoint of the evolutionary process?* The former question has been of concern to evolutionary theorists (mostly of the Darwinian following) who “attempt to explain changes as responses to the particular requirements imbedded in specific historical situations” (Sanderson 2007, 3). The latter question has been posed by the evolutionists, a wide range of scholars focused on change in the social world, many of whom held deterministic or teleological views. Nevertheless, while their answers may be somewhat different across domains, both questions are equally important.

In what follows, we take a brief look at evolutionary thinking across domains in search of a common denominator and thus of a larger purpose. This, we believe, provides a good foundation to appreciate an evolutionary approach to policy, perhaps the most consequential application of evolutionary thinking.

Biological Evolution in Historical Change

Biological evolution can be explained as a process of change involving a large number of biological entities (individual units forming a population) competing over resources in a particular context (an environment). The entities replicate, creating diversity (novelty) through mutation and/or genetic recombination. The fitness of the new feature is determined through biological selection, a set of counter processes (also including genetic drift) in turn decreasing the diversity of the population. The result of these processes is the emergence of new forms and functions and the gradual adaptation of organisms to their environment.

While biological evolution has no direction,²⁶ it is a systematic process whose outcome is diversity. Further, given its processes involve interactions of organisms within and across populations as well as the environment, evolution is inherently systemic. What is more, interactions among the populations’ constituents give rise to global phenomena, emergent properties which themselves become part of the selection processes (for example, various aggregations of simple or complex entities, such as schools of fish or flocks of birds, play a role in the species’ survival). Finally, evolution is a flow, an accretive process of *change*, both gradual and punctuated that, along with generating diversity and altering the environment, brings about an increasing complexity of dependencies (co-evolution) and, with these, selection mechanisms.

As populations or communities of organisms are systems, more specifically open systems (Chapter 6), their study requires us to first establish a boundary, a locus of

²⁶ While Darwin assumed organisms tend to evolve toward higher forms, the general direction of evolutionary change continues to be contested. The debates are paralleled in social scholarship, with some scholars making the case for an overall trend towards social progress (Sanderson 2007).

discourse. Further, given the hierarchical nature of biological organization, analyses can be performed at multiple levels of abstraction. And given that history is essential to the understanding of evolutionary outcomes, such a boundary may also be temporal. Consider, for example, the early rise of oxygen-producing cyanobacteria and their effect not only on the environment but also on the subsequent development of biological complexity.

Earlier (Chapter 6), we discussed CAS as a new paradigm to study and understand the social world with its complex and adaptive realities. From above, we may begin to discern if there are further parallels between change in biological and social systems. Indeed, the study of CAS can provide us with a common language or framework to study such evolutionary systems (as we will discuss, we may consider CAS a superset of evolutionary systems from the biological world). Natural question arises how can the evolutionary view complement our understanding of the structure and dynamics of change in social systems. That is, what can the social studies learn from evolution in nature?

Streeck (2010, 674-676) finds a number of Darwinian features relevant to institutional analysis. First, evolutionary processes are non-teleological, where “variation is stochastic from the perspective of existing structures while retention is systematic without, however, being governed by a predetermined, intended result.” In institutional contexts, this means that institutions and their change may not be products of intentional or informed actors. Second, the Darwinian theory views change to be driven by both endogenous and exogenous factors, allowing for both contingency and order. Nature and history can thus be considered together as evolutionary processes. With its non-teleological yet logical understanding, the Darwinian perspective can “serve as a model for a processual theory of social systems in which an explainable past and present meet with an open future for which human action and practice matter”. Fourth, the theory of evolution views innovation and ongoing change as a product of imperfect replication. Importantly, it “appreciates the essentially anarchic or, which is the same, creative nature of innovation, conceiving of it as arising spontaneously and unpredictably from the perspective of the existing order and of established practice”. And co-evolution further stimulates novelty and deep change, producing a “historically unique” environment. Fifth, as evolution is an ongoing process of adaptation, change that occurred in the past has causal implications for the present and the future developments. More specifically, as “structural change results from an encounter between underdetermined and unpredictable innovations and historically-grown determining conditions,” we reconcile non-teleological and path-dependent views of change. Finally, evolutionary theory exposes the limits to functionalist interpretations of change. Evolutionary outcomes may be far from optimal, as Streeck notes, given for example, “phyletic constraint, transitional disequilibrium, survival of historical adaptations that have become useless, and the purposeless reproduction of slack structures with no function at all.” In social terms, this means that institutional designs may not be efficient or necessarily rational, given both the historical legacies and the limits to the knowable.

Many of these concepts, such as path dependence, unpredictability, or limits to intentional design, are no doubt familiar to scholars of historical institutionalism (Chapter 4; Pierson 2000a; Pierson 2000b; Hall and Taylor 1996). Yet, rather than biology, these scholars took inspiration from social sciences, namely from complexity economics and

the closely related field of evolutionary economics. We will discuss the latter below given its significance to evolutionary policy.

Evolutionary Economics

Previously, we have mentioned the work of Joseph Schumpeter who advanced a dynamic view of economic development (Chapter 6). Rather than driven by exogenous factors, he saw economic change as a product of “revolutionary forces within the economy that destroy old processes and create new ones,” the forces of creative destruction (van den Bergh et al. 2007). This view of change, in which technological innovation, economy, and society evolve together, has provided an inspiration to the emerging field of evolutionary economics.

Evolutionary economists have recognized that contrary to expectations of conventional economics, economic growth is not steady, or moving towards a steady state. Rather, economic systems are subject to periodic and relatively rapid shifts, experiencing change that is deep and irreversible. They further observe economic systems evolve, exhibiting adaptations “on various vertical decision and spatial levels, of individuals, households, groups, organizations (NGOs), firms, sectors, countries, and nowadays even on a global scale.” Finally, such scholars also find continual adaptations in the horizontal economic structures, encompassing firms, markets, technological and scientific systems, laws and institutions, beliefs and preferences (van den Bergh and Gowdy 2000, 40).

Among the main goals in evolutionary economics is explaining change (that is, providing a corrective to equilibrium economics emphasizing stability and predictability), and, more specifically, its drivers and outcomes. Embracing the evolutionary character of economic systems, scholars have generalized a number of evolutionary concepts and applied them in the study of economic processes (van den Bergh and Kallis 2009; van den Bergh et al. 2007): populations and their internal diversity across products, strategies, technologies, processes, or organizational arrangements; dual processes of increasing and decreasing complexity through innovation and selection respectively; processes of replication making possible durability and accumulation; and actors and organizations constrained by information, cognitive resources, and historical developments in their particular context. These elements then provide the basis for analysis, which may take place at the micro (i.e. evolutionary game theory) or macro levels.

Unlike in evolutionary biology that sees change as gradual, possibly accelerated by exogenous events,²⁷ there exist multiple views on change in social systems. This is not peculiar as social systems are different from those in nature. Most prominently, the constituents of social systems are creative as they learn, experiment, and make different decisions (although, as mentioned subject to various constraints). And, while learned information can be transmitted and adopted in other areas of social systems (consider here this work’s goal of transplanting a tool from technology domain to social sciences), this is precluded in biology where information from one branch cannot be passed to another branch (van den Bergh and Gowdy 2000). Both have impact on innovation, the accelerating novelty creation in social systems, a process that is (largely) purposed (Chapter 6). As a result, evolution in social systems occurs much faster than in natural

²⁷ As in the punctuated equilibrium view of evolution of species (Eldredge and Gould 1972).

world (Sanderson 2007; van den Bergh and Gowdy 2000). Recall the rapid cultural shift to post-materialism in the 1960s and 1970s (Chapter 4), driven by an increasing economic security of the new generation (Inglehart 1997), or our transportation example from the beginning of the chapter, demonstrating, too, policy change driven by culture and economics.²⁸

As a result of these differences, scholars have identified several different types of evolution, applying these in their analyses of social systems, though often separately. For some context, let us return to Smyrl and Genieys’s research (Chapter 4), advancing an understanding of change in policy as an evolutionary process. As discussed, the authors observe that the traditional gradualist and punctuated equilibrium understandings (situated in Table 7.1) of change are compatible yet incomplete, as they rely on stable interests of actors rather than their motives. The authors thus argue that evolution in policy also exhibits “preemptive adaptation,” proactive adjustments in policy to enhance its success and maintain the authority of its makers (more in Smyrl and Genieys 2008, ch. 6). This could be equated with the Lamarckian view (viz. Table 7.1) emphasizing the role of anticipatory action and purpose in evolutionary change.

Biological Evolution	Nature of Change	Economic Equivalent	Sorting Mechanism
Darwinian evolution	Marginal, gradual, micro	Neo-classical, Nelson/Winter routines and innovation, neoSchumpeterian diffusion models, evolutionary game theory	Competition among individuals (individual selection), stochastic mechanisms of innovation/selection, genetic algorithms
Punctuated equilibrium	Non-marginal, rapid, macro	Creative destruction, qualitative/structural change, long waves (inventions followed by innovations)	Hysteresis, lock-in, adaptation, resilience, increasing returns, external shocks, vertical innovation
Lamarckian evolution	Gradual or rapid, micro and macro	Development theories, social-cultural evolution, cooperative behavior	Conscious, purposeful, forward-looking decisions, group selection, learning
Self-organization	Marginal or onmarginal, slow or rapid, micro and macro	“Invisible hand”, spontaneous order, stochastic neoSchumpeterian models, deterministic chaos	Reaction to external shocks, thermo-dynamic processes, hysteresis, deterministic chaos, sensitivity
Coevolution	Simultaneous change of sub-systems	Complementarity, ecological economics, Wilkinson’s ecological theory of economic development	Mix of Darwinian selection and punctuated equilibrium, dynamic interaction between subsystems, evolution in each subsystem

²⁸ Scholars have debated a number of additional differences between social and biological evolution. For example, some assert that evolution tends to reduce diversity and produce convergence in the social world, while the opposite is expected in biology due to cladogenesis (Sanderson 2007). Also, whereas a gene is generally considered the unit of selection in biological evolution, it is absent in the social world, which has instead a great variety of other carriers (van den Bergh and Gowdy 2000).

Table 7.1 Types of Evolution and Economic Interpretations (Source: van den Bergh and Gowdy 2000).

Crucial to understanding change both in biological and social systems is co-evolution, emphasizing the simultaneity of change across different aspects of evolutionary systems. In Chapter 6, we have noted that views of markets as complex systems evolving independently of the state are simplistic and incomplete. Rather, they are mutually constituting, co-evolving with other aspects of the social system (Colander and Kupers 2014). We also discussed the co-evolution of socio-technical systems affected by and affecting the economy (that is, their environment), a process expressed in the patterns of economic instability and growth (Chapter 6).

Finally, especially familiar to CAS scholars is the capacity of complex systems to self-organize, generating novel structures at the global level without a central coordinator, in the process of adapting to the environment (Chapter 6). Self-organization reminds us of the inherent unpredictability of change, its irreversibility, and the possibility of its occurrence at multiple levels of abstraction.

The above discussion suggests evolution in biology can be understood as a specialization of a general theory of evolution. This is because novelty production and selection mechanisms in the evolution of technology, culture, and society span a much greater range than in the natural world. Consider, for example, the constitutionalization processes of the EU (Chapter 5) encompassing a variety of forward-looking actors, motivations and philosophies, institutional arrangements, all (re)shaped by frequent exogenous events. Such processes occur along the overarching intent to resolve the contradictions arising from integration of this complex polity. EU integration thus serves as a paragon of a diversity of evolutionary types and mechanisms.

Evolutionary Policy

Given its key role in policy making, economics, and more specifically its prevalent neoclassical variant, is at present the most consequential of social sciences. Assuming predictable (rational) behaviour of individuals and economic phenomena as their aggregates, this framework has informed policy and regulatory decisions, often with undesirable outcomes (i.e. lapses in regulation, crises). This is despite the availability of alternate views (Chapter 1). Such views have been at the core of complexity and evolutionary economics, in turn informing what has been known as complexity or evolutionary policy. While there is no clear separation between these areas (attesting to their relative novelty), they may be viewed as concerned primarily with behaviour and evolutionary characteristics, respectively, of policy systems. Here, as we discuss their implications to the realm of *policy*, we treat these views as complementary.

Setting out to provide a comprehensive view of evolutionary policy, van den Bergh and Kallis (2009) have outlined the significance of evolutionary thinking in various aspects of policy making and compared evolutionary policy with other policy models. Evident from the discussion in the previous two sections, the first is the relevance of evolutionary mechanisms in technological, institutional, economic, and organizational elements of social systems. Taking these into account, for example, leads

to a recognition that technological advancement is not simply endogenous, but rather “the outcome of a continuous interaction between generation (innovation) and selection of diversity in technologies and organizational structures” (van den Bergh et al. 2007). This means to account for interactions between equilibration and disequilibration, dynamics (e.g. non-linearities and path-dependencies) producing outcomes not well accommodated by the conventional views. The second area of significance of evolutionary thinking concerns individual behaviour, replete with biases and decisions of bounded rationality, both products of human evolution. Here, evolutionary game theory and its models of cooperation and competitions find an application. The last area of policy relevance identified by the authors relates to the relationship between biological evolution and regulation. In this area, for example, scholars take into account biological and economic co-evolution in context of environmental policy (van den Bergh and Kallis 2009).

Further, van den Bergh and Kallis identify the differences in assumptions and philosophies between evolutionary policy and its counterparts, and do so across five areas.²⁹ First, as hinted, while neoclassical economics assumes homogeneity of actors’ preferences (rational and utility maximizing), the evolutionary view sees a diverse set of actors and strategies limited by bounded rationality. In terms of policy criteria, the neoclassical approach seeks efficiency and effectiveness. Evolutionary policy, on the other hand, recognizes diversity, uncertainty, and thus the utility of the precautionary principle. Third, there are differences in the preferences of policy instruments. Whereas the traditional approach emphasizes financial (price) instruments, the latter emphasizes the need for a diversity of policy tools and the expansion of access to information. Fourth, there are also differences in concrete policy proposals. As the conventional approach assumes outcomes can be enumerated probabilistically, it advances cost-benefit analyses in optimizing choices. The latter approach aims to recognize and avoid technology lock-ins by protecting emerging innovations. Finally, if policy analysts are conventionally viewed as external to policy, in the evolutionary view they become participants in ideational processes and diversity creation (van den Bergh and Kallis 2009).

Whilst the above referenced scholars begin in evolutionary economics and evolutionary biology, a parallel stream of policy research, complexity policy, is rooted mostly in complexity research. Though the latter also embraces themes familiar from above—including indeterminacy, diversity, path-dependence, or co-evolution—its emphasis is on self-organization, emergence, bottom-up stability, attractors, and tipping points, among others, all relevant to policy analysis and design (Cairney and Geyer 2017; Colander and Kupers 2014; Cairney 2012; Rhodes et al. 2010). These works are often disconnected from each other (Chapter 1), contributing to the slow growth evident in this line of research. Aiming to provide a common denominator, we identify a set of central questions engaged by evolutionary/complexity policy.

How do social systems behave? What are the appropriate assumptions in their study? A shared precept in evolutionary/complexity policy is the recognition that social systems are adaptive, mutually constituting, and exhibit nonlinear dynamics. This leads us to a different set of fundamental assumptions, altering how we study them and shape their development (Chapter 6). Social systems consist of a large number of interacting

²⁹ Van den Bergh and Kallis (2009) contrast evolutionary policy with neoclassical, public choice, and resilience views, the first two of which are conventional.

elements creating various feedback loops, the bases of their special properties. There are the destabilizing, novelty-creating positive feedback loops, as well as the stabilizing, negative feedback loops. These systems move between periods of stability and instability, and, given the feedback-driven nonlinearity, it is *unknowable* what may trigger a phase change and when this may occur.³⁰ Moreover, social systems are historical, given on one hand the contingencies and the sensitivities of the instability phase from which decisions emerge, and the lock-ins and path dependencies defining the period of growth. Knowledge of these dynamics can be leveraged to stimulate innovation (Linstone 1999), understand the cycles of techno-economic development, enhance the capacity of systems to resist regime shifts, i.e. design for robustness (Helbing 2015), or to study change (see below).

Can social systems be controlled? Managed? The conventional theory holds that global properties and behaviours of social systems (such as the markets) can be explained solely with reference to individual actions and preferences. In this view, as inputs are proportional to outputs and effects can be traced to their causes, social outcomes can be predicted and thus controlled. Cognizant of the capacity of complex systems to self-organize, giving rise to emergent phenomena that are inherently unpredictable, evolutionary and complexity policy scholars understand that such systems are beyond our control. They admit that interventions will have at best ambiguous results and yield unintended consequences (Cairney 2012).

This recognition has implications across a number of dimensions. First, scholars begin to pay more attention to contingency and unintended consequences in their explanations of outcomes. While the conventional thinking encourages “functionally-backward” (Streeck 2010) explanations, the updated view is sceptical of such conclusions (Pierson 2000b; Smyrl and Genieys 2008; Streeck 2010). Financialization of the economy, for example, has been intuitively taken as a deliberate product of choices made within the neoliberal paradigm. Yet, some find it to be “an inadvertent result of the state’s attempts to solve other problems” (Krippner 2011, 2). Second, the updated perspective leads us to revisit democratic accountability (Cairney and Geyer 2017). Policy makers are not only subject to bounded rationality but also face an environment that is beyond their control. Should they be held to task for any (unintended) consequences? Bringing these issues forward and resolving them is one of the major public challenges. Finally, complexity research shows that, while not amenable to control, social systems can be managed. For example, altering the flow of information, encouraging variety, and maintaining compartmentalization, all reduce the frequency of phase shifts, enhancing the system stability (Helbing 2015).

What do we want from policy? How do we design policy? How do we make governance more effective? Embracing the evolutionary/complexity paradigm carries deep implication to regulation and governance. At a high level, the purpose of policy is to do something about a (collectively identified) need, while minimizing negative consequences. As hinted, the conventional, linear view of social and natural systems assumes the effects of interventions can be predicted and the risks (and costs) quantified; such confidence then justifies *reactive* approaches to policy. The contrary view recognizes the inherent uncertainty in complex systems precludes a reliable assessment.

³⁰ Although S curve analyses in combination with other tools may enhance our forecasting capacity at certain points in time (Chapter 6).

And given the possibility of harm,³¹ the uncertainty is not a reason to avoid action. The strategy in this case is *proactive*, as embodied by the precautionary principle (Martuzzi and Tickner 2004).

At another level, the fast changing world of increasing complexity poses further challenges to policy. As made evident in the case of financial regulation discussed earlier (Chapter 6), the conventional, process-oriented regulation—dependant a pre-specified, discrete set of rules and processes to follow—becomes problematic in this environment. A remedy can be found in a goal-oriented approach which distributes accountability while giving discretion in enforcement. This approach, however, requires the state to create the right “operating system,” a fitting *ecostructure* (Colander and Kupers 2014). Ecostructures are the defining element of the *complexity frame* in which the aim of policy shifts from control to influence (Colander and Kupers 2014). In this paradigm, the state is responsible for top-down policy creating and shaping the ecostructures. Once in place, the ecostructures make possible the emergence of bottom-up policies, recipes created dynamically in response to the changing environment. This advanced approach to policy opens another, if less visible, set of questions to which we hinted earlier: May we expect an adoption of the complexity frame? Are systems of governance themselves evolutionary?

How do policies change? Are there any analytical patterns? The evolutionary characteristics of social systems (including punctuated equilibrium and Lamarckian evolution) are reflected in the explanations of institutional stability and change (Smyrl and Genieys 2008; Pierson 2000a), as well as the nature (direction) of change (Streeck 2010; van den Bergh and Kallis 2009). On the whole, as noted (Chapter 2), scholars have observed institutional change can be abrupt, on account of shifts in the policy making paradigms (Hall 1993), or gradual, manifested in various types of change, each associated with a particular mechanism (Streeck and Thelen 2005). Finally, scholars question if policy or institutional development exhibits some form of progress, whether in structures or outcomes. While the above referenced works suggest policy change is systematic and exhibits a number of regularities, a question remains whether we can identify more fundamental characteristics in the evolution of policy. We began to tackle this question earlier (Chapter 6) and continue below.

The Structure of Policy Evolution

Evolutionary theorists have discerned evolutionary processes not only in economics, technology, or law but also in science (Nelson 1995). The latter received particular attention due to Kuhn and his prominent *The Structure of Scientific Revolutions* (2012) outlining the processes of change in established science. To much resistance, Kuhn has argued science evolves by punctuated equilibrium, where periods of stability are followed by paradigm-shifting crises. The stable periods are described as normal science, problem solving within the prevailing paradigm—defined both as a shared conceptual framework and a specific solution template based on this framework—which is embraced uncritically and replicated accordingly. In time, theory may be refined and expanded, but the accumulating anomalies and unanswered questions eventually bring normal science to

³¹ Given the fat-tailed distribution of events in CAS, the possibility of negative consequences, including systemic lapses such as crises, is relatively high.

a halt, giving rise to a period of instability, a crisis. The resolution, however, depends on the availability of an alternate paradigm. Kuhn argues that existing theory can be “declared invalid only if an alternative candidate is available to take its place. ... The decision to reject one paradigm is always simultaneously the decision to accept another... that decision involves the comparison of both paradigms with nature and with each other” (2012, 78). In this view, scientific progress is not cumulative, that is, it does not involve cumulative complexity as, on the whole, in biology.

Policy and institutional scholars often invoke Kuhn’s (2012) paradigm in their conceptualizations and explanations of change, which, at the same time, are found problematic in that context. One, it does not address competition among paradigms and the selection of a winning paradigm during the crisis (Nelson 1995). Given the significance of contingency in the evolution of complex (social) systems, we may be able to obtain at best a limited understanding of these mechanisms. A related challenge is the application of Kuhn’s thesis to developments in social sciences (namely in policy and institutional scholarship). First, scholars argue that instead of a one stable paradigm, there is a number of co-existing paradigms. As a result, some view social sciences as “pre-scientific” (Smyrl and Genieys 2008; Geddes 2003). Moreover, some policy scholars point out that rather than punctuated, policy making is in a state of “perpetual crisis,” a condition that may not allow us to objectively claim the prevailing paradigm is “worn out” (Smyrl and Genieys 2008, 6). According to Smyrl and Genieys (2008), this is because crises are social constructions made possible by the fact the underlying conditions are dynamic (and interacting with policy outcomes) rather than unchanging, as they are presumed to be in the physical world.

We suggest the approach advanced here can reconcile the evolutionary view of science and policy, while bringing us towards a unified view of policy change. It does so first by steering our attention to the assumptions on the dynamics of policy systems and, second, by leading us to separate between a paradigm, policy system, and a subsystem. Reading to this point, one may recognize that basing paradigm in social sciences on a theory or a set of hypotheses that are *predictive* is problematic. Social systems—complex and adaptive as they are—fast reveal their limits to predictability, rendering any set of such principles, e.g. supply-side economics, quickly obsolete. This means that rather than predictions, a paradigm must supply a framework setting parameters of inquiry. We find this in meta-theory, that, we argue, is the social sciences’ (and other domains dealing with CAS) analog to the conventional paradigms of physical sciences. In this light, mainstream social sciences *have* a paradigm, as they operate within the *Cartesian-Split-Mechanistic* (Overton 2015), or reductionist, frame of reference in which social and physical systems are analytically similar (Chapter 1). Hence, Kuhn’s crisis would not bring about a replacement of a policy system, but of a meta-theory informing the studies of the social world and the orientation towards policy and policy making. And one of the goals of this research is to expose the growing challenges stemming from this paradigm, waiting to be resolved within an alternate frame of reference (Chapter 4, 5, 6).

A case can thus be made on the relevance of Kuhn’s theory in policy scholarship, and to social sciences, more generally. Once a paradigm is selected, considerable resources are invested into research infrastructure, training, textbooks, and other areas, resulting in increasing-returns-like growth. An existence of an alternate paradigm is

insufficient to break the lock-in, instead requiring an accumulation of anomalies that eventually lead to a decline and a crisis.

To be sure, change in science, technology, policy, or law can be gradual, occurring in incremental steps which, taken together, may lead to significant shifts. The question is whether these amount to a change that is paradigmatic. A technology view can, again, help us provide some insight. Consider a familiar example of home entertainment technology. The VHS design became the leading technology for home video. In time, this analog solution was superseded with a digital one, offering a higher quality, speed, and convenience. The digital transition began with the DVD format and was followed by Blu-ray high definition video that, just as VHS before, emerged as the leading technology. Although such a shift can be considered revolutionary, consumers were nevertheless required to manipulate with physical media, and, if they wanted to record media content, they generally needed a different device. Yet, a more significant leap forward constituted the implementation of internet connectivity across devices, and the development of cloud storage technology and video and audio streaming services. Consumers no longer face the limits posed by physical media or the constraints of local storage for home video, given the availability of a large selection of streamed titles and the sharing versatility offered by cloud technology. As number of the changes across major systems could be termed “paradigmatic,” the term quickly loses its utility. Using the term for the most general of approaches, we separate a paradigm from a (technological or policy) system and subsystem, both embracing a way to solve a particular problem. And, mindful of the evolutionary patterns, we recognize each system and subsystem follows its own S curve. This means that parts of a larger policy program have different life spans, and some solution templates (instruments and their combinations) experience decline and replacement earlier than do others. As well, subsystems do not develop uniformly. We can thus make sense of change, both sudden, in a replacement of a policy system (traditionally understood as paradigmatic change), and gradual, in a replacement of one or more of its subsystems. This is, after all, compatible with Kuhn’s view suggesting the existence of a “concrete puzzle-solution,” which can be used as a problem-solving model existing at a lower level of abstraction (2012).

Despite its critiques, the importance of Kuhn’s observations thus goes beyond explaining science. This is because for Kuhn, rather than arbitrary, progress in science unfolds according to a certain logic, exhibiting a *structure*. At its most basic, scientific advancement can be viewed as nonlinear, following an S curve (Chapter 6): a crisis culminating with a paradigm shift is followed by a period of growth, in time bringing about another revolution. And such a view of change is, as hinted, discernable across other creative systems.³² Yet, as our discussion of an application of I-TRIZ, the Directed Evolution methodology (Chapter 6), indicated, there is more to the *structure* of change in technological and, as we argue, policy systems than their staged development. That is, creative systems exhibit developmental regularities identified as the Patterns of Evolution. As outlined, aside from suggesting creative systems and their subsystems exhibit nonlinear growth, the former also:

³² These are systems, whether physical or informational, created for purpose and shaped by human creativity, imagination, and learning (Chapter 6). They are evolutionary, yet exhibit certain regularities amplified by the creative actions of their constituents.

- evolve unevenly, combining matching and mismatching elements;
- tend towards increased dynamism and controllability;
- alternate between periods of structural complexity and simplicity;
- evolve toward the multilevel;
- tend to decrease the involvement of humans;
- and evolve toward ideality.

In context of evolutionary policy, the Patterns of Evolution thus suggest answers to a number of questions. What is the direction of evolution? How can we characterize progress? First, in terms of the direction of evolution—a topic subject to ongoing debates (Streeck 2010)—we can expect policy systems over time to decrease in the number of internal contradictions (conflicts borne of the mismatches between subsystems). According to the Patterns, each subsystem follows its own S curve. This means that parts of a larger policy program have different lifecycles, and some solution templates (instruments and their combinations) experience decline and replacement earlier than others. In addition, all subsystems follow their own development trajectories. Distinguishing between the replacement of systems and subsystems helps us make a distinction between the type and pace of change, integrating the punctuated and incremental understanding of policy evolution.

What is more, while the complexity of rules, functions, or processes in a policy system is initially expected to increase, innovation ultimately allows simplification, improving with it the system's efficacy. These processes are closely related to increasing *ideality*, which could, ultimately, define progress. "Because complexity causes an increase in cost and harm, increasing simplicity will increase ideality if the benefits stay the same," explain Rantanen et al. (2018, 72). Though, to be sure, increasing ideality is not necessarily connected with increased simplification. We can thus begin to see the possibilities in extending our insight into the nature of change, concept of progress, among other evolutionary questions in policy systems, inviting thus of investment in this potentially fruitful line of research.

The importance of the Patterns of Evolution goes beyond evolutionary policy studies, given their applicability to comparative work and to policy design. The next module further elaborates these points as we engage an emerging solution model in LMP. When considered from an evolutionary perspective, and particularly when taking into account the Patterns of Evolution, this model becomes a step in the development of LMP.

Part II. Application

The prior modules have engaged change, starting with the post-industrial transformations of the welfare state and continuing with insights from scholarship concerned with describing and explaining such shifts. Students of social systems are increasingly privy to the challenges stemming from the inherent complexity of policy systems and their outcomes, and are finding progress outside the bounds of conventional thinking. First, scholars have observed that rather than the mere expansion or retrenchment, contemporary change can span many dimensions (Bonoli and Natali 2012b; Häusermann 2012), reflecting the growing diversity of pressures and needs borne of the changing environment. Counter to predictions of traditional theories, such outcomes invite not only new explanations but also new understanding of social policy. That is, if we consider

social policy “as part of a broader politico-economic settlement that can impact significantly on the functioning of a country’s economy,” we recognize that social, economic, fiscal, and education policies are increasingly connected (Bonoli and Natali 2012a, 5). To emphasize, critical to advancement here was obtaining a more accurate *description* of change built on the assumption that post-industrial policy is qualitatively different from the past.

Second, scholars seeking to explain change—whether in context of integrating polities or in the numerous atypical outcomes domestically—recognize the inherently mutually-constituting and evolving nature of social systems (Streeck 2010; Featherstone 2003). The numerous feedback effects and nonlinearities make it difficult to reliably connect causes with effects, posing challenges to both the explanation of policy and its design. As a result, institutional and policy scholars find theoretical inspiration in complexity (Cairney and Geyer 2017; Colander and Kupers 2014; Cairney 2012) and evolutionary thinking (Streeck 2010; Smyrl and Genieys 2008; Pierson 2000a), whether drawing on insights from biology or heterodox economics. This thinking brings to the foreground the previously neglected properties and behaviours at the systems level, leading us to confront the limits to what we can know and thus do about outcomes in social systems (Helbing 2015). This has direct implications to how we study change (Chapter 6), and understand and design policy (Colander and Kupers 2014).

How can we build upon these findings and advance our understanding of policy change? Answering this question was the aim of the previous sections that set out to advance an integrated view of change, reconciling various views on evolutionary change. While scholars have shown institutional change exhibits certain regularities, identifying different types of gradual change (Streeck and Thelen 2005) or observing the same non-linear growth argued to define progress in science (Hall 1993), we posit these fit into yet a larger context. Evolution of policy, among other creative systems, has a *structure*, describable by a set of distinct evolutionary patterns. And these could provide a powerful framework not only in understanding policy development but also its design.

In what follows we take a closer look at LMP in these terms. In particular, we consider the emergence of flexicurity (Chapter 2), an exemplar of the type of systems intervention typical to the post-industrial era. Flexicurity, among the family of contemporary LMP strategies, can be viewed as an evolutionary phase in the development of LMP. Importantly, given its components also follow an evolutionary path, we study LMP (and other policy systems) at multiple levels of abstraction. Our goal then is leverage the structure-in-evolution view of policy change to draw a more complete picture of LMP developments, past and present. *How does LMP evolve? And how does flexicurity fit into the larger picture of change?* We begin with brief review of LMP and its subcategories, along with a mapping of the key instruments, aiming to provide some baseline for this and the ensuing modules. We then discuss some major trends observed by scholars concerned with LMP development. While these scholars are able to offer some valuable insights, it becomes apparent that the multi-dimensionality and variance in LMP developments would benefit from a more holistic view of change. The discussion concludes with some theoretical *expectations* for LMP evolution, informed by the *structure-in-evolution* view of policy.

Defining Labour Market Policy

Thus far, we have engaged LMP as a category of policies dealing with risk in labour markets, both of the (potential) labour market participant and the employer. More formally, ILO sees LMP as partly a subset of labour market regulations which include “wage setting institutions, mandatory social benefits, the unemployment insurance system, as well as different aspects of labour legislation (law on minimum wage, employment protection legislation, and the enforcement of the legislation).” LMP, on the other hand, “comprise all kinds of regulative policies that influence the interaction between labour supply and demand” (ILO 2019).

LMPs can be further classified into *passive* measures, consisting of unemployment related payments, and *active* measures, or active labour market policies (ALMP), concerned with bringing people into employment or helping them to stay in employment (Chapter 2). An earlier analysis (Chapter 3) used ALMP data from Eurostat distinguishing between services and activation measures, covering job-search and employment supports respectively. Bonoli (2011) goes beyond the conventional ALMP dichotomies of human capital development versus activation and provides a four-prong typology; it thus distinguishes between incentive reinforcement, employment assistance, occupation, and human capital investment (Bonoli 2011). In this analysis, we use a more comprehensive classification distinguishing between supply and demand side instruments. Developed by Meager (2009), it is provided in the panel below.

Supply-side measures include:

1. *Training schemes*: these are the classic elements of Scandinavian ALMPs and may cover vocational and/or general skills. The underlying rationale is that the employability and job-finding chances of workless people are enhanced by training.
2. *Information and job-brokering activities*: these are the standard job-matching activities of the public employment service, involving vacancy registration, the provision of vacancy information to job seekers and provision of information on job seekers to employers.
3. *Information, advice and guidance* to job seekers on job search methods, often alongside motivational support.
4. *Sanctions and incentives* aiming to ‘activate’ workless job seekers. The sanctions involve compulsory participation in active measures with the threat of benefit withdrawal in cases of non-participation; while incentives may include a financial bonus when a workless person accepts a job offer.
5. *Subsidies* to individuals who enter self-employment and start their own enterprises (these also have a demand-side component).

On the *demand side*, measures include:

1. *Subsidies* to employers hiring jobseekers from particular target groups.
2. *Job creation* or ‘make work’ schemes, often in the public or not-for-profit sector, providing work opportunities for the unemployed.

Source: Meager (2009)

Furthermore, in the discussions on LMP it is important to separate between unemployed and economically inactive individuals. The former encompasses individuals who are seeking employment or would take a job if one was offered (attached or

marginally attached to the labour market). The latter are those “who are either not available for work or do not want work and are not actively seeking it; because they are in the education system, because family or health circumstances prevent them working, or because they have ‘retired’ early from the labour market” (Meager 2009, 3).

As we hinted earlier, the post-industrial landscape makes it difficult to consider LMP as separate from other policies, given that other interventions have an increasing impact (social and education, among others) on “the interaction between labour supply and demand.” Hence, in our analyses we treat LMP as a (sub)system concerned the employment dimensions (or needs) in the broader system of social welfare.

Mapping Trends: Conventional Views

The introductory modules (Chapter 1, 2) have discussed welfare state modernization efforts aiming to tackle the challenges defining the post-industrial environment; issues ranging from new forms of social risks to fiscal sustainability. Scholars have observed such reforms often implement a combination of old and new instruments, some of which may involve weakening, others strengthening. As a result, the change space is multidimensional, including recalibration, flexicurity, welfare readjustment, and protectionism (Häusermann 2012). This general mapping of social policy reforms is important as it steers our attention to co-evolution (whether conscious or otherwise) among policy instruments.

Clasen and Clegg (2011) observe further regularities in the modernization reforms, at a more granular level, the level of unemployment protection systems. The authors identify three processes of institutional change, driving the shift from the industrial model of unemployment protection, centered on unemployment benefits, to the post-industrial “integrated benefit-and-service system adapted to the profile of economic risks that characterize post-industrial labour markets.” (2) These processes, what they call “triple integration,” are the standardization of unemployment benefits, risk re-categorization, and benefit activation (Table 7.2).

In the area of unemployment compensation, the authors note a weakening of the link between the rates and length of entitlements and “previous labour market achievements and position” (7). The goal is to neither disadvantage nor discourage the increasingly common flexible labour arrangements. As a result, unemployment benefits are lowered, closing the differential between insurance-based and other benefits, and insurance-based schemes become less dominant, among other implications. Second, as growth in the low-productivity service-based economy depends on increasing the numbers of people in employment, a new approach aims to expand the ranks of the employed. Among the strategies is to reclassify people previously under different risk categories into the unemployed group, simplifying the benefit schemes. Such workfare-oriented solutions are accompanied by other issues as people, whilst in some form of employment, may not earn sufficient wages exposing them to new types of risks. Hence, unemployment and employment begin to lose their relevance as indicators of social risk. The third, related trend is driven by an overall need to improve people’s employability, requiring updated incentive structures and new services. In the author’s view, these activation processes involve “the institutional articulation – and possibly integration – of labour market programmes and job-search support for those out of the labour market with

the provision of benefit support” (9). Thus, for example, administration of passive and active measures is brought under one roof (compare Chapter 3).

Process of integration	Possible policy implications
Unemployment benefit homogenization	<ul style="list-style-type: none"> • Fewer tiers of unemployment protection • Emergence of dominant tier of unemployment provision • Diminishing differences between benefit tiers
Risk re-categorization	<ul style="list-style-type: none"> • Diminishing differences in entitlement and conditionality between unemployment and other benefit schemes • Transferring claimants to unemployment benefit systems • Merging benefit programmes • Creating a single benefit for working-age people
Activation	<ul style="list-style-type: none"> • Merging employment services (active LMP) and unemployment benefit provision (passive LMP) • Tightening requirements to engage in supported job search • Providing labour market advice and support systems for unemployed and other working-age benefit groups (‘onestop shops’)

Table 7.2 Triple integration in contemporary labour market policy (Source: Clasen and Clegg 2012; 2011)

The above trends, as Clasen and Clegg (2011) argue, are discernable across post-industrial economies, particularly as their unemployment support systems were relatively similar in comparison to other aspects of their systems of welfare. Indeed, other scholars find a similar, if more complex, set of trends. Speaking primarily with reference to the UK, Meager and Hill (2006) and Meager (2009) identified several major shifts in ALMP unfolding over the recent decades. First, the authors confirm the trends identified by Clasen and Clegg (2011): bringing in previously economically inactive parts of population into labour markets; changing various benefit schemes to provide incentives to exit unemployment and “make work pay;” and shifting focus on activation and the development of (increasingly mandatory) schemes designed to enhance participation of the workless.

Meager and Hill (2006) and Meager (2009) further observe the increasing prominence of *supply-side* instruments (with demand side virtually abandoned in the UK). That is, rather than on the employers, the *interventions* are focused on prospective employees’ inducements and readiness. There is also an important trend towards individualization of employment-related services. These widespread strategies assume that better outcomes can be reached if the unemployed, many in differing circumstances, receive tailored supports and advice. As a result, benefit administrators become personal advisors, bringing about a cultural change within these support systems. A related trend is the growing use of *private and voluntary organizations* in the delivery of ALMP. This is part of the broader effort to introduce competition into the public sphere by privatizing or outsourcing its services. Questions remain on the best strategies to ensure effectiveness and compliance, however. Finally, Meager and Hill (2006) also note an increasing concern with *prevention and early intervention*. While the past interventions were targeting the long-term unemployed, a group seen as the most difficult to reintegrate into the job markets, it is now recognized investments into proactive measures may have better outcomes.

The above identified patterns are far from exhaustive. As mentioned (Chapter 3, 6), there are additional trends in benefits delivery such as decentralization, introduction of e-services and monitoring, and expansion of tertiary education.

Mapping Trends: An Evolutionary View

As is apparent from the discussion above, welfare state transformations and the developments in LMP can be viewed from various angles. As a result, scholars are finding an array of patterns and trends, whether at the program or model level, where they have identified various systems interventions (seeking to rebalance security and flexibility, for example), or at the policy or process levels, where they observe particular shifts in beneficiary targeting, activation strategies, conditionality rules, administration processes such as accountability, or delivery instruments, among others. This diversity of viewpoints can be explained by the fact scholars are influenced by their field of interest or an explanatory framework. In context of the UK, for example, scholars recognize the turn to austerity, and its drive to reduce benefits expenditures, preference for “work first” approaches, and the desire to increase participation in employment, as the structuring factors (Meager and Hill 2006). Others assert that stability and narrow risk profiles of the industrial labour markets gave way to post-industrial flexibility and new risks, thereby shifting policy priorities (Clasen and Clegg 2011). Still, others see the patterns of change as outcomes of (re)alignments among actors of varied interests (Häusermann 2012). Not to forget, however, many of these changes would not be possible without modern management techniques and ICT (OECD 2001), enabling accountability, performance assessments, decentralized delivery, as well as giving the job seekers the tools to find work more effectively.

While the above perspectives offer a different mapping of developments in social or employment policy, they lack an integrated interpretation of change. The limited picture we have is thus inviting us to look further. This, as we hinted in earlier modules (Chapter 6, 7), can be found in the structure-in-evolution understanding that sees policy evolving in patterns discernable at *multiple levels* of abstraction. Before a closer empirical engagement of policy evolution in two jurisdictions in the ensuing modules, let us outline hypothetically a development of LMP mindful of the patterns underlying the structure-in-evolution view.

The social and employment in the era preceding the creation of modern welfare systems is minimal, centering on social assistance in the form of various payments; LMP systems are rudimentary, covering basic rules on worker safety, hours worked, and age, and possibly including minimum wage protections [*Stages of Evolution*]. The increasing demand for labour in the growing economy is reflected in the policy outcomes in favour of the employed; protecting jobs becomes the policy priority. The wages in these times of high economic growth and low employment are sufficiently high to sustain the single breadwinner model and, in continental regimes; family as the primary unit of support.

The rapid growth of this era is fuelled by technological innovation, concentrated to industrial sectors such as mechanical, aerospace, or shipyard; industrial development is protected through the GATT system. This employment landscape is characterized by stability; workers tend to stay in the same job with the same employer for extended periods. This stability is provided by increasingly complex regulations, serving well the

market insiders which make up majority of the workforce. Irregular employment is marginal and generally outside of the scope of both EPL and benefit schemes. Workers pay into unemployment insurance, which provides generous benefits during the periods of unemployment. Given the transitions between jobs are relatively short, policy is primarily concerned with financial support during transitions. Systems of social support and unemployment serve separate constituencies which generally do not cross-over [*Evolution with Matching and Mismatching Elements*]. Workers capitalize on vocational or early job training, mostly sufficient to sustain their career path. As a result, the policy programs are designed independently and, aside from increasingly complex regulations, are relatively basic [*Nonuniform Development of System Elements*].

The engine of economic expansion, industrial innovation, runs out of steam and economies start to slow. The current LMP model has reached its maturity and begins its decline which cannot be reversed with marginal updates [*Stages of Evolution*]. Rising unemployment is addressed by subsidizing jobs, or by removing workers from the labour markets through early retirement and other incentives. Reflective of these thrusts, ALMPs are used primarily to provide occupation to those without work or as demand-side measures in support of job creation or retention.

A new economic paradigm sees liberalization of trade and labour markets as a way to rekindle growth. The economy gradually shifts into the post-industrial phase in which the service sector becomes the key to growth. A constellation of factors, including cultural change effected by the material security borne of the past economic boom, brings new participants into the labour markets. Entering the transforming economy, some individuals welcome the flexibility common to these markets; others see an erosion of their economic security. Not all countries experience these developments at the same time. Some thus observe an imbalance between insecurity of outsiders and security of the insiders and begin to address these issues. Their LMP thus undergoes gradual rebalancing: more security for irregular workers, in turn supporting an expansion of flexible working opportunities. The focus shifts to protecting workers, rather than jobs as in the prior era. These developments mean deregulation (or simplification) of EPL, enhancing security schemes, and building up and gradually integrating ALMP with unemployment systems [*Increased Complexity then Simplification*].

Economic and demographic change creates budgetary pressures further shaping the policy strategies. Saving on social outlays and stimulating economic growth requires raising employment levels by bringing previously inactive groups into employment and raising the retirement age. In parallel, the open economy increases competitive pressures on the employers, who press for a more flexible and learning workforce. As a result, policy interventions are increasingly systemic, trading EPL for transitional security while building up skills development systems. Multi-prong policy models thus become the norm.

At one level, there is an increasing interrelationship among instruments and thus a growing model complexity; at another, there is a trend towards integration as, for example, social and employment services are brought under one roof [*Increased Complexity then Simplification*]. To enhance effectiveness and lower costs, there is also an evolution towards decentralization of delivery and introduction of third party providers; both are thought to enhance competition. Further, new technologies make possible individualization of services, already developed in regional contexts [*Evolution*

toward the Multilevel; Increased Dynamism and Controllability]. Finally, in terms of the underlying processes, there is a growing sophistication of performance monitoring and accountability mechanisms, in some areas also enabled by AI [*Increased Dynamism and Controllability, Evolution toward Decreased Human Involvement; Increased Ideality*]. These algorithm-driven processes lack in transparency and remediation mechanisms, however, limiting individuals' capacity to review and contest whatever outputs they produce [*Evolution with Matching and Mismatching Elements*].

We now peer into the next step of policy evolution, defined by an economy undergoing deep transformations driven primarily by advances in automation. The digital sector, including network infrastructure, e-commerce and digital media, is a major part of the economy, with deep impact on labour markets. The retail sector, for example, has been completely transformed not only as it is dominated by online vendors but also due to the widespread adoption of automated cashiers. There are deepening inequalities and rising unemployment, difficult to remedy by changing the EPL or by implementing advanced activation. Unable to keep up, the previous LMP solution, flexicurity, is in decline [*Stages of Evolution*]. Ready in wait, the basic income model now gains purchase across states. Rather than protecting jobs or workers as in the prior eras, the focus now is on individual welfare. As a result, the range of unemployment, old age, and related services are replaced with one income distribution program [*Increased Complexity then Simplification; Evolution toward Decreased Human Involvement*]. The resources are diverted away from ALMP, including training systems which have not proven their effectiveness. In time, cognizant of the effects of EPL, policymakers begin to recalibrate EPL in line with the restructuring job markets [*Nonuniform Development of System Elements*]. Aiming to bridge the gap between the high skills and low skill jobs, policy makers also start to change the incentives and rules to develop and support mid-skill work, including in medical and legal sectors. A series of economic, social, and cultural shifts demand further adjustments to the basic income program. Conditionality and tiered system is introduced to align outcomes with public interest [*Increased Complexity then Simplification*]. This increases the need for new accountability systems; at the same time, large gaps in compliance exist in the EPL and other policy arenas [*Nonuniform Development of System Elements*].

Taking a cue from goal based regulation and working within the complexity paradigm, states begin to increasingly adopt the complexity frame (Colander and Kupers 2014) for policy [*Stages of Evolution*]. This is especially applicable in financial and employment regulation, which have in the past depended on complex sets of discrete processes replete with loopholes (Chapter 6). The states are thus evolving empowering environments, allowing the right regulatory structures to emerge from the bottom [*Increased Ideality*]. This changes the complexity and the nature of governance processes altogether [*Increased Complexity then Simplification; Increased Dynamism and Controllability*].

Above, we have conducted a brief mapping of the developments in social policy with reference to the Patterns of Evolution. As apparent, the structure-in-evolution places policy change in a context of broader techno-economic developments while allowing the introduction of the time element into the analysis. While this exercise was only illustrative, we may begin to appreciate where a common framework fits in policy analysis and, with developed sequences of change associated with each Pattern, the Lines

of Evolution, in design. We may also appreciate such a framework could offer a new perspective on existing empirical and theoretical work. Making a case for the viability of such an approach in policy studies demands first an empirical validation. Having now a clearer theoretical and practical understanding, we turn to such a goal in the remaining chapters.

Conclusion

A recurrent theme in this research is the conflict between two views of the world. Inspired by physical sciences is the conventional, reductionist perspective on the social world. This is dominating not only explanations but also approaches to regulation of the socio-technical systems. The other is the complexity view, recognizing the world consists of interconnected, continually changing systems, exhibiting behaviours that cannot be understood with reference to system elements. Outcomes in these systems thus cannot be foreseen.

Both views have deep implications to the study and the design of policy, and governance more broadly. In a linear world, as assumed by the conventional view, we can connect causes with effects, make predictions, and calculate expected utilities of possible interventions. The social world is thus amenable to control; and, on the expectation that ex ante analyses have accounted for the most critical outcomes, much of the regulation can be reactive. Replete with feedback loops producing unexpected, adaptive behaviours, the social world, according to the evolutionary/complexity view, can at best be managed. Facing absolute uncertainty, policy makers understand the limits to design; they must use different strategies, including precaution. Given the evolving nature of society, there are no laws or normative theories to follow; governance is a matter of creating the right eco-structures, an environment enabling actors to identify regulatory goals and meet them (Colander and Kupers 2014). Ultimately, we face a different world than the one of convention, requiring new tools and approaches.

Working within the latter framework, the goal of this module was to first advance the evolutionary view of policy. Scholars across social sciences have found useful disparate elements of evolutionary and complexity research; recently, this thinking has been brought more formally into studies of institutions and policy. Nevertheless, outstanding questions both on the direction and logic of policy development and, more fundamentally, on the relationships among the various interpretations of change found across policy and institutional research, become barriers to progress within and beyond these research programs. Taking the structure-in-evolution view, an application rooted in research in technological innovation, holds a promise not only to integrate evolutionary scholarship but also to advance the way we approach change in social systems.

While many scholars see evolutionary features in institutions (as well as science), we advance a view of change in creative systems as *structured*. And flexicurity provides an important support in this effort for two reasons. First, its organic origins and its subsequent development, including the attempts at its replication through the EC (all in spite of the uncertainties in its outcomes), reinforce the argument for evolutionary approaches to policy. As well, when taking into account an extended view of evolution in creative systems, the Patterns of Evolution, flexicurity represents a developmental phase

in LMP. Flexicurity thus becomes an important referent in the study of the structure of policy evolution.

Chapter 8. Evolving Policy: The Danish Experience

An earlier assessment (Chapter 3) of labour markets across the EU revealed significant diversity in LMP constellations across states which fall into discernible clusters. It also identified a number of exceptional cases, countries which do not fit well into these groupings. Among them is Denmark, a state that has attracted significant attention of policy makers impressed by its strong employment and economic performance, particularly notable given the reductions in unemployment were not accompanied by inflation (Madsen 2006; Torfing 1999). Throughout the 1990s, Denmark has also attained some of the highest per capita incomes in the world. With its low rates of poverty and income inequality, Denmark joins its Scandinavian counterparts as one of the most egalitarian countries in the world. And, along with Switzerland, and the US, the World Economic Forum (2019) has considered Denmark among the most competitive economies globally.

These outcomes are exceptional, too, in that they are contrary to expectations. As our and other analyses reveal (Chapter 3), Denmark is not like Sweden or Germany (CME) nor the UK (LME) in its institutional setup and its policy making mechanisms. It is a hybrid incorporating features of both LME, with its workers and organizations exposed to the market, and CME, in its “institutionalized collective learning and decision making among firms, workers, policy makers, and others” (Campbell and Pedersen 2007, 309). Hence, to some, Denmark has been able to capitalize on different kinds of complementarities than those stemming from the institutional homogeneities typical to the LME or CME systems. In their study of Danish institutional performance, Campbell and Pedersen (2007) identify these features in the country’s labour market institutions, systems for training and skills development, and industrial policy, and show how they enhance rather than hinder Denmark’s socio-economic performance. Indeed, the Danish case not only serves as a challenge to what varieties of capitalism (Chapter 4) research leads us to expect, it is also an important study in the evolution of employment policy.

As noted (Chapter 8), the Danish employment system has several notable features, many products of historical contingencies, path-dependent processes, and rather limited strategic choices (Emmenegger 2010; Schwartz 2001). Due to what are considered to be its key complementarities, this system has often been characterized as the “golden triangle” (Madsen 2008; Madsen 2006). The first vertex of this model represents flexible labour markets. The relatively weak employment protections mean high levels of external numerical flexibility, numbers similar to LMEs (Chapter 3). Employers can take on or fire workers with relative ease, resulting in high levels of occupational mobility and shorter job tenures (similar to the US or UK) (Madsen 2006). The low levels of employment protection are balanced by generous welfare systems, the second vertex of the triangle. Available to all citizens, generous unemployment benefits, health insurance, and other income related benefits make up one of the strongest social safety nets among OECD countries. Such a system in turn makes possible, and now is increasingly conditioned on, the participation of those without work in advanced activation schemes focused on counselling and capacity development. Finally, the third vertex of the golden triangle is active labour market programmes. Enacted primarily in the 1990s, the chief goal of these ALMPs is to enhance the employability of workers, especially those in long-term unemployment. These policies are designed to provide both

the motivation and the tools to (re)enter employment. Revealing of the magnitude of these programs is their overall cost, second only to Sweden in terms of the proportion of GDP spent (Campbell and Pedersen 2007). These policies are also reflected in the overall participation in training, of both the employed and the unemployed (see Figure A3.5). Both Denmark and Sweden show numbers attesting not only to the extent of these programs but also to the advanced state of their systems of skills development (Chapter 3).

This model of security, flexibility, and learning, which has come to be known as *flexicurity* (Chapter 2), has served Denmark well in coping with the post-industrial demands for flexibility and agility. Moreover, embraced by individuals and their representatives, flexicurity has proven resilient and popular (Madsen 2013). Yet, as Campbell and Pedersen (2007) recognize, the Danish labour markets have also benefited from other forms of flexibility. These are associated with “institutional decentralization,” where “important elements of the welfare programs, active labor market policies, and some aspects of collective bargaining agreements were decentralized to the regional level and sometimes to the level of individual firms” (317). Importantly, much of this system relies on “decentralized negotiations among unions, employer groups, municipal authorities, educators, and other relevant actors at the regional and local levels over curricular and other issues” (317). Such flexibility allows more control over the outcomes of upskilling, now better tailored to the local needs; the same is true for working time negotiated to fit the needs of both local firms and the citizens, more of whom can thus participate in the labour markets. What is more, as the authors note, such widespread, inclusive, and adaptive systems create a virtuous circle enhancing the viability of the firms and supporting the very system of labour market flexibility.

Flexicurity, to be sure, is a product of both historical developments and ongoing dynamics among various players in broader economic and political context. This module thus sets out to take a long term view and analyze the evolution of the Danish social state with an emphasis on employment policy. More specifically, it aims to accomplish two related goals. First, we trace the development of the Danish social policy since its foundations at the break of the last century. Notwithstanding the numerous works exploring the Danish institutional and policy developments—whether focusing on particular period in time (Bredgaard and Daemmrich 2013; Goul Andersen and Pedersen 2007; Madsen 2006; Goul Andersen 2002; Nørgaard 2000; Levine 1978); engaging changes in the welfare state more broadly (Kaspersen 2006; Bernild 2003; Christiansen and Petersen 2001); or discussing specific facets of labour market arrangements (Hendeliowitz 2008; Daguerre 2007; Etherington and Andersen 2005; Larsen 2004)—there is a lack of an integrated overview³³ sufficiently comprehensive to support our line of analysis. We hence start by filling this void as we provide a historical account of employment and, where pertinent, social policy development—not only as they are both part of the welfare architecture but also as they are increasingly interrelated. Generally in line with the boundaries established in the literature, we organize the discussion around six key time periods of contrasting economic or political circumstances.³⁴

³³ This is with regards to material available in the English language.

³⁴ To be sure, if we were to focus the analysis on institutional developments, we may opt for a different organization, not the least as institutional changes do not necessarily coincide with reforms in policy.

Such an overview will thus serve as a foundation for the second task at hand: to empirically validate the structure-in-evolution view of policy, introduced in the preceding modules (Chapter 6, 7, 8). *How do the Patterns of Evolution manifest in the development of Danish systems of social and employment policy? Can they bridge the gaps in our understanding of policy change?* We thus identify and discuss each of the eight patterns in this particular context, reinforcing the case for an alternate view of change and its prospects.

The Foundations

To understand Danish labour market development, and indeed the establishment and the subsequent developments of its welfare state, one must go back to end of the 19th century, times of instability and protracted conflict between the employers and labour. Ultimately, a resolution was reached in the September Compromise of 1899, when the employers recognized the unions' right to organize so long as the labour accepted the freedom to dismiss workers without restrictions, among other terms (Emmenegger 2010). They also agreed to establish mechanisms and rules in resolving disputes. Yet, an ensuing conflict (in 1908) revealed this agreement was inadequate given “a lack of rules on the question of how to solve disagreements on the interpretation of collective agreements within the different branches, and how to sanction breach of ordinary collective agreements” (Hasselbalch 2002, 17). The outstanding issues were addressed in relatively a short order based on the recommendations of a special committee. As a result, the state established: an arbitration body now known as the Labour Court with the capacity to issue in cases of breaches of collective agreements; a set of standard rules guiding the dispute procedures; and a public conciliation body with the capacity to intervene in negotiations and facilitate resolutions (Hasselbalch 2002).

These events hence produced a framework that became “the foundation for the practice of leaving it to the labour market parties themselves to regulate most matters concerning the labour market” (Larsen 2004, 140). As a result, it was only in 1960s, with the revision of the agreement that added protections against arbitrary dismissals (Emmenegger 2010) and with the development of an “official labour market policy” (Larsen 2004), that LMP has seen more substantive change.

Aside from the organization of labour relations, this period has also seen the establishment of the Danish welfare state, a process accelerated by another crisis. Starting in the 1870s, the economically vital agricultural sector began to experience labour shortages along with drop in demand for crops and lower prices, ultimately bringing about a crisis. Changes in production intensity and migration to cities raised the demand for farm workers and their wages, in turn eroding the profits of farmers (Petersen and Petersen 2007). The politically powerful farmers thus began to support state intervention in the form of social policy as a way to subsidize and retain their workers (Petersen and Petersen 2007).

This opened the doors to five major legislative acts that followed over the period of about two decades. Enacted in 1891, the first legislation was on old-age assistance. Funded by state and local taxes and managed by local authorities, this universal scheme covered all needy citizens over 60 years of age. Eligibility and the assistance levels were determined locally; aside from dispute resolution, the state intervention was limited. A

product of compromise, the sickness insurance legislation was enacted in 1892. Voluntary insurance was provided by associations receiving subsidies from the state; it was administered by corporatist bodies at both local and national levels. Accident insurance for workers was passed in 1898. The employer-covered insurance was aimed at workers in the manufacturing sector; a national corporatist body was given the power of oversight. The next social law was the Occupational Safety and Health Act of 1901, providing a number of innovations over the prior arrangements (though exempting agricultural firms). As with the workplace insurance, it was agreed that a tripartite body would administer the inspection regime. Finally, there was the Unemployment Act of 1907, a compromise securing a dependable unemployment security. It established a voluntary system of unemployment insurance provided by trade associations and financed by their members and state (and optionally local government) subsidies. The administration was at the national level through a corporatist body constituted by representatives of the unemployment associations (Nørgaard 2000).

As hinted, it is no coincidence that such laws were enacted during this period. Though the legislatures were dominated by bourgeois parties—with agrarians having the main influence over the outcomes (Nørgaard 2000)—all parties were motivated to come to the table to avoid further instability (Levine 1978). Importantly, however, their debates were rooted in a shared philosophy, present until the 1930s (Levine 1978). And, as Nørgaard (2000) observes,

...the five policies can be said to share a common institutional trait: all laws involved decentralized administration. To varying degrees, administrative powers were delegated to the localities, private companies, or semi-private organizations. Corporatism and local self-administration, i.e. functional and geographical decentralization, along with pure private solutions, may very well have been looked upon as three species of the same genus. (207)

In sum, a number of key policies were implemented during this important period, some innovative, others building on schemes developed earlier. Rather than being similar or predictable, as various path dependent and power resources theories may hold, the laws varied in their funding (who pays) and administrative aspects (who and to what extent has discretion over implementation) (Nørgaard 2000). Overall, the outcomes were skewed in favour of the bourgeois parties, who have left an important imprint on the subsequent development of the Danish welfare state.

Milestones: 1910s to 1950s

It has been argued that the next period of Danish history, punctuated by two wars and a deep economic crisis, became a pivotal period in the formation of the Danish state and the development of its social policy. The Great War was the first time when “redistribution of income and welfare took place on a massive scale,” benefiting not only the poor but the society more broadly (Kaspersen 2006, 117). This meant major interventions such as price controls, confiscation of foods and other critical goods, and a ban on exports (in 1914), and income support to help with rising prices (in 1915) (Petersen and Sørensen 2018). The war also provided an impetus for the government to bring together major societal organizations in numerous commissions to weigh in on wartime regulations and policies; this has institutionalized their voices in decision

making and entrenched the Danish variant of corporatism (Kaspersen 2006). This period saw some revisions to welfare legislation, such as in 1921 when some flat-rate benefits were introduced and local subsidies for unemployment insurance became mandatory (Nørgaard 2000).

For Denmark, as for other states, the early 1930s were times of economic and social instability. Faced with deep crisis, the major political parties reached a milestone compromise, the Kanslergade Agreement, which included subsidies for agriculture and business, investments into public works, currency devaluation, statutory changes to collective agreements, and, above all, the enactment of a major social reform, the Social Reform Act of 1933 (Petersen and Sørensen 2018; Kaspersen 2006). Based on proposals developed by Social Democratic politician K.K. Steincke in the 1920s and advanced for years prior to the passage, the Reform can be considered “the most comprehensive social legislation in any European country at that time” and a milestone in the development of the Danish welfare state (Christiansen and Petersen 2001, 182).

While there are some debates on the Act’s novelty (Petersen et al. 2013), it was significant in a number of ways. First, “it introduced the principle of social rights for all citizens to receive social benefits and care and the obligation of the state to provide a minimum level of existence for everybody regardless of the cause of their need” (Christiansen and Petersen 2001, 182). The past system of discretionary allocation of benefits by local authorities, that had produced large inequalities across jurisdictions (Christiansen and Petersen 2001), thus gave way to “the modern entitlement principle” (Esping-Andersen and Korpi 1986).

Second, the Social Reform Act of 1933 coordinated and simplified the system of welfare as it replaced the 55 laws enacted over the preceding half century into 4 main pillars. These were the Accident Insurance Act, Employment Exchange and Unemployment Insurance Act, National Social Insurance Act including sickness, old age and disability, and the Public Assistance Act (Musiał 1996). Among the notable legislative changes was making compulsory the membership of adults in sickness societies, associations also responsible for old-age pensions; this made possible to dispense with the socially punitive Poor Law, previously intended to provide support for non-members (Bernild 2003).

Finally, the Act led to realignments in the administrative system that has, in parallel with the statutory developments, grown in institutional complexity. Emerging was “a very bureaucratic and dense public administration, that was hard to navigate and expensive to run” (Nielsen 2016). The reform thus brought about several changes in administration: “1. Municipalities became the center for the local social administration (in terms of responsibility, administration and control); 2. A simplification of the very complicated refund regulations and a collective redistribution from the rural municipalities to the large urban municipalities; 3. In total, the state took over a larger share of the social expenditures from the municipalities” (Petersen et al. 2013, 121). It must be noted, however, that at this time, the state was not yet fully equipped to deliver on the new statutory obligations; hence the Act encouraged “operation agreements between local authorities and what are known as self-governing institutions” (Ibsen and Habermann 2005). Nevertheless, the goal was to have the state develop as the central actor in the provision of social welfare.

The contemporaneous challenges with unemployment, exceeding 40% in 1932 (Kaspersen 2006), compelled the government to act further. 1930s have thus also seen the lowering of the age to receive pensions to 60 years, reforming the education system, instating a minimum of 2 weeks of holiday for all workers (Petersen and Sørensen 2018), and creating institutions to support mothers (Christiansen and Petersen 2001). Such policies were aimed at enhancing family life and, with it, population (Petersen and Sørensen 2018; Christiansen and Petersen 2001).

During the Second World War, as throughout the prior war, the state was in a crisis mode, intervening heavily in the markets, limiting benefits and making it more difficult to access them. In the employment sphere, for example, the administration of unemployment and social benefits became stricter, and the unemployed were compelled to take on virtually any available opportunity (Petersen and Sørensen 2018). Overall, however, the war has not altered the fundamentals of the Danish welfare architecture (Petersen and Sørensen 2018).

The Keynesian Era: 1950s and 1970s

There is a broad agreement in the literature that the following period, 1950s to 1970s, was significant not only for the Danish industrial development but also the advancement of its institutions, whether of governance, welfare, or economic coordination. The period began with Denmark's further integration into the world economy, jumpstarting in 1957 "the Second Industrial Revolution" (Torfing 1999), providing in turn a springboard for "the Golden Age of Social Democracy" (Christiansen and Petersen 2001). As hinted earlier, policy decisions of this era reflected the Keynesian consensus (Chapter 1, 2), prioritizing full employment and economic stability, and thus growing the role of government in the management of the economy and the provision of welfare. In Denmark, the government has thus embraced the "integrative growth-welfare model" (Christiansen and Petersen 2001), a Social Democratic strategy of inclusive growth through tax-based redistribution and social investment. This has led to a number of reforms, changing "both the social security system and the way in which social problems were talked about" (Christiansen and Petersen 2001, 184). Importantly, the policy reforms were often linked with institutional adaptation, whether with respect to social policy or the emerging LMP.

The first major reform implementing the new model, a tax-financed, universalist welfare system, was the National Pension Scheme in 1956. This provided all retirees with a "People's Pension," a benefit consisting of a flat-rate base support complemented by an income-related supplement (Bernild 2003; Christiansen and Petersen 2001). This was followed by the 1958 School Reform establishing a comprehensive primary education for seven and, in 1960, nine years; and enacted respectively in 1960 and 1961 were the Rehabilitation Act and the Public Assistance Acts, "genuinely proactive, preventive social policies, and removed the old system where some, 'undeserving', claimants lost their civil rights" (Christiansen and Petersen 2001, 188). Moreover, this period also saw the development of LMP as an independent policy area. In 1960, the government has established the unskilled workers' training programme (1960), and institutionalized a system of continuing education for skilled workers in 1965 (Larsen 2004). Key reforms were soon to follow.

Important here is to note, as Bernild (2003) reminds us, that whereas social insurance reforms were the products of compromise among major political actors, the universalist strategy was advanced from the top down, informed by social research. Indeed, social policy making, particularly with regards to the reforms of this period, took on a rationalistic character with the establishment of the technocratic (and contested) National Institute of Social Research in 1958 (Christiansen and Petersen 2001).

From these developments thus emerged two transformative reforms with deep implications beyond the Danish system of social security: the establishment of the Regional Employment Agencies in 1969 and the Social Security Act of 1976 (Etherington and Andersen 2005). The creation of the public employment service was motivated by the belief that better allocation of labour is a public prerogative given the centrality of labour markets to macroeconomic balance (Etherington and Andersen 2005; Larsen 2004). As Larsen explains, providing firms “with workers and finding jobs for the unemployed came to be seen as a government matter, and the public employment service system became the pivot of labour market policy, which has since found its basic legitimacy in these allocative tasks” (2004, 143). The job-seekers gained a robust employment support system while the employers retained the hiring and firing flexibility, expanding their options and, freed from paying for redundancies, keeping their costs lower. These were the origins of the flexicurity system.

Often taken as the most significant postwar welfare reform, the Social Security Act of 1976 was a culmination of a series of related social and administrative acts of the 1970s. It was rooted in the plan of the Commission for Social Reform (in 1964) guided by the principles of basic social rights and “prevention, rehabilitation, holism and individual needs and security” (Christiansen and Petersen 2001, 191). The commission thus advanced a number of main and supporting changes. First, the aim was to streamline the bureaucracy, offering a one-tier system of access to services ranging from unemployment to health. The key outcome was the emergence of “a system of tax-financed social rights,” where, among others changes, the central government assumed the financing of pensions and of health-care, replacing the traditional sickness insurance funds (Christiansen and Petersen 2001). Excluded from this scheme, however, was unemployment insurance, given its strong attachment to the trade unions. The second aim was ensuring individual security, seen as key to both inclusion and reintegration. “Generous welfare as a tool route to decent work on a voluntary basis,” was the guiding precept (Etherington and Andersen 2005, 21). This meant raising the levels of benefits and easing access to them. Finally, the commission saw a greater value in the provision of tailored services over mere transfers of cash. The reform was to be “achieved on the one hand by centralizing the casework of all social events to a single social security office, and on the other hand by a decentralization from the national to the local level” (Bernild 2003). This, in turn, would be enabled by “a staff of well-functioning and highly trained employees in the social administration” (Christiansen and Petersen 2001, 191).

And it would require a new administrative infrastructure, shoring up the “local government pillar,” one of the two institutional components of the Danish welfare and employment policy (Etherington and Andersen 2005).³⁵ This new infrastructure was

³⁵ Local Coordination Committees emerged in 1998 with a goal of enhancing cooperation between the two pillars, thus forming the third institutional pillar of the Danish social policy (Etherington and Andersen 2005).

established in a set of administrative reforms of the 1970s that have homogenized and professionalized public services (Kaspersen 2006). Prior to the reforms, Denmark had no less than 1300 administrative parishes, the majority of which (upwards of 800 in 1950) could not take social service claims due to the lack of professional staff (Kaspersen 2006). The reforms established 275 identically organized municipalities responsible for administration of social services, social security, primary education, elderly care, childcare, and utilities, among others, and 14 regional councils tasked with planning, secondary education, health, transportation, and environment (Etherington and Andersen 2005).

Moreover, this period saw changes to the “corporatist,” or the second, pillar of the Danish social policy. With regard to LMP, it was recognized that their effective formulation and implementation would not be possible without a greater involvement of stakeholders. The late 1960s thus saw the establishment of a number of corporatist structures, namely the National Labour Market Board (at present the National Employment Council) at the national level and 14 labour market boards (Labour Market Councils) at the regional level (Larsen 2004). The creation of these active labour market policy institutions was a major milestone in the Danish LMP, not the least due to their ability to shape policy in response to local conditions.

Transitions: 1970s to 1980s

For many industrialized democracies, 1973 is taken as a milestone, a year in which an exogenous shock, the OPEC embargo, began tipping their already fragile economies into crisis, opening a window to changes in thinking and eventually in policy. The year has further importance to Denmark, where the elections marked the end to the traditional political order as the emerging “protest parties” challenged the dominance of the traditional players and their shared vision of the welfare state (Bernild 2003; Christiansen and Petersen 2001). The ensuing two decades saw near constant growth in unemployment (from 2% in 1973 to about 9% in 1980s), testing both the prevalent thinking and the solutions designed in times of low unemployment and economic growth (Larsen 2004). Importantly, these were times of paradigmatic shift, in ideas though not (yet) in policies (Etherington and Andersen 2005; Gould Andersen 2002), offering many insights into socio-political change.

Denmark was affected more deeply by the crisis than other nations due to its high levels of foreign debt (building up throughout the 1960s) demanding a stricter fiscal policy; a weakened competitiveness due to wage increases compensating the higher costs of imported goods; and falling profits due to the combination of increases in wages and decreases in productivity in the industrial sector (Torfing 1999). These led to dramatic spike in unemployment (to nearly 5% in 1975), whose unabated growth compelled governments to action.

The ensuing governments have reached for different solutions to cope with unemployment, policies that Gould Andersen (2002) classified into three consecutive policy regimes.³⁶ The first were Keynesian supply and demand strategies, tried by the Social Democratic government from 1975 to 1982. This included a stimulus in the form of a short-term reduction of value-added tax and investments into the public sector,

³⁶ The discussion of the three policy regimes is based mainly on Gould Andersen (2002).

significantly expanding its employment. Finding these to be not very effective, the government turned to lowering of labour supply, implementing early retirement allowance, shortening working hours and extending vacations, and introducing leave schemes, including parental and education programmes. It is important to note this period has also seen the establishment of some key ALMP: a law requiring municipalities and counties to set up education and employment projects to combat youth unemployment (1977), and a job training programme (1978).

Taking office in 1982, the Conservative–Liberal government shifted strategies, prioritizing instead markets and competitiveness. Aside from market liberalization, there was focus on inflation leading to freezing of budgets and public sector hiring, the cessation of wage indexation, and limitations on increases in unemployment benefits. With respect to ALMP, ongoing education and training, believed to promote the flexibility of the labour force, assumed priority (Larsen 2004). Employment programmes were thus augmented with a basic education scheme (in 1985), offering those seeking work an opportunity for skills enhancement (Larsen 2004).

The return of the Social Democrats to government in 1993 marked the beginning of the third policy regime, structural strategies. This was a time for a shift to activation and, with it, major changes in incentive and compliance systems, and ALMP, as will be discussed in the next section.

In sum, at the end of the 1980s, the unemployment benefit system had basic income-like features, given the broad access to substantial social security available over extended periods of time. Gould Andersen (2002) outlines the state of the play in LMP at the end of this period:

Access was easy, since only one year of membership and six consecutive months of (normal) employment was required to achieve full entitlements. *Duration* was very long (some 8½ years) because entitlement to 2½ years of unemployment benefits could be prolonged twice for another 2½ years if the individual took part in a job programme. The *compensation level* of 90%, which is very favourable to low-income groups (and to citizenship), was maintained. Also, the *works test* appears to have been rather liberal. The unemployed could not refuse an appropriate job and were formally required to be actively job-seeking and able to take a job immediately. However, especially in recession periods, little was done to ensure an effective works test. (66, emphases original)

In addition, 60 to 66 year-olds who had paid into unemployment insurance for at least 20 years had the right to early retirement. Finally, the government established transitional allowance (in 1992). This allowed 55 to 59 year-olds who were long-term unemployed to draw support (at 80% of maximum unemployment) until reaching the age of early retirement (Gould Andersen 2002). Overall, in this period of crisis and a recession, social policy not only remained largely in tact, it was even expanded in some aspects.

Activation: 1993 to 2001

Changes in social policy, including many of the LMP reforms, implemented in the 1990s can be viewed as outcomes of extensive debates both on the efficacy of the specific policies and on the Danish approach to welfare more broadly. It is no coincidence that the debates to revisit the core of the Danish social policy have intensified throughout the 1970s and 1980s. This was the time of a relatively fast break from the steady growth and

low unemployment (Larsen 2004); as the unemployed, supported unconditionally by the state, began to accumulate, so did the questions on the logic of the status quo. As Larsen explains:

The structural problems in the labour market, apparent at that time, point to some of the inherent problems connected with the transitional labour market in general. It is difficult to get unemployed people back into the market when, for years, they have relied on high levels of financial compensation and training schemes primarily geared towards earning the right to continued unemployment benefit, even in times of many vacancies. (2004, 146)

But rather than the increasing costs, at issue was “whether the welfare state undermined the duties of citizenship” (Cox 2001, 477). A number of changes to policies discussed in the previous sections followed, which gradually began to reshape the public conceptions of social policy (Cox 2001). Ultimately, the recommendations of a number of commissions tasked with studying (and rationalizing) change paved the way for what was no less than a paradigm change.³⁷ At the core of this shift was the acceptance of reciprocity: the unemployed who receive social assistance have to make effort to seek employment (Cox 2001). This new “deal” (Larsen 2004) was reflected in a number of related reforms of 1994 and 1995 passed by the Social-Democratic government under pressure to cope with the rising unemployment: the Act on Active Labour Market Policy, the Act on Municipal Activation, and deep reforms of the pension system (Cox 2001).

The first two Acts resulted in a number of major changes in ALMP and its administration (Madsen 2006). First, as hinted at the outset, elements of ALMP development were *decentralized* to the lower levels of governance, where tri-partite councils became empowered to design and implement policy in context of the corresponding jurisdiction. Second, there was a shift in focus in the provision of assistance to the long-term unemployed. The rigid rule-based system was replaced with *individualized* approaches tailoring assistance to the needs of individual recipients. Third, a two-period system of benefits was established, separating a passive period (up to four years long with access to one year of activation services) from an activation period (three years). Also implemented were instruments promoting job rotation. To make it easier for individuals to take a personal time off work, the legislation established a sabbatical, education, and family leave supported by a partial unemployment benefit. Finally, the link between ALMP participation and unemployment benefits was severed. That is, being in subsidized employment no longer extended unemployment eligibility (Madsen 2006). See also Table A8.1.

The systems of pensions were also reformed, reinforcing the new employment focused approach to social policy. Motivated primarily by the recognition that the increasing population of those in retirement strains the sustainability of the publicly-financed system of old-age support, the changes aimed to shift some of the responsibility for old age security to the individuals. This led to several adjustments (Cox 2001): making the access to benefits more selective through mean-testing; increasing the importance of contributory schemes; and encouraging occupational pensions which establish “a direct connection between a citizen’s work history and pension income” (Cox 2001, 482).

³⁷ Which some view as a transition from the Keynesian welfare state to the Schumpeterian workfare regime (Torfing 1999).

Coming in 1995, another important milestone was related to general labour agreements on flexible work hours. This move was related to the aforementioned *decentralization* of negotiations on various aspects of employment policy. The workers thus gained more say about employment arrangements at the local level, giving them more options to balance their family and work life. This expanded the labour pool, which was of benefit to the employers, not the least as it supported flexibility (Campbell and Pedersen 2007).

Importantly, 1998 saw a replacement of the Law on Social Assistance with new laws emphasizing *activation* and thus “duty to work” (Goul Andersen 2002). Further policy changes in this period focused mainly on the adjustments in policy settings. This involved shortening of the passive support period for both unemployed youth and adults and changes in eligibility requirements (Table A9.1). The reasons for these changes, however, appear far from evidence-based, given the speed at which these adjustments were rolled out.

The above discussed reforms were followed by sharp drops in unemployment and an overall economic upturn—what is often called the Danish employment “miracle” (Schwartz 2001; Torfing 1999). A case has been made that the new LMP played a large role in these developments (Madsen 2006). At last, it has been argued, policies started to deliver results as “successive governments, after years of trials and errors, finally reached the right balance between individual obligations on the unemployed and generous welfare provision” (Daguerre 2007, 82).

More People at Work: 2001 and Beyond

A change of government in 2001 to the coalition of the Liberal Party of Denmark (Venstre) and Conservative People's Party marked the beginning of a new period, years of slow growth leading up to the global financial and economic crisis of 2008. Overall, the government continued the same policy regime as its predecessor while also implementing a major structural reform.

First, with respect to labour markets, a new reform, “More people at work,” was introduced in 2003. The reform moved further away from education and training and towards personal guidance and subsidized job training (Larsen 2004). Madsen (2006) outlines its key elements. First, the selection of individualization schemes was greatly *simplified*. The original 32 programmes were replaced with three general types centering on “a) guidance, training and education, b) practical introduction to the enterprises and c) wage subsidies.” Second, organizations outside of government (such as the tri-partite councils) were given a greater control across all stages of ALMP implementation. Third, more pressure was placed both on the unemployed, now expected to intensify job search related activities, and on the service providers, now prioritizing personal contact with people who have been in unemployment for more than 3 months. Also, all adults who were unemployed for more than a year were expected to remain in activation (although the activation rules were not unambiguous). Moreover, the legislation initiated efforts to bring under the same roof systems for insured and uninsured persons. This would first be accomplished at the municipal level with joint job-centres. Finally, the legislation aimed to leverage ICT in the modernization of the administration and delivery of ALMP and the benefits.

Moreover, in 2007, the government implemented a structural reform of the administration system. Studies indicated that “many of the administrative units were too small and lacked the capacity to handle the tasks they were given, and also that most of the counties (regional authorities) lacked adequate capacity to ensure optimal sector planning” (Hendeliowitz 2008, 11). To make the system more responsive and efficient in face of rapid change technological and economic change, the government opted to reduce further the number of administrative units (Hendeliowitz 2008). As a result, the existing 271 municipalities (275 before mergers) were reduced to 98 while the 14 counties were replaced by five administrative regions, all governed by elected representatives. Further, there has been a shift of many competencies to the municipalities, now responsible for the administration of nearly all public services in their area, also including active labour market programmes (Hendeliowitz 2008).

It would not be long, however, before the Danish system of social and employment policies was exposed to global crisis, testing not only its performance but also offering further insight into the conditions for its change. The 2008 crisis, an important milestone in the discussions on social policy in general and flexicurity in particular, significantly impacted Danish employment and economic performance, moving Denmark from a top place in the 2008 EU unemployment ranking to the middle position by 2012, and reducing its GDP by 8% on a quarterly basis throughout the height of the crisis (Madsen 2013). Flexicurity, which meanwhile has been embraced at the EU level as the answer to labour market challenges for the new age, has thus been challenged given the lacklustre performance, opening doors to new ideas.

The response to the crisis was handled by two administrations, first by the incumbent Liberal-Conservative government (serving from 2001 to 2011), and then by the centre-left government which took over in 2011. Both adopted a range of expansionary measures followed by a combination of welfare reforms and fiscal adjustments. Among the key measures implemented by the former government were: a 2009 reform reducing taxes for high- and middle-income groups; economic stimulus packages in 2009 and 2010 focusing on infrastructure, energy-saving and other public investment projects; phasing out of early retirement schemes in 2011; and proposals to change the disability and flexi-job programmes, limiting entitlements and job subsidies for select groups (Hansen and Mailand 2013; Madsen 2013). Of particular interest was the controversial recovery plan of 2010, a set of austerity measures developed as a response partly to the mounting deficits and to a European Commission recommendation to limit them. Among its key elements were a 0.5% reduction of ministry budgets and a temporary freeze on tax scale indexation. Furthermore, the plan increased fees for training, placed a limit on the dues union members can deduct from their income, lowered the maximum duration of unemployment benefits (from four to two years), and introduced changes in one’s subsequent access to benefits (Jørgensen and Schulze 2011; Hansen and Mailand 2013), engendering severe criticism from the trade unions (Madsen 2013). As a result of these new limits coupled with declining income security due to decreasing replacement rates, the trade unions demanded the inclusion of a new benefit: severance pay for blue-collar workers in employment for at least three years (Bredgaard and Daemmrich 2013; Madsen 2013).

In terms of ALMP, a series of ministerial initiatives were introduced in both 2009 and 2010 (the latter driven by proposals from the social partners), aiming to help those

affected by collective dismissals and to aid employers and their employees through company restructuring (Madsen 2013).

While also introducing a set of public sector investments to stimulate the economy, the incoming centre-left government, mindful of the European Commission's recommendations for fiscal restraint, continued with budget cuts. It also implemented a number of LMP and pension reforms, revealing its more flexible stance toward ALMP and its willingness to invest more in interventions (Madsen 2013). Among its key reforms were: expanding access of the unemployed to education; a focus on combating youth unemployment through job rotation, apprenticeships and training; and reducing drop-out rates, particularly in vocational education and training (VET) programmes (Madsen 2013). The government also proceeded with implementing the proposed flexi-job and disability pension reforms (Hansen and Mailand 2013).

Considering the post-crisis attitudes of the social partners is also revealing. Some authors have noted deep shifts in the status of Danish unions over the last two decades. Jørgensen and Schulze (2011) observe that since the end of the 1990s, Danish unions longer involved in drafting legislation, thereby changing the style of Danish policy making. Also, since 2007, the social partners have been excluded from the administration of LMP, and now have a solely advisory function. Finally, in Jørgensen and Schulze's view, the changes to the activation approach with the new "work-first" scheme and the merging of benefit recipient groups have lessened the importance of the unions. Such thrusts may well themselves suggest a new era in the Danish employment policy.

Analysis

In previous modules, we have posited that policies, as other creative systems, do not change randomly but follow a set of distinct patterns, regularities which can be leveraged in design, forecasting, and, more generally, to enhance our understanding of institutional and policy change (Chapter 6, 7). In what follows, we draw on the historical account above and apply the Patterns of Evolution in the analysis of the development of the Danish social policy. Rather than an extensive study of each pattern and their relationships, our goal is to provide rationale for the structure-in-evolution view. An additional dimension to our argument is created by a parallel analysis of the UK conducted in the following chapter.

Stages of Evolution. Evolution of policy systems is nonlinear, following the distinct stages of an S curve: a selection and gradual adoption, rapid takeoff and growth, and decline. Policy systems move between periods of stable growth (characterized by lock-ins) and decline and instability, times determining their replacement. Both are important to understanding change. In the Danish context, we observe four periods of instability, each followed by a set of major social policy reforms: 1900s, 1930s, 1960s, and 1990s. The foundations of the Danish welfare state in the 1900s is connected to techno-economic developments of the 1870s and 1880s, time which also saw the crystallization of shared ideational underpinnings of the ensuing reforms: the importance of mutual help and the understanding of government as "society manifest" (Levine 1978). The reforms of 1930s were enacted in times of protracted crisis, though implementing many blueprints developed and advanced by Social Democratic politician K.K. Steincke for more than a decade prior. The next set of reforms was based on rationalistic

approaches advanced by commissions and research organization in the early 1960s. Though developed in times of a growing economy, some of the reforms were enacted at times of crisis in the mid 1970s. Contrary to these developments, the next set of reforms of the 1990s was implemented in times of economic upswing. Enacted by Social Democrats (contrary to conventional expectations), the reforms were rooted in neoliberal ideas that saw their selection and rise throughout the preceding two decades. Just as with Friedman's example of cyclical historical processes in the US (Chapter 6), the Danish cycles of reforms have occurred with notable regularity. As one solution gains purchase, increasing returns (lock-ins) ensure their durability for the cycle. This means that rather than emphasizing to the type of government or the economic situation, we are advised to pay attention the Stages of Evolution in explaining developments in policy.

Nonuniform Development of System Elements. Non-linear growth is apparent not only in policy systems but also their subsystems, each of which follows its own S curve. As a result, some policies are functionally ahead relative to others, producing contradictions within the policy system. Consider the case of the Poor Law system of social relief, predating the foundations of welfare institutions in the reforms of 1900s. Receiving assistance under the Poor Laws led to the loss of one's civil rights and punishment. Despite the successive reforms of the 1900s (creating new welfare programs for the "deserving") and the 1930s (introducing "social rights" and a public system of provision), it was only in the 1960s (establishing defensive and proactive social policies) when the old system was fully eliminated (Christiansen and Petersen 2001).

The second case relates to the administrative layer of social policy, as its outcomes depend on equitable access to services. It can be said that Denmark's administrative capacity has historically lagged behind what social policy was designed to deliver. For decades, most localities could not provide social services to which their residents were entitled, given they were never able to bring onboard professional staff. While the reforms of the 1970s tried to address this problem with a new administrative architecture, it was found lacking and saw further consolidation in 2007. Hence, even with developed, universalist policies in place, the outcomes may be far from universal on account of the asymmetric development of the related subsystems.

Evolution toward Increased Dynamism and Controllability. Policy systems tend to evolve in their capacity to adapt to the environment and to deliver more effectively on the intended outcomes. In line with our earlier discussion (Chapter 6), Larsen recognizes that "[c]omplex and constantly changing problems cannot be solved effectively and efficiently by a bureaucratic machinery of fixed and detailed legislation and administrative regulation" (2004, 142). The author speaks in context of the Danish LMP, notable for the lack of "hard-and-fast core of rationalised theories about the problems and solutions" (Larsen 2004). Rather, the LMP benefits from the system's agility, enabled by its unique institutional evolution. To explain, we return to the 1960s and 1970s when a number of new corporatist arrangements began to emerge in Denmark. Such trends were part of a broader decentralization and the rise of a new type of corporatism. This led not only to "the development of a multilevel system of interest groups and firms participating in policy learning, policy formation, and policy implementation at national and now subnational levels" but also to an opening of the policy processes to a greater range of stakeholders (Campbell and Pedersen 2007, 322). Campbell and Pedersen (2007) explain:

The result was a form of corporatism that improved the capacity to develop collectively shared understandings of international competition and improved capacities to formulate, implement, and fine-tune the structural policies deemed necessary to help firms and industries adapt to this competition... The system is not one where an autonomous state intervenes to pick industrial winners and losers and then targets them by applying taxes or subsidies, as is often the case with traditional forms of industrial policy. To the contrary, it is an institutionalized strategic collaboration between various actors from the private sector and government—a discovery process where firms, unions, other interest groups, experts, and the state learn about costs and opportunities and then engage in strategic coordination. (322)

Overall then, as also hinted at the outset, the Danish politico-economic system has benefited from its combination of decentralization and corporatist coordination, expanding the information-sharing and consensus-building capacity, and ultimately facilitating the kinds of structural policies such as flexicurity. Such arrangements, however, are far from static. Jørgensen and Schulze (2011) remind us of the changing role of Danish unions in decision-making and administration. An analysis of political and institutional (re)adaptation as pertaining to the shifts in unions' power resources in a changing politico-economic context should add to our understanding of the evolution toward increased dynamism and controllability in relevant policy systems.

Increased Complexity then Simplification. Policy systems cycle between phases of increasing complexity of functions, rules, processes, and dependencies among its subsystems, and periods of simplification. The above discussion of Denmark reveals a number of such cycles, apparent at several levels. At a high level, we witness transitions from the discriminatory, rules-ridden schemes of social-relief, to the more inclusive systems requiring memberships in associations, to the state-centric provision of welfare based on the principle of universality and minimal conditionality, and recently, to workfare and with it increasing complexity of rules and schemes in bringing people to work. Hence, for example, the reforms of the 1930s replaced 55 laws enacted over the prior decades with 4 main acts, simplifying also the bureaucracy and financing. There has also been a gradual consolidation and streamlining of the administrative architecture, growing the capacity to provide sophisticated individualization schemes and, in turn, their simplification (“More people at work” reform, for example).

An outstanding example here, however, is the Danish labour market policy that “somehow took in complementary elements of government 'market lubrication' and welfare protection” (Larsen 2004, 144). Indeed, its welfare state cannot be understood apart from its employment policy (LMP and EPL), just as its employment policy cannot be understood apart from the welfare state. It is because these developed into what has been, in retrospect, called flexicurity, a complex of interrelated and performance enhancing policies, a step in the evolution of welfare state (more in Chapter 2).

Evolution with Matching and Mismatching Elements. Given the limits to resources, technology, or knowledge, policy systems make use of instruments that may not necessarily fit well together, yet enable the systems to function. Discerning this Pattern in a part of evolution of the Danish social policy, we can begin with the reforms of the 1930s that attempted to address the inequities of the locally managed systems. Public institutions across the country's administrative units hence assumed the key role in the administration of welfare. Far from ready to meet all their obligations, they often relied on partnerships with local organizations to provide services. Moreover, the administrative architecture was heterogeneous, differing in structures and processes

across localities. Due to these differences, some areas had an advantage in the delivery, maintaining a system that produced inconsistent (and unequal) outcomes across the country. This is an ongoing challenge, particularly given the public administration trends in outsourcing, with a goal of providing a greater range of services, cost-savings, or their combination (Chapter 6).

Evolution toward the Multilevel. Due to the challenges inherent to top-down control as well as one-size-fits-all designs, policy systems become distributed and increasingly effective at the local or individual level. Danish employment policy offers particularly vivid examples of this evolutionary pattern. As noted, 1958 saw the establishment of National Institute of Social Research, which has provided a new direction in social policy. Ultimately, the “aim was to adapt the population at large, specifically the workforce, and every individual in particular, to a ‘society of change,’” rather than to rely on social insurance traditionally “geared to take care of predictable ‘social events’ in a ‘stable society’” (Bernild 2003). This created the groundwork for *individualization* strategies, most immediately apparent in the recommendations of the Commission for Social Reform in 1964. Importantly, meeting individualized needs required placing the service provider closer to the recipient, hence a new architecture. And later, in the 1990s, there was a similar individualization programme implemented in context of ALMP. Moreover, even parts of policy development and implementation were regionalized over time, making them more responsive to the local needs. Notable is the importance of ICT in enabling new service architectures relying on data sharing and communications (Chapter 6), designs not feasible in the past.

Evolution toward Decreased Human Involvement. Development of new technologies, including social technologies, and their incorporation into policy systems leads to a decreasing human involvement. No doubt, the increasing use of ICT in policy implementation is not only leading to expanded possibilities and increasing speed, their application also means lesser need for staff. This is evident, for example, in the “More people at work” reform of 2003 that involved an extensive digitalization of the ALMP system (Madsen 2006). Also, the 2006 welfare reform requires recipients to conduct weekly job searches online (Andersen and Pedersen 2007), saving not only service time but also agents normally tasked with providing this information. More indirectly, integrating the systems to serve both the insured and uninsured unemployed (Madsen 2006), and giving more discretion to agents (supported by ICT) to resolve cases, also yield reductions in the involvement of people in these processes.

Evolution toward Increased Ideality. Policy systems, as other creative systems, carry internal contradictions that produce adverse or suboptimal outcomes. These contradictions are gradually resolved with social and technological innovation, increasing the system’s ideality (ratio of positive and negative effects). As noted earlier (Chapter 6), working with this important pattern faces additional challenges in policy systems (given the same policy may result in a different ratio in the continuously changing context). Nevertheless, when working at a level of welfare state evolution, these trends are readily quantifiable. Consider the development of the Danish health policy, initially implemented by a dual system separating those covered through voluntary paid memberships in associations and the poor. Such an exclusionary design was eliminated with the reforms of the 1930s, when a compulsory system of memberships was established. Yet, this, as Bernild notes, created a contradiction, as it “necessitated a new distinction between active

members, who could receive benefits and passive members who could not, due to their income being too high” (2003, 4). While extending coverage and inclusiveness, the system became universal only with the social reforms of the 1960s, creating a government operated, tax-financed system of health care accessible to all (Christiansen and Petersen 2001). In time, the contradictions behind many of the adverse effects were dismantled, increasing the system’s overall ideality (more in Chapter 11).

Conclusion

Engaging the depth and complexity in the evolution of the Danish welfare state and, along with it, its labour market elements, the review above demonstrated that social policy is neither static nor volatile. And, upon a closer look, the development is replete with anomalies not explained by conventional theory. Early social policy designs, for example, are not in line with predictions of either power resource or path dependent theories (Nørgaard 2000). We also witness policies designed in times of economic growth implemented, perhaps non-intuitively, in periods of crisis. More recently, contrary to expectations, it was not the Conservative–Liberal government, but the Social Democrats who began to implement the neoliberal agendas.

On the other hand, a look untainted by conventional theory reveals various regularities and trends, offering a fresh starting point in explaining these developments. As discussed (Chapter 7), scholars have devised a number of ways of describing social policy trends, focusing primarily on its integration over the recent decades. The diversity of interpretations, however, begs the fundamental question of social science: Can we find a unified picture of change applicable across policy fields? As we attempted to show, this may be found in the structure-in-evolution view of policy, based on the eight Patterns of Evolution (Chapter 6, 7). The case study of this module loans an empirical support for this line of analysis. We have not only identified all eight Patterns in the Danish context, we have done so purposely at multiple levels—institutions, policy, and implementation—making the point that the same regularities manifest across creative systems.³⁸ Moreover, as noted, each Pattern of Evolution is associated with a number of Lines of Evolution. Well developed for physical systems, the Lines of Evolution are yet to be enumerated for policy systems, a task that will require comparative work. In the next module, we begin to develop further insight as we engage in a similar analysis of the UK.

³⁸ Future analyses would thus also benefit from an appropriate analytical framework, possibly not unlike those used in enterprise engineering.

Chapter 9. Evolving Policy: Developments in the United Kingdom

The previous module visited Denmark, a state frequently cited for its model of social policy particularly in context of the post-industrial economy, and an important case study in the development of social and labour policy. We now turn to the United Kingdom (UK), a country that has also received significant attention on account of its evolving social policy and its performance. The UK's employment benefits and employment protection are among the lowest in Europe (Chapter 3), which, coupled with high levels of poverty and inequality, place the country in an analytical box of its own. On the other hand, the UK has among the highest per capita incomes in the world and has been repeatedly ranked as one of the most competitive economies globally (WEF 2019).

The UK has received much attention not only due to the social and economic implications of its strict savings regime, but also due to its relatively strong (and to many unexpected) labour market performance. Starting in the 1970s and continuing through the 1980s, when unemployment stayed around 12%, the UK's employment situation was dismal and without many prognoses of recovery (Clasen 2002). The situation changed, however, in the 1990s, when the labour markets started to experience a durable and non-inflationary recovery, earning the UK a place, along with Denmark, the Netherlands and Ireland, in the group of labour market successes (Clasen 2002). As in Denmark, these positive developments coincided with a "radical overhaul" of social policy, changes "held up within other EU member states as an example of progressive modernization" (Clasen 2005, 3). Hence, overall, the preceding strategies of cost-cutting and deregulation were supplanted by reforms in social policy and a significant activity in the area of labour market policy. As a result, there was a notable decrease in youth and long-term unemployment, and a downward trend in the rates of poverty and inequality, especially in some vulnerable groups (Clasen 2005).

Importantly, these changes have been unfolding in context of the realities of the UK's often challenging political and politico-economic system. The country is a prototype of a liberal market economy (LME) (Chapter 5), system described as "disorganized capitalism" (Rhodes 2000). Unlike a coordinated market economy (CME), where there are lasting relationships between the investors and firms, strategic coordination across supply chains, widespread representation of workers on company boards, and significant public investments into skills development, "the British political economy is characterized by a dominance of short-term stock market finance capital, weak levels of business coordination and state interventionism, as well as decentralized, craft-based unions' representation, favouring voluntaristic plant-based rather than sector-wide wage bargaining" (Clasen 2005, 35). Its deregulated markets have an impact on worker skills profiles and the overall business strategies. This means employers tend not to make large investments into training, instead capitalizing on flexibility and a reliable supply of cheaper, unspecialized labour; and the workers do not have to commit to specialized training, benefiting instead from their general skills portable across labour markets (Clasen 2005). This economy thus depends on price to be competitive.

Further, the UK has been classified as a liberal welfare state regime, where the markets and private sector are the key sources of social security. Here, the tax-funded insurance system has been designed to provide a basic level of social and unemployment security, emphasizing means-testing and conditionality, while providing incentives for

various forms of private benefits. Also, unlike in most other countries of Continental and Northern Europe, in the UK “welfare and the economy by and large existed in separate spheres,” given the absence of social partners in the decisions on social security (and thus a lack of dialogue on social wage) (Rhodes 2000, 20). In the 1980s and 1990s, however, a combination of social reforms and macroeconomic policy choices created new connections between the welfare state and the economy, though very different from other countries. In this redesign, “a new ‘functionality’ was engineered between a social and employment policy system and the demands of accumulation in a liberal market economy. Low corporation taxes and social charges are vital, not just for sustaining Britain's FDI dependent manufacturing sector, but also for meeting the demands of the large low-wage, low-skill, low-productivity sector of the economy, whose employers also benefit from ‘in-work’ means-tested social security benefits as an effective subsidy” (Rhodes 2000, 21). The same is true for income taxes, also low in order to spur demand. As a result, policy choices are limited, with welfare improvements dependent on the conditions in the labour markets, and the economy as a whole (Rhodes 2000).

In terms of governance, the very nature of the British political system is a critical determinant of policy outcomes. Minas et al. (2012) note that even post-devolution, the UK continues to be “almost unique amongst western welfare states in the high degree of central mandate over fields of social security and employment services. The political system has never accorded the social partners or regional/local government influential roles in policy-making or in the delivery of income maintenance policies” (292). Such lack of access, and thus less space for contestation, has been shown to impact the country’s employment regime with minimal regulation and market-driven benefits (Gallie 2009). And the UK’s governance is further complicated by the historically fragmented and adversarial system of industrial relations, resulting in a lack of consensus on key issues including incomes, innovation, and industrial organization (Rhodes 2000).

Hence, the weaker institutional constraints expand the UK government’s capacity for action, on the one hand; its politico-economic regime limits the policy options, on the other. Exhibiting some extremes of stability and change, the UK thus provides an important case in the study of evolution of social policy. *How are Patterns of Evolution expressed in the UK, an exceptional political and economic environment?* Attesting to the interest in the UK social policy is the large number of accounts of its rise and change, some illuminating developments in a particular period (Rhodes 2000; Lowe 1999; Fraser 1984; Hay 1983; Mowat 1952), others exploring the role of select actors (Heller 2007; Hay 1977; Gilbert 1966), while others engaging different aspects of recent reconfigurations (Mayhew 2015; Clasen 2011; Daguerre 2007; Taylor-Gooby 2005). While each work paints an important part of the picture, the answer to our question demands an integrated view, however. We hence follow the template from the preceding module (Chapter 9) and conduct a survey across key time periods. We continue with the application of the Patterns of Evolution, this time in the context of the UK, ultimately aiming to advance the structure-in-evolution view on policy.

First Social Policy

Accounts of the origins of the British state welfare often begin with the Poor Laws of the 17th and, in their revised form, of the 19th century, and continue with the rise of

private/cooperative societies providing protections for workers of the industrializing state. Both carried deep implications in the subsequent developments in social policy (Morgan 1948; Mowat 1952; Hay 1983; Heller 2007). As in Denmark, these poor laws were harsh and punitive: a classification system attempted to assign people into three types of “houses” based on their ability to work; these houses were to be established and supervised at the parish level, and financed from taxes collected from its residents; each parish was to serve only the poor who were local or permanent to that area; and, later, the recipients also lost their civic rights (Fraser 1984). In time, industrialization, increasing population, improving social mobility, and economic instability has brought this preindustrial system, despite the innovations of its local stewards, to their knees (Fraser 1984).

Due to the hesitation of the central government to take action, localities, concerned increasingly with the working poor, began to introduce various allowances. Ultimately, a forty-year debate concluding with a report from the Royal Commission led to a creation of a new system (1834) built on centralization and deterrence. Not the least due to its insensitivity to industrialization challenges, including temporary unemployment, this solution was never thoroughly implemented. Instead, with changing economy and increasing industrial employment, workers began to find security in mutual assistance organizations (such as the Friendly Societies). As necessary as they were popular, these organizations grew so large they came to dominate “all other working-class activities” of the latter 19th century (Fraser 1992, 108).

The shifting power structures borne of the growing number of organized workers brought about some major milestones in the British social politics. The first came with the second Reform Act in 1867 when the urban workers gained the franchise. A federation of trade unions, the Trade Union Congress (TUC), was established in 1868, in turn obtaining legal recognition in 1871. In Britain, “the union movement thus preceded the political workers’ movement,” as the party representing interests of the workers, Labour, was not established until 1900 (Kaufmann 2013). Finally, after more than a decade of labour tensions (starting with London dockers’ strike in 1889), the right to strike was recognized in 1906.

Though the state, including the courts, were not a part of the development of collective labour law, which was instead set out in voluntary agreements (Kaufmann 2013), it became increasingly important in other spheres of policy.

Increasingly sensitive to issues stemming from rapid industrialization and demographic change, the government hence planned and implemented measures ranging from public health to education. And given the “spirit of the age ... geared to the accumulation of facts,” knowledge and evidence played an important role in policy and administrative change (Fraser 1984). Ultimately, the new social problems fuelled the rise of “that administrative state which few anticipated or at heart wished for” (Fraser 1984). Hence, we witness interactive cycles of problem identification, public intervention, the creation of supporting institutional structures, and their adaptation in light of new knowledge and innovations.

Admittedly, particularly in complex areas such as unemployment, innovation was a matter of trial and error.³⁹ Consider, for example, the case of a work relief program, the Unemployed Workmen Act of 1905. Though the program quickly failed, it helped to establish that rather than unemployment, the outstanding challenge was underemployment, demanding a different intervention at a higher (national) level (Gilbert 1966; Hay 1983). In other cases, change was not always driven from the top. In terms of social policy, we witness a pragmatic repurposing or adaptation of existing systems, often in response to the lack of action by national government. “Just as the varied allowance system of the Poor Law had evolved to meet the practical problem of low wages, so the continuance of outdoor relief and the growth of Poor Law medical services were a response to the real world which faced the guardians,” explains Fraser (1984, 117). And, as noted, it was not public but private solutions that emerged to meet the social security needs of the industrial working class.

No doubt, the aforementioned outcomes provided an important baseline in the critiques and discussions of the existing social arrangements. This became the case in particular during the last decades of the 19th century that saw significant intellectual activity on the responsibility for the aged, unemployed, or sick, and even on how to organize British society.⁴⁰

Reforms: 1906 to 1945

As the turn of the century met with multiple trade depressions, the Boer War (stimulating a reflection on whether young British men were fit enough to fight), and discontents driven by socialist movements responding to the economic developments, the stage was set for change. Though major reform was not on the agenda of the Liberals assuming control in 1906 (Hay 1983), the administration, beleaguered, soon implemented some of the key social reforms in British history.

The reforms began with the Education Act (in 1907), providing medical inspections for all school aged children, and meals for the needy among them, and continued with the Old Age Pensions Act (in 1908). The Trade Boards Act (in 1909) established minimum wages and maximum hours in some trades. The lesson from the Unemployed Workmen Act provided an impetus for creation of the employment exchange system (in 1909). These public employment offices were a first step in “the organization of the labour market and the development of services to protect industrial workers from the economic consequences of loss of earnings” (Morgan 1948, 209).

The Liberals’ reforms continued in 1911 with the National Insurance Act, viewed as “one of the most important pieces of social legislation of the twentieth century” (Heller 2007, 1). The act consisted of two parts, the first of which was the institution of sickness insurance providing health and disability coverage for a large part of the working population. Workers earning below a certain threshold were required to purchase

³⁹ “Some historians argue that improvements in statistical knowledge were a precondition for legislation,” while others have “shown how such improvements were themselves largely a product of legislative and administrative reform” (Hay 1983, 48).

⁴⁰ Note, for example, the establishment of the Royal Commission on the Aged Poor in 1893; The National Committee of Organised Labour on Old Age Pensions in 1899; the Interdepartmental Committee on Physical Deterioration in 1903; the Royal Commission on the Poor Laws in 1905-1909; or Lloyd George’s exploratory visit to Germany in 1908.

insurance (subsidized by the state and the employer) from a government approved insurance society in which they also assumed membership. The coverage did not include hospital stays or specialist services, and did not cover worker families or dependents. The second part of the Act established compulsory unemployment insurance, initially for trades with predictable unemployment cycles. The scheme was gradually enlarged, as “1914-18 saw the inclusion of an increasingly large number of industrial workers in the scheme, which in 1920 was extended to include nearly all industrial workers, and in 1936 was amended to include agricultural workers” (Morgan 1948, 209).

The importance of state and its social policy interventions became further normalized during and after the First World War. In this context, notable is the creation of the Ministry of Labour (in 1916) that became responsible for employment exchanges and unemployment insurance, a step towards a system managed and accessed nationally. In 1921, this insurance began to cover the dependents of the contributing workers. Contributory pensions supporting old-age (65), widows, and orphans were instituted in 1925, extending, though with nominal benefits, the non-contributory scheme from 1908 aimed at needy persons over 70 (Mowat 1952; Morgan 1948).

The new arrangements, namely in the unemployment sphere, were repeatedly challenged since their enactment as great numbers of the unemployed who exhausted their insurance had to resort to poor relief (Morgan 1948). Such measures further showed their limits in the depression of the 1930s. Following the bankruptcy of the Unemployment Fund, the government limited unemployment benefits, and created a new support scheme shifting the responsibility for the unemployed from the local to the national level. In 1934, the government thus established the Unemployment Assistance Board tasked with the administration of the national system of assistance (Morgan 1948).

Overall, the first four decades of the 20th century saw a gradual break-up of much of the Poor Laws as the government took on an increasing responsibility over social security areas traditionally in the purview of the localities. The centralization of these services demanded significant administrative changes. While explanations for such trends abound, we may turn to Hay (1983) who outlined the ultimate drivers of social legislation in this period:

[T]he expansion of central social services after 1908 was the inevitable result of the failure to reform local finance. There were, of course, other reasons why the Liberals provided old age pensions and health and unemployment insurance nationally. It was increasingly realised that problems like unemployment and personal health could only be tackled on a national scale. This was brought about, in part, by the failure of local attempts at solution, and by a clearer appreciation of the scale of the problems. (41)

It is no coincidence the government thus chose a new path outside of the Poor Laws. Maintaining the Poor Laws would require a reorganization of local finance, which was undesirable both practically and politically. And, perhaps more importantly, both the philosophy behind and the efficacy of the Poor Laws were found outdated in context of the changing, industrial society (Hay 1983).

The Keynesian Decades: 1945 to 1979

In the UK, as in other European countries, the end of the Second World War and the ensuing decades of growth saw the establishment and adaptation of its modern welfare

system. The developments of the preceding period and, more prominently, the war, provided the needed foundation for the redesign. Given the extent and the magnitude of social needs created by the war, the government established an exchequer-financed scheme administered by the Assistance Board (formerly the Unemployment Assistance Board). Given its good administrative performance, the Board demonstrated “that a national agency could operate a national programme while remaining flexible enough to meet the great variations in local circumstances which are characteristic of any relief programme” (Morgan 1948, 214). As well, looking ahead to reconstruction, the government took on efforts to rethink policy with plans to address “the major causes of economic want” (Morgan 1948).

The welfare state created after the war was based largely on the blueprints of the Beveridge Report (in 1942). The Report was based on three policy pillars: the provision of basic security for all people; the establishment of the National Health Service (NHS); and a national commitment to full employment (Kaufmann 2013; Lowe 1999). Replacing a range of services and administrative arrangements with a new system was to be administered by one government department, the Ministry of National Insurance, with offices across the nation.

The making of the welfare state was a significant achievement, namely as it required a broad shift in thinking about social policy and its delivery. In particular, it meant to adopt the idea of *universalism*, “or the equal inclusion of everyone in a given country in the same insurance scheme or 'risk pool',” and *comprehensiveness*, “or the insurance of everyone against every possible risk by which, through no fault of their own, their income might be lost” (Lowe 1999, 6). And as only the state could ensure such a security of its citizens, the existing support systems had to give way to a new architecture. This shift occurred by 1947 when “the consensus of a public-private partnership in the provision of public goods was broken and a new discourse began. Monopoly, uniformity and central control replaced choice, flexibility and voluntarism. The approved societies were to be one of its first victims” (Heller 2007, 27). Ultimately, a new welfare state was created with the establishment of National Insurance, the NHS, and the passage of National Assistance Act of 1948, proclaiming “the existing Poor Law shall cease to have effect” (Mowat 1952, 63). Though the system was not as generous as the one envisioned by Beveridge, and in the end relatively austere (Rhodes 2000), Britain found itself nevertheless in a new era of welfare.

The post war years exposed the limits to the country’s economic structure, its social policy making, and the attempts at organizational change. The UK had experienced much slower growth than its counterparts, mainly due to its stop-go policymaking, compelled ultimately by its currency legacy, the weakness of its manufacturing, its system of finance, and industrial organization. And, as the government manipulated with public outlays as part of its regulation efforts, social policy was often the victim of these developments (Rhodes 2000). The Keynesian era in the UK witnessed repeated crises in which the lack of industrial competitiveness and wage regulation held major roles. Rhodes describes an emblematic clash between two government prerogatives: “The dual commitment to full employment (and thus electoral popularity) and the strength of the pound contributed to the ‘stop-go’ cycle of the 1950s: policy lurched between contracting the economy when a failure to achieve balances, above all in foreign payments, threatened sterling, and expanding it when unemployment threatened to rise”

(Rhodes 2000, 29). Unlike in Denmark, reaching full employment emboldened the government to erode rather than expand the welfare state. This was met with resistance from the trade unions with social policy becoming a hostage in the negotiations. Hence, in terms of social policy, Rhodes notes, the government struggled between two opposing policies: “rising wages were used to justify the removal of universal social welfare, while the welfare state was used to justify appeals for wage restraint” (2000, 29). Though a temporary deal on wages was reached by the Labour government (1964-1970), a long-term agreement never materialized (Kaufmann 2013; Rhodes 2000).

Cognizant of the economic importance of a skilled workforce, the governments of this period endeavoured to establish a national system of skills development. However, the youth-focused Employment and Training Act of 1948, and later, the 1964 Industrial Training Act, were met with a fate similar to the other attempts at improving the economic structures. Designed through “technocratic policy learning,” the 1964 Act aimed to meet three needs: “to enable decisions on the scale of training to be better related to economic needs and technological developments”; to improve the overall quality of industrial training and to establish minimum standards; and to spread the cost more fairly” (Pemberton 2001). To do this, the Act made possible the establishment of standard-setting, oversight, and advisory bodies, the Industrial Training Boards, made up of employer and union representatives (but not the government). The boards were empowered to collect fees from employers to be used to provide the trainees with allowances (Pemberton 2001). Aside from meeting the cost objective, the Act was largely a failure, due to the already familiar issues, including “the inability of the Ministry of Labour to prevail over the fragmented institutions of the labour market, the inter-dependence of these institutions and the barrier to change formed by the preference of many employers and unions to retain their autonomy in training” (Pemberton 2001). Moreover, notable here is that training and vocational education were not coordinated, with the latter further overlooked in the education reforms of the 1960s (Pemberton 2001). This meant the designs were not systemic as was increasingly needed.

The 1970s marked a decade of transition in British policy making. The two governments of this period were determined to tackle at last the recurrent stop-go, labour market, and social policy challenges.⁴¹ This time, however, their efforts were complicated further by the increasing instability and turmoil. Faced with rising unemployment and inflation, the Conservative government (1970-1974) made a series of financial reforms and opted for expansionary policy, the latter bringing only a fleeting success. Attempts to enhance wage bargaining resulted in the Industrial Relations Act of 1971, a legislation fast repealed (in 1974) due to a vehement union opposition. And seeking to reduce both the expenditure and the role of the state in welfare provision, the government introduced reforms to housing and pensions (the 1973 Pensions Act). Notably, the Conservatives made inroads in skills development with the passage of the Employment and Training Act creating a new agency (in 1974), the Manpower Services Commission (MSC). A publicly-financed, corporatist entity, the MSC was tasked with coordination of vocational training as well as administration and expansion of public training schemes, including the Youth Opportunities Programme and the Training Opportunities Scheme (OI 2019). Moreover, with the establishment of the MSC, the Jobcentres (offices that had recently replaced the Employment Exchanges) and Benefit Offices were separated, gradually

⁴¹ The remainder of this section is based primarily on Rhodes (2000).

easing the job seeking requirements. In time, “the management of the system had become essentially passive with no responsibilities to counterbalance the right to benefit” (Wells 2001, 248).

Labour returned to power in 1974, the first year of a severe economic recession precipitated by the OPEC crisis. Privy to the successes of corporatist solutions, they began to implement the “Social Contract,” trading wage stability for social fairness and security. The government thus took a major legislative action: “The 1975 Employment Protection Act bolstered union recognition, guaranteed pay during layoffs, and extended mandatory notice periods for redundancies. The 1975 Social Security Pensions Act sought to end massive dependency on means-tested, supplementary benefits by adding a state earnings pension (SERPS) to the basic flat-rate pension to be fully protected against inflation. The 1975 Social Security Act replaced the Beveridge flat-rate system and introduced earnings-related contributions,” aiming to improve benefits through a more redistributive approach (Rhodes 2000, 35). These programs, however, exacerbated the fiscal crisis, and the plummeting currency compelled the government to take austerity measures. Ultimately, the policy of full employment was abandoned, ending with it the Keynesian period. What followed were times of wage-related discontent, setting the stage for an era of major change.

Liberalization: 1979 to 1997

Taking over in 1979, the Conservatives were determined to dispense with the ongoing labour and economic problems, made painfully evident throughout the preceding decade, and radically reform the existing system. Though some of its prescriptions were sporadically implemented in the past, this time market-orientation, an agenda for which there was “no alternative,” became an encompassing strategy.

On the whole, the ensuing transformations may be understood at multiple levels, including that of policy (Taylor-Gooby 1996), social model (Mayhew 2015), or political economy (Rhodes 2000). In terms of policy, the government, seeing “state spending as detrimental to economic growth because it pre-empt resources that might otherwise be used in the private sector of the economy,” began to limit public expenditure while lowering taxes; emphasized private provision and the use of markets; and increased “centralisation of power over the welfare system and over other aspects of national life” (Taylor-Gooby 1996, 104).

Such policy choices deeply altered the existing social model, constituted by the systems of employment relations, social welfare, and education and skills development (Mayhew 2015). Throughout their 18 years in power, the Conservatives passed a series of laws aimed at reducing the power and the effectiveness of unions, believed to pose problems to governance and the economy. The legislation abolished the closed shop, and curtailed the unions’ immunity, legal status in bargaining, and capacity to take industrial action (Mayhew 2015; Clasen 2003). And these were not the only reforms leading to the expansion of central government power. The central government also took away the local authorities’ ability to raise taxes and reduced their influence in the administration of education and social housing (Taylor-Gooby 1996).

In terms of the labour markets, the government in the early 1980s supported early retirement programs allowing older people in employment or those in unemployment to

transition into retirement and make more jobs available to young people (Wells 2001). At that time, the outsized if undifferentiated training and employment programs were not well connected to the broader labour markets (Wells 2001). Finally, the Jobcentres focused on serving the employer needs, rather than the unemployed individuals, an approach that has proven ineffective (Wells 2001).

Broadly, the government began to remove labour market rigidities, including in worker pay and employment protections, and persistent skills deficiencies, viewed as two major labour market challenges (Clasen 2003). As a result, in 1994, "the UK had no regulation of working time or wage levels, no legal protection for those hired under fixed-term contracts and no right to representation at the workplace" (Clasen 2003, 67). Though hesitant to increase training outlays (Clasen 2003), the government established a number of schemes, such as Youth Training and Employment Training, intending to bring people into employment (Mayhew 2015; Rhodes 2000). The responsibility for skills development was shifted from the MSC (abolished in 1987) to the local and (deliberately) employer managed Training and Enterprise Councils (Mayhew 2015). There was also a "historically unprecedented" focus on qualifications, in order to ensure public money was spent on good results and to facilitate employee mobility (Mayhew 2015). The government thus established the National Vocational Qualification (NVQ) system, an employer delivered instrument which was to improve the overall qualification of the workforce. Not the least due to low funding, limited employee participation, and employer resistance, the NVQ did not yield the anticipated results (Mayhew 2015; Rhodes 2000).

An important milestone in the UK LMP is the introduction of Restart in 1986, commencing a new regime of activation and increasing benefit conditionality (Martin 2014; Wells 2001). Thus, aside from the mandatory Restart interviews, the government (in 1989) added an "actively seeking work" condition and (in 1991) began to require the long-term unemployed to participate in a labour market programme (Grubb 2001). Also, the number of sanctions were doubled from 1994-1995, as part of the "Stricter Benefit Regime" initiative (Grubb 2001). Along with the introduction of fraud officers, there was an increase in the number of Unemployment Review Officers, who could conduct client interviews in Jobcentres (Wells 2001). Job vacancies were being posted in Benefit Offices and those unemployed for longer than six months were invited by post to use employment services (Wells 2001). In terms of administration, there was a re-integration of the Jobcentres and Unemployment Benefit Offices, implemented as the Employment Service. This underscored "an approach which enables the payment of benefit to become an active labour market policy in itself" (Wells 2001, 250). Implementing new management approaches, the Employment Service was given more autonomy, along with the capacity to outsource exceptional cases, in delivering on their targets (Wells 2001).

Among other, though not fundamental (Mayhew 2015), social security reforms of the 1980s were changes to the key assistance schemes. The Family Income Supplement, introduced in 1971 to provide means-tested benefits to working parents, became Family Credit. The benefit was made more generous (Daguerre 2007), a limited version of the "make work pay" strategy (Taylor-Gooby 2005). Also, the "last-resort" means-tested support, the Supplementary Benefit, was transformed into Income Support. Overall, these benefits were determined based on "different principles, so that the system was able to

discriminate more finely between the needs of different groups” (Taylor-Gooby 1996, 106).

These incremental innovations were followed in 1996 by a “radical overhaul” of the unemployment benefit system, “creating a clear-cut legal framework for processes that define and monitor availability, job-search and compliance with PES instructions” (Grubb 2001, 206). More specifically, this entailed a number of policy and administrative changes. First, unemployment benefit and means-tested Income Support were consolidated into the Jobseeker’s Allowance (JSA), in turn classified into the contributory-based (CB) and income-based (IB) JSA. At the same time, the CB entitlement was reduced from 12 to 6 months. “Rules from the previous regimes were standardised and, where possible, simplified... to allow people to concentrate on getting back to work rather than worrying about benefit rules,” and to facilitate the provision of “more coherent and extensive help” (Wells 2001, 249). In addition, “an intervention regime has been established which is built around the individual and fully focused on the labour market” (249). This is done through a Jobseeker’s Agreement, an individualized plan required of all recipients. It demands an ongoing job search stimulated by regular visits to Jobcentres (every two weeks), a broadening of acceptable jobs (at three months), and interviews (at six months) (Wells 2001). See also Table A9.1 for a comparison of these trends.

Finally, taking a big-picture view, and considering the tax, labour relations, social security, and labour market reforms together, reveals a politico-economic adaptation subordinating the welfare system to the economy (Rhodes 2000). In addition to labour policies that guaranteed flexible and disciplined labour, “in-work means-tested social security benefits effectively subsidized employers so that they could create more low-wage employment,” while “training policy gradually became a means of providing firms with temporary, low-cost labor” (Rhodes 2000, 57). A new path was set for the ensuing governments to follow.

The New Deals: 1997 to 2007

Labour returned to government in 1997, this time as the New Labour and, given their previous “programme of expanded tax-financed social spending and a neo-Keynesian 'Alternative Economic Strategy'” did not resonate with the electorate during the previous three elections (Taylor-Gooby 2005, 23), a new agenda. Reflecting the findings of the 1994 report of the Commission on Social Justice, the party’s new plan committed to modernizing the welfare state and to innovations in the area of labour market policy (Taylor-Gooby 2005), including investing in skills development. Though channelling some social democratic elements, the Labour agenda embraced the liberalization project that had gained a broad purchase during the Conservative period. Thus, aside from plans to end welfare dependency and reduce public outlays on benefits for inactive groups, the New Labour sought a solution balancing incentives with sanctions in getting people to work (Daguerre 2007). Overall, the goal was to *maximize* employment using a mix of supply-side interventions, labour market policies, and “an ambitious reform of the tax and benefit system (including Incapacity Benefit) to make 'work pay'” (Daguerre 2007, 66). Importantly, given the strong influence of American reforms, including the “work first” idea (Taylor-Gooby 2005), some have viewed the change as Americanization of UK’s

LMP (Daguerre 2004). Others see UK's labour market initiatives as an "adaptation of the EU 'employability agenda'" (Etherington and Andersen 2005).

Implementation of this agenda can be divided into three stages, distinguished by both policy outputs and key actors in the policy process (Daguerre 2007). The first, formulation and design, stage involved respectively the Treasury, and the Department of Social Security along with the employer-dominated New Deal Task Force. The result was the introduction of mainstream activation reforms, starting with the leading programme, the New Deal for Young People. Led by the Department for Work and Pensions (DWP) and the Treasury, the second phase focused on "further unifying the treatment of economically inactive people and in expanding the various New Deals to all categories" (Daguerre 2007, 70). Covering a wide range of circumstances, the following New Deals were thus implemented (OECD 2014; Meager and Hill 2006; Daguerre 2004):

- 1998: The New Deal for Lone Parents (NDLP) is a voluntary scheme providing single parents on social assistance with job-related support. Aside from job-related advice and assistance, including training and education, the individuals get help with finding childcare, and obtain in-work support.
- 1998: The New Deal for Young People (NDYP) is a compulsory employment programme for youth (18-24) receiving JSA for six months or more. NDYP first requires individuals to enter the "Gateway" period (lasting four months) during which they receive individualized advice and intensive training in finding work. Those who remain without work then must choose from four options (up to six months, or 12 months in case of training): enter subsidized employment; participate in the Environmental Task Force; take up work with a non-profit; or enter an approved full-time training or education program. Non-participation in these programs results in benefit sanctions. The program is delivered either by the Jobcentre Plus or voluntary or private organizations, depending on geographical area.
- 1999: The New Deal for Partners of Unemployed targets possible second earners in an unemployed household who it provides with job search and support services. While compulsory for partners under 25 years of age without children, it is otherwise voluntary.
- 2000: The New Deal 50 plus (ND50+) is a voluntary program available to individuals over 50 who have drawn JSA or other social supports for more than 6 months. The participants get access to Jobcentre Plus services, including advice and assistance in finding work, training grant, and a work-related financial credit.
- 2000: The Employment Zones (EZs) took over JSA claimants in areas of high-unemployment. The EZs were delivered by contactors given a level of discretion in service provision. The payments were mainly outcomes based.
- 2001: The New Deal 25 plus (ND25+), previously known as the New Deal for the Long-Term Unemployed, targets individuals 25 years and older on JSA for more than 18 months. All participants are required to engage with the Jobcentre Plus where they are offered education, advice, and subsidized employment (or self-employment) through a network of New Deal Personal Advisers (NDPAs). Similarly to NDYP, there is a penalty in case of non-compliance.
- 2001: The New Deal for Disabled People (NDDP) has become the central ALMP provision for claimants who are disabled or sick. Its main goal to help them find

work and support them upon entry to work. The delivery is done by a network of voluntary, private, or public “Job Brokers,” also tasked with cooperating with employers in improving the retention rates. 2003 has seen the introduction of a related program, *Pathways to Work*, which requires all new claimants for incapacity benefits to have a “work focused interview.” The goal is to identify people who may require an active intervention in returning to work and leverage a mix of instruments in support of their transition.

- The lesser known programs, the New Deal for Musicians (1999) and the New Deal for Self Employment, intended to address some of the more unique needs of smaller groups. In the case of the former, this was an access to specialist consultants from the music industry and a greater range of learning options.

Continuing the administrative integration, the government merged Benefit Agency with Employment Service into Jobcentre Plus (operational from 2002), integrating the administration of social benefits, activation, and support services. “Jobcentres are required to move away from a benefit eligibility culture to one of personalized assistance with job search,” as they implement the New Deal’s policy of individualization (Daguere 2004, 50).

Starting in 2003, the third phase focused on the growing incapacity-related expenditure. The increase in the number of claims was notable, given that at the end of 1997 there were 2.7 million people receiving incapacity benefit, up from 700,000 in 1979 (Daguere 2007). While the Conservatives made a number of changes (eligibility was to be determined by strict work test and only physicians from Benefit Agencies), they did not result in a reduction of claimants. Note that the expenditure in this area tripled between the early 1990s and the mid 2000s (Meager and Hill 2006). In addition to updates in benefit regulations and tax credits, the Labour approach included the NDDP and *Pathways to Work*, as major change in this area has proven difficult to enact.

As part of the “make work pay” strategy, the government introduced the National Minimum Wage and reformed the tax credit system. The government began in 1999 by replacing the Family Credit with Working Family Tax Credit (WFTC), a similar design (though cheaper and simpler to administer) to one unsuccessfully advanced by the Conservatives in 1980s (Clasen 2005). In 2003, the government replaced the WFTC and a number of other tax credits with a single *Working Tax Credit*, a system expanded to also cover the employed without children. It also created a generous *Child Tax Credit* integrating various credits for children, along with means-tested and non-means tested child benefits, into one payment (Clasen 2005). Importantly, the system “is administered by the Treasury, and thus not accounted for as an expenditure. Its novelty is the underlying idea that the taxation system can take over a function previously performed by the social security system” (Taylor-Gooby 2005, 129). Also, another advantage of this system is that employees are no longer distinguished by the type of tax credit they wish to claim, which may have been a disincentive in the past (Meager and Hill 2006).

Though sharing the Conservative’s training strategy of employer delivery and voluntarism, the New Labour administration had developed a greater appreciation of the importance of skills development (Mayhew 2015). Labour began (in 2001) with the replacement of the Training and Enterprise Councils with the Learning and Skills Council operating at the national level with local offices, followed by “a bewildering array of initiatives and frequent changes in the institutional architecture” (Mayhew 2015, 207).

The New Deal became “a major driver in the development of quasi-market structures in British employment services,” as its “programmes were implemented through a mix of public, private and voluntary sector provision with more than 900 providers across the country” (OECD 2014, 183). Hence, these changes must be understood in context of institutional transformation at multiple levels (Etherington and Andersen 2005).

There have been shifts in responsibility from local to the regional level, for example, with the establishment of the Regional Development Agencies, tasked mainly with economic development. At the same time, these changes “necessitated intermediate tier of governance at the sub regional level which tends to be joint local authority representatives,” such as the Learning Skills Councils with respect to LMP (Etherington and Andersen 2005, 10). Overall, many functions traditional in the purview of local governments were moved to the private or voluntary sphere creating “a more complex and fragmented institutional and stakeholder environment” (Etherington and Andersen 2005, 10).

The Crisis and Consolidation: 2007 and Beyond

As mentioned, the UK exhibited an exceptional labour market performance for most the preceding period, with 2001 unemployment below 5% when measured by survey (Clasen 2002). As well, the UK labour markets have proven relatively resilient in the face of the financial crisis. Though in 2012 unemployment rebounded by 50% and labour participation was at 20-year highs (OECD 2014), the government continued with major LMP activity (Chapter 3).

As in Denmark, the crisis response was overseen by two governments, Gordon Brown’s New Labour (2007-2010), replaced by David Cameron’s Conservative-Liberal Democrat coalition in the 2010 election. Similarly, the response consisted of a stimulus—a revenue-side intervention namely in the form of a temporary cut in value-added tax (Hodson and Mabbett 2009)—and a series of reforms. The social and employment security reforms were designed to maximise efficiency while minimizing costs, thus introducing a variety of market-based instruments to the mix of solutions.

As the employment of young people was disproportionately affected by the crisis, the New Labour response to unemployment targeted this demographic. A system to match apprentices with employers seeking trainees was hence implemented (Heyes 2013). The government also introduced the Young Person’s Guarantee (in 2010), guaranteeing training, work or job experience for all young people out of employment for more than six months. This was supported by the Future Jobs Fund (created in 2009), subsidising the employment of disadvantaged workers (Gama et al. 2015; Heyes 2013).

A 2007 report commissioned by the DWP found the New Deals system multifarious in terms of delivery options and programs and recommended its replacement with a “a new single welfare-to-work system for all client groups, delivered by private and voluntary sector organisations through a completely new contracting framework, with providers being paid by results” (OECD 2014, 183). This led the government to introduce the Flexible New Deal (FND) (in 2009), a single solution for all long-term JSA claimants replacing all New Deals and EZs. In line with a “black box” approach, the FND provider could exercise discretion in the service delivery to optimize placement outcomes (OECD 2014).

Aiming to reduce deficit spending, the incoming Conservative-Liberal Democrat coalition implemented a series of austerity measures (Heins and Bennett 2018) impacting also labour markets and employment security. First, the government terminated the Young Person’s Guarantee and the Future Jobs Fund. Also axed were the Educational Maintenance Allowance, which had aided young people from disadvantaged backgrounds to pursue education, and the Train to Gain programme (introduced in 2006) facilitating on-the-job training. The government also withdrew from efforts to enable workers in small firms to take time off for training (Heyes 2013). The administration continued with reforms to the unemployment benefits and assistance schemes, which, at a high level, were aimed at improving the activation of the unemployed, restricting the eligibility of claimants, and combating fraud (Gama et al. 2015).

More specifically, the government introduced two key reforms: the replacement of the existing workfare system with the Work Programme and the creation of the Universal Credit system. Thinking that FND was not “far-reaching enough,” the coalition government decided to introduce the Work Programme expanded to cover all unemployed including incapacity and related beneficiaries. Note that JCP will continue to handle cases of short-term unemployment (Martin 2014). Notwithstanding the fact FND could provide important indication of the effectiveness of marketization (at the time not indicating it was working), the government proceeded with the replacement of more than 20 existing welfare-to-work initiatives with the Work Programme (OECD 2014).

Starting in 2013, the Universal Credit (UC) merged the means-tested JSA and Employment and Support Allowance, Income Support, Housing Benefit, Working Tax Credit, and Child Tax Credit into a single means-tested benefits and tax credits system. The UC’s main design goal was to encourage full-time, family employment. To be effective, the UC system is dependent on ICT to provide real-time information on incomes (Martin 2014) in order to adjust payments to in-work claimants (OECD 2014). Also, in terms of the government plans to reduce fraud, efforts centred on the JSA and included residency requirements and tougher sanctions for overpayments (Gama et al. 2015).

Just as in the previous period, the Coalition government realized a significant number of changes to governance and organizational structures. These included:

- i) The National Careers Service was launched in 2012 bringing together separate careers services for adults (Next Step) and young people (Connexions Direct).
- ii) Local Enterprise Partnerships have been introduced to encourage a more responsive approach to the needs of local business, while at the same time abolishing Regional Development Agencies in 2012.
- iii) Local Employment Partnerships – introduced in 2007 – aimed to increase the propensity of employers to recruit disadvantaged people into work and were part of a broader effort to connect workless individuals with vacancies, overcoming barriers to work and improving the job matching services offered by JCP and its partners. Local Employment Partnerships as a governance structure [were] abolished in 2010, with existing relations potentially being maintained through local engagement of JCP with employers.
- iv) For adult further education the [Skills Funding Agency] replaced the Learning and Skills Council in 2010, including a change to the funding mechanism of further education and the introduction of adult skills budgets. (OECD 2014, 171)

A major motivation behind the policy and institutional reforms, particularly post-crisis, is cost savings, often done without considering efficacy. The decisions are made in the context of the “austrian doctrine,” a set of flawed assumptions (Boyer 2012) elsewhere mostly discredited (Krugman 2015). While crises are seen as opportunities for deep

institutional change, the 2008 crisis is not viewed as one of them (Hill, 2011). However, the outcomes of the 2019 Brexit-focused elections, whose winning party committed to a significant spending increase, may be sign of change.

Analysis

The above review brings to the fore the UK's exceptional circumstances: institutional resistance and stability, on the one hand, and the possibility of rapid policy change, on the other. Apparent are the government's early pragmatism in social policy (1910s), later frustrated by economic decision making, and an ongoing struggle to cope with (un)employment issues. Notable is the central government's power to take action, all the while under constraints borne of the country's political legacy and its industrial condition. How are these conditions reflected in the Patterns of Evolution?

Stages of Evolution. Evolution of a policy system can be described with an S curve, a nonlinear model with distinct stages of selection and adoption, take-off and growth, and maturity and decline. As other complex systems, policy systems alternate between phases of stability and growth, and instability critical to innovation and change. In terms of UK social policy, we can identify four main periods of instability and followed by some key reform activity: 1910s, 1940s, 1980s, and 2000s. As discussed, the end of the 19th century has seen an increasing economic and social instability, motivating a search for solutions and ultimately reforms installing the first elements. A series of acts focusing on the wellbeing of children, security of the elderly, and labour markets, culminated with the National Insurance Act and the establishment of compulsory sickness and unemployment insurance for workers. These were gradually expanded to cover increasingly larger parts of the population, though the Poor Laws continued to play a significant role in a number of areas. These were finally eliminated with a complete redesign of the social security system, a broadly supported effort guided largely by blueprints developed during the war. The third major reconfiguration followed a decade of depletion of the key policy systems. The 1980s thus saw the replacement of many financial, labour market, and social policies, reconfiguring the welfare state to the needs of the economy. The fourth major wave of reforms took place in the 2000s. The New Labour followed the general direction set by the preceding governments as it made major changes to the tax and benefit systems and establishing a system of activation. The overarching goal was to maximize employment and minimize public outlays. As in the case of Denmark, the waves manifest lock-in, depletion, and replacement of major policy systems. These major stages impact the fate of most subsystems as well. Note, for example, the short-lived reforms enacted in the 1970s: While the Conservatives' Industrial Relations Act of 1971 did not gain purchase due to its incompatibility with the contemporaneous system, Labour's "Social Contract" legislation of 1975 was fleeting due to the arrival of a new system in the 1980s.

Nonuniform Development of System Elements. Rather than developing uniformly, policy subsystems follow their own S curve trajectories. This means, for example, that solution instruments may reach maturity and replacement at different points in time, leading to contradictions in the policy system. This Pattern, along with the Stages of Evolution above, is among the most clearly evident across our reviews of policy evolution. Consider here the development of the early elements of the social security

system, the sickness and unemployment insurance. Though these schemes were introduced at the same time, they covered different parts of the workforce and were expanded at a different pace (in addition to being delivered through different mechanisms). Part of the reason for this is the uncertainty inherent in any new policy design. Gilbert explains: “No one, least of all Churchill himself, knew how or whether compulsory unemployment insurance would work. In the attack on unemployment, Churchill, whose penchant for political gambling was as marked as his contempt for social theories, led the Liberal cabinet into a dangerous wilderness” (1966, 850). A way to minimize the risk was to take incremental steps. Notably, another integral element of social policy, helping the unemployed to find work, was instated through Labour Exchanges preceding these insurance schemes. However, repurposed multiple times throughout its lifecycle, this instrument has not seen the type of growth other elements of social security system (not the least as it is of not much use in a depression). As in Denmark, it was only in the post-Keynesian period, as workfare became an increasingly popular social policy strategy, that such institutions regained purchase.

Evolution toward Increased Dynamism and Controllability. Policy systems tend to improve in their responsiveness and capacity to adapt to changing conditions. At a high level example of this Pattern is the UK’s unique transformation of its dysfunctional political economy. As noted, historical circumstances prevented the development of an agreement on a social wage, which, particularly in context of Keynesian policy making, “triggered industrial relations conflict that fed into the cycle of macro-mismanagement and decline” (Rhodes 2000, 20). In a series of reforms, the government enhanced the dynamism with its market-orientation and increased controllability by expanding its power not only over the unions but also in other areas. As Taylor-Gooby explains: “The extension of the market system weakened professional independence in the NHS and education, while the imposition of a detailed National Curriculum and compulsory diet of examinations in the latter area and the establishment of a restricted list of drugs in the former, together with new monetary controls tightened central control” (1996, 111). At the same time, however, this constrained the options available, with welfare state prospects dependent on the economy.

At a lower level, consider the Poor Law system which became unsustainable not only due to the failure to reform local finance but also, ultimately, the system’s unsuitability in coping with the needs of an urban society. Morgan (1948) identified four processes which played a role in the gradual break-up of the Poor Laws:

In the first place, one category of needy persons after another has been removed from the influence of the poor-Law authorities. Secondly, the new provisions, for the most part, require the establishment of rights to benefits by previous contributions. Thirdly, there has been a steady transfer of direct responsibility for those in need from local to central government, although local authorities are left with duties in the fields of environmental services such as housing, public health, and education. Lastly, there has been a shift from the concept of an all-purpose local authority, as intended, for example by the Local Government Act of 1888, to the idea of functional organization. (217)

Though jurisdictions have been more or less successful in adapting to local conditions and creating their own systems of poor relief (an organization that had proven highly resistant to attempts at reform), creating a uniform and equitable system demanded the central government to assume control over administration and financing. At the same

time, the variety of social needs required the development of expertise in both finding solutions and delivering them. This was made possible by new government organizations with control over delivery of services ranging from benefits to healthcare.

Increased Complexity then Simplification. Policy systems experience successive phases of increasing complexity of functions, rules, processes, and dependencies among its subsystems, and simplification, though with equal or improved outcomes. While our analyses focus on modern social policy, the Poor Laws systems that preceded it are equally revealing. Such decentralized systems had highly differentiated outcomes dependent on the implementation by each locality. Each jurisdiction adapted the system to its conditions leading to a convoluted and highly fragmented system of systems of poor relief. The ensuing transfer of an increasing number, though not all, responsibilities to central authorities created a hybrid system of even greater complexity. Finally, the legislative acts of 1946-1948 eliminated this complex system of rules, services, and administrative structures. “Social services introduced piecemeal and administered by separate authorities would thus be brought together: unemployment benefits and payments, old age pensions, sickness benefits under National Health Insurance; gaps and loopholes would be closed. A medley of welfare services would be replaced by the welfare state,” explains Mowat (1952, 62). A new, simplified system of social security was thus created.

In terms of more recent developments, consider the establishment of a series of New Deal initiatives including NDYP, ND25+, NDLP, ND50+, NDDP, or EZs, designed to facilitate activation of a wide range of long-term unemployed. Within a decade, these were replaced with a single program, the FND. Further consolidating the system was the Work Programme which included services for the disadvantaged jobseekers. Similarly, the government replaced the complex system of benefits, encompassing the means-tested JSA and Employment and Support Allowance, Income Support, Housing Benefit, Working Tax Credit, and Child Tax Credit, with a single working age benefit, the UC. The system of support and incentives was thus greatly simplified, with a dual goal of bringing more families to work thus reducing poverty levels, and saving outlays on welfare (Martin 2005).

Evolution with Matching and Mismatching Elements. In order create a functional system in face of various constraints such as resources, available technology, or vesting, policy implementations often resort to subsystems that do not match with others. Hence, elements of a policy system not only mature at different times, they may not fill well together. A prime example here is the reliance on the Poor Laws throughout the early welfare era, used as a catch all for cases not covered through the emerging schemes. Consider also the National Insurance Act of 1911, which included a number of mismatched elements. Its health insurance component, in particular, was “unique in its blending of public and private agencies, something which was not replicated, for example, in other areas of social welfare such as unemployment insurance or housing” (Heller 2007, 2). Given health insurance was the domain of the Friendly Societies that had, to that point, grown in size and influence, they were assured a part in the new solution. Other organizations, including trade unions and industrial life insurance providers, were also allowed access to the scheme, however, with big businesses soon becoming “the chief administrators of the system” (Heller 2007, 3). Importantly, the entire system saw a radical redesign in the National Insurance system, bringing all

services together in one, universalist, welfare solution. Importantly, to reiterate from above, the new solution required the displacement of the belief that one should pay only for services as required by one's need, with a new social technology, a broad embrace of *universalism* and *comprehensiveness*. And only the state could make this possible.

Evolution toward the Multilevel. Given the limitations of top-down control as well as one-size-fits-all designs, which do not accommodate well the diversity of needs, for example, policy systems become distributed and increasingly effective at the local or individual level. The gradual transfer of social responsibilities from the localities to central government, as noted, was accompanied by the rise of functional organization able to deliver results at scale. Citizens across the nation could access the same services delivered per protocol by government staff at local offices. With these capacities in place it was possible to implement service personalization, giving more discretion to administrators in coping with the diversity of personal circumstances. And it was possible to consider service integration, for example in creating Jobcentres Plus tasked with the joint administration of benefits, activation, and support, enhancing control over personal outcomes and saving resources. Further, its specialists have the ability to make referrals to external providers with additional expertise and tools to help in exceptional cases. Note that requisite to such designs is a highly trained staff available across the country and advanced information and communication tools.

Evolution toward Decreased Human Involvement. Innovation in technology, which also includes social technology, including new shared understandings, makes possible to decrease the need for human involvement. And the decrease in the number of actors needed in accomplishing a task leads not only to savings but also to greater effectiveness. For example, the success of the training scheme for the unemployed in the UK “is threatened by the myriad of actors involved ... with current structures being only established recently, there has been a lack of understanding of each other's roles in some cases” (OECD 2014, 149). Such a situation is made even more complicated without stable governance structures and limited information flows.

Consider also the UC, an innovative system of tax credits and benefits, which aims to reduce fraud, get more people to work, and save resources. This is achieved by a design that changes incentive structures by making work of whatever amount pay, by reducing complexity of qualifying rules, by dynamically adjusting payments as people alter their work arrangements, and by offering a comprehensive benefit administration portal online. The design also intends to reduce fraud by encouraging recipients to report all work, and by linking benefits, earnings, and payments in one system (OECD 2014). Finally, its administration will be handled by the DWP, rather than multiple organizations as in the past. Hence, the solution reduces human involvement both directly, by automation and administrative consolidation, and indirectly, by emphasizing incentives rather than the resource-intensive coercion. This is also better aligned with the self-service which is at the center of the UK's PES. With the increasing use of online job databases, “[t]he future trend seems to be towards growing possibilities for jobseekers to contact employers with job vacancies either directly or with a minimum of PES involvement” (OECD 2001, 19). At the same time, jobseekers can enter their profiles online to be accessed by potential employers. These developments would not be possible without the ICT, becoming a critical driver in solution design.

Evolution toward Increased Ideality. Each policy system carries a number of internal contradictions stemming from a lack of uniformity, compatibility, or increasing systemic complexity. Innovations make possible to resolve these contradictions and increase the ratio of positive and negative effects, the system's ideality. Ideality, as we pointed out previously (Chapter 8), can be considered at multiple levels of abstraction. And it must be understood in context, a changing environment altering the calculus of outcomes brought about by different performance of the same policy system (Schwartz 2001). For our purposes, we highlight the most general of thrusts: the evolution of the social policy into an inclusive and comprehensive system of security. Writing in 1948, following the passage of modern social legislation displacing the discriminatory and deficient system of Poor Laws, Morgan (1948) offers a contemporaneous insight into this evolution:

The extent of the Poor-Law abolition can be appreciated only if these measures for the abolition of want are viewed against the background of the social legislation of the last forty years. By means of these measures Britain has gone far toward replacing the right to relief (a questionable "right" in 1907) with a series of human rights which might be briefly summarized by the phrase "the right to life" in the fullest sense of the word life. Thus, the Poor Law is replaced by a right to a minimum standard of subsistence. The National Health Service is to provide the right to good health. (218)

To these, the author adds a series of acts to guarantee decent standards of housing, education, nutrition, and wages. And, as discussed, social policies have seen further ebbs and flows over the coming decades and ultimately their adaptation to the economy. The UK now has "a welfare state that a country at the bottom of the G7 prosperity league can afford" (Rhodes 2000, 57). And in that context, innovations continue. This includes, for example, efforts to prevent "poverty traps" (Martin 2015) with the new system of Universal Credit.

Conclusion

Above we have surveyed the development of social policy, and with it, the evolution of labour market subsystems in the UK. As in other countries, there is no shortage of explanations of legislative outcomes over time, attesting not only to the inherent complexities but also to the uniqueness of each situation. Extending our effort from the last module (Chapter 8) we continued to validate the structure-in-evolution view, this time in a different context. As in the previous analysis, we identified and explored a number of significant expressions of the eight Patterns of Evolution at multiple levels of analysis.

Having completed this module, we can make a number of observations inspiring further study. First, unlike in Denmark, the Stages of Evolution are of irregular length, a characteristic possibly exacerbated by the UK's unique institutional arrangements. Nevertheless, there are identifiable periods of stability and growth in policy systems, followed by their instability and replacement, preceding the start of the next cycle. It is important to note that the stages do not necessarily represent changing paradigms, as commonly defined, offering a more robust understanding of change (Chapter 7). Second, though it has not been of much use to distinguish between industrial and post-industrial logic in the UK policy (Heins and Bennett 2018), the UK and Denmark manifest comparable patterns in its development. Both exhibit a structurally similar *adaptation of*

social and labour market policies to broader conditions. Notably, in the UK, these were preceded by a major reforms resulting in a creation of a “new functionality” between social policy and the economy, a link that had been uniquely weak in that context (Rhodes 2000). Hence, we witness first a growing complexity of unemployment benefit schemes (i.e. Restart), the establishment of activation systems, followed by their integration with benefit systems, increasingly simplified. Emerging thus is a flexicurity-like system, if one fitting UK’s budgetary and structural constraints. We thus situate these developments in a broader evolutionary context than do other interpretations (Clasen and Clegg 2011; Chapter 7). Finally, in some areas, such as skills development, we witness a significant legislative activity, yet no stable subsystem growth, limiting learning and innovation. This is exacerbated by the lack of institutional underpinning and the drive to save resources. Overall, as in Denmark, we witness a staged-rebalancing of the welfare system and its subsystems as they evolve towards a greater ideality, though each within its own context. In the next, closing module, we further reference our cases in our evolutionary analysis.

Chapter 10. Conclusion: Ahead of Policy Evolution

In an opening to one of his studies, Hay recognized that “evolution of social policy in capitalist societies is exceedingly complex,” adding that “it is better appreciated as part of the whole political process” (Hay 1977, 435). Reminding us that social policy can be used in a number of ways—as a redistributive, economic, or coercive instrument—the author argued that explanations of its origins are incomplete without also addressing the role of elite actors. Notwithstanding such admissions of complexity, students of the welfare state have continued to seek out parsimonious and intuitive theories of institutional development. In the decades since Hay’s writings, the political economies of the UK and other industrialized nations have undergone radical change, and so did their welfare policies (Chapter 2, 8, 9). At the same time, scholars are finding the existing theories are reaching exhaustion when faced with such transformations (Chapter 2, 4). They find change that is both abrupt and gradual, driven from the top and bottom, and often counter to intuition or conventional assumptions (Chapter 4). They also find change that is multidimensional, one that no longer fits along the familiar expansion and retrenchment axis (Chapter 2, 3). And they find welfare states are neither collapsing nor ballooning, as many have predicted, but instead adapting to the new social and economic realities (Chapter 2).

If these are difficult times for policy practitioners, they are perhaps equally so for policy scholars who are increasingly aware that coping with the complexities borne of the increasing diversity, interdependence, and openness will require updated theoretical approaches and tools (Chapter 5, 6). Indeed, the oft contested policy choices and our (mis)understanding of them are adding to the tension in social sciences borne of two conflicting views of the social world. The prevalent, *reductionist* view assumes the social world is much like its physical counterpart, describable with elegant laws and thus predictable. An alternate view sees the world as a complex, *evolutionary* system, with properties and behaviours that cannot be understood solely with reference to its elements. In this paradigm, the results are unpredictable.

These diverging perspectives carry significant implications to how we understand and explain outcomes in social systems, and, more proximately, to their regulation. If we can connect causes to effects, as is possible in the conventional, linear world, we can enumerate the implications of our interventions; we are in control. If, on the other hand, we assume feedback-driven nonlinearities, we recognize large interventions may have negligible effects, while the small ones can trigger a crisis. While these contrasting views set out what is *theoretically* knowable and doable about outcomes in social systems, public policy is equally about solving problems in practice. This is also when we begin to think about the diversity of empirical problems and the limits to what we can *effectively* know. Consider, for example, that the large number of possible outcomes stemming from the sensitivity to initial conditions means we can hardly determine the causes even in systems nominally deterministic (Chapter 6). What is more, the variety of assumptions and the subjectivity at play in deciding these can lead to diametrically opposite policy designs (Manski 2013). At the same time, we lack sufficient data which can be used to support decision-making processes in many critical policy debates (Chapter 3). As a result, policy making is often a matter of trial and error—and art rather than science—and policy success a product of factors other than strategic choice (Schwartz 2001).

Ultimately, we are led to rethink how we at once explain and effect change, resolving with it the tension among the two main theoretical views. Here, we would hope that communities of social scientists and practitioners would unite in their recognition of the importance of moving beyond their silos. This may require some shared meaning, a common denominator in the understanding of change applicable across domains.

Aware thus of the rapid change taking place in context of the post-industrial modernization and the challenges in studying these shifts, this research was driven by an important question: *How can we better understand policy change?* As discussed (Chapter 1), a better understanding means first getting closer to a unified view of change able to reconcile its various interpretations. It also means improving our ability to deal with the mounting anomalies. In addition, we hope to gain a level of insight into future developments, a prognostic capacity proven elusive within the conventional theory. Importantly, an advanced understanding of policy change must admit to the evolutionary nature of social systems, a mutually-constituting world closer to biology rather than, as has been widely embraced, physics. We appreciate such goals demand significant innovation, a process whose success often depends on the willingness and capacity to work outside of the proverbial box. We thus ask: *Could the key to progress in public policy scholarship and practice lie beyond convention? If so, what innovations can advance our insight into policy change?*

For us, a compelling way forward can be found in the field of technology innovation, and, more specifically, the Theory of Inventive Problem Solving, TRIZ, and its advanced version, I-TRIZ methodology. TRIZ posits that rather than randomly, technological systems *evolve* according to discrete patterns, identifiable through historical studies of system innovation. While the patterns have become the basis for the development of universal methods of advancing technological systems, researchers early recognized their applicability in non-technical domains (Zlotin et al. 2001). The past two decades have seen much interest and investment in TRIZ—whose principles have been incorporated into both proprietary and general applications for innovation, problem solving, and management of intellectual property (Rantanen et al. 2018; Cavallucci 2017; Chechurin 2016; Savransky 2000; Clarke 2000)—though less attention has been paid to its potentials beyond these areas. *How can these innovations extend our understanding of change in social policy and in policy systems in general?* Like its founders (Zlotin et al. 2001), we submit that advanced TRIZ postulates can advance our understanding of change in *creative* systems, offering a unified view of evolutionary change and answers to a number of outstanding questions.

Whether devices or processes, creative systems, built for purpose and shaped by human creativity, imagination, and learning, exhibit regularities in their evolution. These, as we argue, include public policies, which are not unlike other technologies in their development processes and lifecycles. Among the main goals of this research was thus to empirically validate what we call the *structure-in-evolution* view of policy, centering on I-TRIZ's Patterns of Evolution and an updated set of assumptions. Our analysis took us across two crucial cases, Denmark and the United Kingdom, countries which have exhibited significant adaptation of their political economies, including, too, their social and labour market policy systems—if, on the whole, in response to different demands. Denmark has a hybrid political economy in which its increasingly decentralized collectivist decision making meets deregulated labour markets. In a major restructuring,

the UK had adapted its social policy to its economy advantaged by low wages and flexibility of its workforce. Though the post-industrial logic has not applied to the UK (Heins and Bennett 2018), it and Denmark have served as models of modernization. Both countries augmented their flexible labour markets with active labour market and social security systems, increasingly integrated in order to bring more people to employment.

Our historical analysis of the development of social and, eventually, (active) labour market policies across these jurisdictions bears out the structure-in-evolution view (Chapter 8, 9). Specifically, we show policy systems develop in stages, exhibiting nonlinear, S curve, growth with their subsystems developing non-uniformly, following separate trajectories; evolve with matching and mismatching elements; tend towards increased dynamism and controllability; alternate between periods of functional/procedural complexity and simplicity; evolve toward the multilevel; tend to reduce the human factor; and increase, over time, their ratio of positive and negative effects, evolving towards greater *ideality*. Moreover, we observe these patterns at multiple levels of abstraction.

Cognizant of the limits to the dominant *reductionist* views, we joined the growing number of scholars whose research is attuned to the complex and *adaptive* properties of social systems. We added to evolutionary and complexity policy scholarship, two fragmented streams of research emphasizing evolutionary mechanisms and dynamics of policy systems respectively. The structure-in-evolution view, we argued, could integrate these not well connected streams of research. Moreover, it can help to bring their assumptions and tools to mainstream analyses, as scholars begin to relate their (incomplete) conceptions of evolutionary change with the new view. At the same time, it addresses a number of questions and anomalies. Why are policies designed in times of economic growth implemented during a slowdown? Why do administrations adopt policies contrary to their traditional ideological positions? How are punctuated and incremental views of change reconcilable? Finally, the new view gives us the ability to get *ahead* of evolution. That is, if policies, as we argue, evolve in a systematic manner, we can attain not only a capacity to forecast but also a critical knowledge resource in steering our designs in a more optimal direction.

The remainder of this module first retraces the trajectory of the study, presented in a complementary manner in the opening chapter, and revisits the structure-in-evolution view. *What is the significance of its core postulates for the theory and practice of public policy?* The module closes with some comments on future work.

The Research in Review

Organized in two logical parts, this project first attempted to engage the theoretical and empirical barriers in the studies of policy change in context of the profound transformations in the post-industrial and progressively integrated states. Scholars encounter outcomes many of which are contrary to expectations and make calls to revisit conventional theories with synthetic approaches in its explanation. Others, particularly students of Europeanization, increasingly recognize the interrelated and nonlinear character of such processes, and appreciate the difficulties with establishing causal links, demanding, too, new tools and theories. As well, as we demonstrated, even basic analyses

of policies and their outcomes face challenges stemming from both assumptions and data, raising questions on how decisions are made and, in turn, how policies change.

“Moving Horizons,” the second part of the study, thus focused on alternate assumptions and tools in studying policy change. The goal was to advance a new approach offering the potential to extend our understanding of evolutionary change, and, more specifically, to improve our ability study and develop public policy. Moreover, we wanted to show how such a view can help advance policy scholarship sharing in the understanding of the social world as a complex, evolutionary system. Making a case for an adaptation of an approach from engineering science demanded an empirical validation in the context of public policy, one of the main components of the second part of the project.

While scholars across social sciences and humanities have always concerned themselves with change, or its absence, the deep shifts of the recent decades have stimulated a new degree of interest in social, political, or economic dimensions of change, or their combinations. Preparing the ground for the ensuing discussions, Chapter 2 takes the reader across two contrasting economic and political eras and discusses their implications to social policy. The transformations of the contemporary post-industrial and the coinciding neoliberal period inspired much work in describing and explaining policy change. Broadly, some scholars identify a variety of types and mechanisms of transformative change (Hall 1993; Streeck and Thelen 2005; Smyrl and Genieys 2008) while others find policy solutions to be increasingly complex and interdependent and far from predictions of traditional theories (Häusermann 2012). Among these solutions is *flexicurity*—a structural policy balancing reductions in employment protection with strengthened social security while adding services facilitating employment—familiar from the EU employment strategy. While countries, as studies have shown, have undertaken major revisions of various aspects of their welfare states, it was flexicurity that was thrust into the center of the debates on modernization, particularly in labour market policy (LMP). At issue was often the essential ambiguity of flexicurity offering an avenue to employment deregulation, argued alternatively as beneficial or counterproductive (Piasna and Myant 2017). Others saw flexicurity simply as a state of labour market (Bredgaard et al. 2008), a dynamic condition measurable and comparable over time and space. Indeed, such an interpretation is important to an evolutionary view, we assume here, in which flexicurity is defined as the development of *complementarities* among different policy instruments, including numerical flexibility, transitional security, and training. The chapter closed with a more detailed discussion of flexicurity as a solution and an analytical model in preparation for the ensuing case studies.

The recent decades have seen significant LMP activity across the EU, intensified, in many countries, as part of reforms enacted following the economic crisis (Schömann 2014). Partly in line with other research, Chapter 3 thus conducted a hybrid analysis of the developments in LMP across the EU comparing the situation before and after the crisis. Using flexicurity as an analytical lens, we hoped to gain insight into the type and direction of change across countries. We find a number of countries, with or without intention, complementing flexibilization with an increased security; as well, most countries are building up their skills development systems, fitting them together with other LMP interventions. Yet, our goal was not only to map the state of LMP change; it was also to assess the value of such analyses, limited by both data and assumptions. As a

result, we can easily arrive at quite different conclusions on many of the key questions. This has implications not only to our study of change but also to policy making. Among the fundamental issues, of course, is whether we can reliably connect our interventions into social systems with their effects, challenging both how decisions are made and their relationship to outcomes.

Having investigated the relative changes in LMP over the recent period, we thus moved, in Chapter 4, to their explanations. Scholars have generally relied on three key theories of welfare state, the neo-functionalist, conflict, and institutionalist explanations, emphasizing, respectively, the problem pressure, political mobilization, and institutional variables (Armingeon and Bonoli 2007). While such theories may work in explaining a world of single-dimensional change, they are found inadequate when faced with the kinds of multi-dimensional and interrelated transformations observed in Chapter 3. Arguments have thus been made for new, synthetic approaches cognizant of the interrelationship between structural conditions, conflict and common ground among various actors, and institutional elements, all with an important role in accounting for change (Häusermann 2010). Even if indirectly, such research leads us to think about the range of ongoing *adaptations* to the changing environment and their implications. Cognizant of these realities and the many atypical and often less intuitive outcomes, scholars begin to question the conventional assumptions on rationality, stability of interests, and even actors' motivations. For some (Smyrl and Genieys 2008), this kind of evolutionary thinking, emphasizing uncertainty, contingency, competition, and innovation, yields nontraditional conceptions of power and authority.

Such realities may be particularly evident in research on Europeanization and globalization, aiming to make sense of the relationship between policy origins and change at different levels of governance. This is the topic of Chapter 5, whose goal was to explore some of the theoretical lessons emanating from such research. First, given the mainstream theories of relative policy change, or convergence more specifically, offer at best a partial view of change, we observed similar calls for theoretical pluralism. This is among the reasons why other scholars advance mechanism-based accounts of policy change, both in the global and European contexts. Yet, even here some admit outcomes result from a mix of these mechanisms (Knill and Lehmkuhl 2002). Overall, the emerging theme is struggle with causality (Exadaktylos and Radaelli 2002), particularly as scholars recognize the mutually-constitutive and nonlinear character of politico-economic processes (Featherstone 2003). This brings out the recurrent questions on what we may know about social systems, under what assumptions, and how. As discussed in that and the preceding chapters, a number of policy scholars are admitting to the complex and evolutionary characteristics of the social world. Their answers, approaches, and results vary, however, indicating at once the lack of a common set of assumptions and tools in the study of evolutionary change. The second half of the project hopes to begin to bridge this gap.

The central plank of the study, Chapter 6 provided a different perspective on the social world and policy, and, accordingly, advanced new theoretical foundations and tools in their study. Conventionally, social systems have been assumed to behave like their mechanistic, or physical, counterparts, thus reducible to their components without a remainder. This has shaped fundamentally the prevalent schools' approaches to causality and predictability, our explanations of change, and hence defining how we understand

and make policy. Scholars, as noted, are increasingly uncomfortable with the linear, deterministic views of the social world as they embrace emergence, nonlinearity, multicausality, and other elements of complex adaptive systems (CAS) research. At the core of an alternate frame of reference, the *complexity paradigm*, CAS bring to the fore the complex and adaptive, that is evolutionary, properties of social systems. Understanding, for example, that such systems alternate between periods of stability and novelty-creating and path-setting instability, offers insights into when and how change happens. To demonstrate these dynamics at a high level, we reached to Friedman (2009), who identified and explained a number of policy cycles occurring with surprising regularity across the American history. Technological and, with these, economic developments are the drivers of change in these socio-technical systems. As well, we discussed a *complexity frame* for policy (Colander and Kupers 2014), a goal-oriented approach to regulation of social systems informed by the complexity paradigm.

Such observations invite questions on what may be learnt about evolution in policy, a kind of technology. Thinking of policy as a technological system, purposed to address one or more social needs (Arthur 2009), we argued, can help in our search for answers. We found inspiration in engineering science and its research in technology innovation theorizing that rather than randomly, technologies evolve in a systematic way. Ultimately we adopted and applied the eight Patterns of Evolution—originally identified by analyses of developments in technological systems—in the context of policy.

Aside from their potential in expanding our analytical toolkit, the patterns hold a more fundamental promise. As we made the case in Chapter 7, they can provide an integrated view of evolutionary change and bridge a number of more or less connected approaches to policy. There has been a recurrent interest in evolutionary theorizing across social sciences, as scholars sought to understand the logic and direction of social change (Sanderson 2007). Some have found answers in social history, others in biology, both yielding important if incomplete picture of social and economic development. Progress has been made by institutional, and more recently policy, scholars drawing on findings of research in complexity and evolutionary economics. Though sharing the same worldview, these streams of research emphasize different aspects of change and remain largely disconnected. Bringing together both the dynamics (i.e. staged growth due to phase shifts in complex systems) and the order of change, the structure-in-evolution of view, we explained, can provide a unified understanding of policy evolution. So for example, we can place the complexity frame for policy into an evolutionary context as a step in policy evolution, a solution providing an increased dynamism and controllability. Finally, scholars have challenged Kuhn's explanation of progress in science in the context of public policy (Smyrl and Genieys 2008). Ultimately, as we argued, the structure-in-evolution view can help us reconcile these understandings.

Moreover, given its generality, such view can help us make sense of policy change more broadly. We continued with its application to the development of social and labour market policy, with particular interest in flexicurity. Welfare state modernization, as we noted earlier, involves change that is multidimensional (Bonoli and Natali 2012), in some assessments involving recalibration, flexicurity, welfare readjustment, and protectionism (Häusermann 2012). More focused analyses find, in context of LMP, a growth in various activation services, individualization schemes, and early intervention programs (Meager 2009); identified have also been broader integrative trends in the

unemployment protection systems, including the merging of employment and benefit delivery services (Clasen and Clegg 2011). Aiming to demonstrate the fit of these observed changes into a bigger picture of evolutionary change, we contrasted these conventional mappings with an evolutionary view. This involved an exploration of a longer arc of social policy development and a placement of flexicurity and other innovations in this context.

The success of the novel approach to policy change advanced here depends on a sustained engagement, including, first, on the provision of an extensive empirical support for it. We began these efforts in Chapters 8 and 9 with the structure-in-evolution analysis of two important jurisdictions. In search of patterns of change at multiple levels of abstraction, our review departed from those generally used by traditional theories or their syntheses. We focused on shifts between periods of stability and growth, and times of instability, the types and the coverage of policies, their congruence with respect to the dominant policy making principles and values, changes in administrative organization, and their complexity, among others. We thus discern the eight Patterns of Evolution and offer a contextual discussion of each. Such analyses, we believe, reveal larger (and we venture to say very varied) forces at play in both shaping policy designs and opening opportunities for change. This is why (social) policy is neither frozen nor volatile, changing instead according to certain logic. Our cases studies, and the preceding discussion, thus provide a rationale for the structure-in-evolution view, leading us to appreciate the complex and adaptive character of the social world and its relationship to the way change unfolds while offering the tools to know when and how to make more robust choices.

The Structure-in-Evolution View

Analyses, including ones in this study, suggest that stakeholders faced with competing needs and often conflicting understandings of policy outcomes at particular junctures are no better off than scholars looking back trying to explain them. Precisely due to such complexities, we seek tools to overcome the limits of traditional theories based on fixed assumptions that lead us equally to explanations as to anomalies. An alternate approach can be found in the *structure-in-evolution* view of policy change that, cognizant of the complex and adaptive nature of the social world, offers a new way of thinking not only about change but also about existing theoretical and empirical work. We return to the structure-in-evolution view of policy change in a concluding synthesis. We revisit its central constructs, the eight Patterns of Evolution, and draw on our case studies in their discussion. What are these regularities? How are they expressed? We also discuss their significance to scholarship and practice. What are some outstanding theoretical questions these help us answer? Finally, we also begin to explore some possible reasons for such regularities, making a case for a new type of analysis. Understanding the evolutionary dynamics behind the patterns could facilitate the development of the Lines of Evolution, the formulation of which is integral to a complete Toolkit in Evolutionary Policy.

Stages of Evolution. Evolution of a policy system follows an S curve, a nonlinear model with a number of distinct stages: selection and adoption, take-off and growth, and maturity and decline. Moreover, such systems cycle between phases of stability and instability, critical to understanding the evolution of policy systems. The system is

stabilized by its negative feedback loops, leading to lock-ins and stable growth in policy systems. Positive feedback loops, on the other hand, destabilize the system, opening “windows of opportunity” to break the path-dependent developments and allowing system replacement.

Though appearing to occur with notable regularity in the case of the UK and Denmark, given the nonlinear behaviours enabled by such feedback mechanisms, we cannot predict what may trigger a phase change and at what point this may be (Chapter 7). There are, however, some important points to be made. First, as also apparent in our analysis, system replacement often depends on the availability and salience of an alternate set of specifications. For example, the Danish social reforms of 1930s were largely based on a solution that had been promulgated for over a decade by its author by K.K. Steincke (Chapter 8). While this is not a new observation, we add to these findings by pointing to tools that may support a strategic, *directed* change. TRIZ-based applications can be used to locate the system along its evolutionary trajectory and identify future steps in its development, offering thus the knowledge resources to effect change strategically. These may be complemented by complexity research giving us insight into how to stimulate or delay phase shifts (Linstone 1999).

Further, system replacement does not necessarily coincide with, what has been termed by Kuhn (2012), a paradigm shift. Consider Goul Andersen and Pedersen’s (2007) observation about changes in orientation towards employment policy in one of our countries of interest:

In Denmark, however, this paradigm shift took place as a silent revolution with little immediate impact beyond the discursive level. No major new reforms were adopted (an attempt was made in 1989), and no fierce ideological struggles over the issue took place – unlike what is described in Hall’s (1993) theory of paradigmatic change. Only policy experts noticed the change. Because the government was by and large unwilling to take action against unemployment (since it was regarded as structural), it was unable to find a majority in Parliament for any major change... (6)

Highlighting there are other factors to change than merely an updated causal understanding, this finding adds to the explanations of inertia of policy systems. At the same time, as we discuss below, we are led to distinguish between paradigm, policy system, and subsystem replacement, lending some clarity to Kuhn’s conception of change that has seen its challenges in policy scholarship.

Finally, and perhaps most importantly, the nonlinearities revealed in this pattern of systems development steers our attention to two critical issues. First, we must recognize the significance of increasing returns in the policy context. The current framework (that, as we argue below, is *the* paradigm in which policy is made), affects at once the type and quality of our decisions and the possibility of change. The prevalent, reductionist view of policy making assumes social systems can be controlled. Since causes can be connected effects, we can not only know the outcomes of our interventions, we can assign to them probabilities. This also allows for reactive regulation, where course correction is possible as a contingent response. This, however, ignores path dependent growth and the indeterminacy of outcomes, both of which undermine the traditional view of regulation. Privy to these issues, the complexity view changes policy making strategies by introducing precaution: taking measured action (including testing and pilot programs) in the face of uncertainty. Moreover, it begins to rethink policy as a means of influence rather than control in context of a complex and evolutionary system

(Chapter 6). We should expect (the precautionary and adaptable) policies designed within the new paradigm to follow S curve trajectories that are very different from those of the current systems.

Nonuniform Development of System Elements. Policy systems are constituted of subsystems, each following its own S curve. The system elements may thus reach maturity and decline at different points in time. This creates contradictions, which must be resolved to improve the system's performance. We offered a number of observations of such uneven developments, resolved with either improved subsystems or new systems. The gradual dismantling of Poor Laws, their replacement with measured expansion of compulsive schemes targeting different security needs, and their eventual displacement with integrated systems providing universal access, serves as a prime example of such developments.

If the *Stages of Evolution* pattern complements our insight into the punctuated equilibrium view of change, *Nonuniform Development of System Elements* places in context of evolutionary policy the gradualist view of change. Placed purposely at the top, these two patterns bring together the two major interpretations of evolutionary change (with the structure-in-evolution view further expanding these horizons), offering, too, some conceptual clarifications and the potential to reconcile the existing theories. A prominent concern of policy and institutional scholars has been *transformative* change, however defined, and the processes, whether slow or abrupt, leading to such change (Hall 1993; Streeck and Thelen 2005). The view advanced here separates between systems and their subsystems, and interprets change in terms of their replacement (this is in addition to structural change as captured by the patterns).

And, as hinted, replacement at the system level does not equal a change in paradigms—a premise helping to address some (mis)conceptions of how Kuhn's theory relates policy systems (Chapter 7). Kuhn (2012) explains scientific change as a punctuated process, where normal problem solving within an accepted paradigm eventually produces anomalies accumulating to a point of crisis. The crisis leads to a change in paradigms, if an alternate is available. Policy scholars argue that policy paradigms exist in the state of "perpetual crisis," blurring the distinction between normal and crisis periods (Smyrl and Genieys 2008, 6). This is because the continually changing environment leads to failures in policy, which, itself, may be flawed from the start (Taylor-Gooby 2005). Moreover, unlike in science, multiple paradigms are thought to coexist as strongly held worldviews of policy elites.

The structure-in-evolution view, we argue, can reconcile the evolutionary view of science and policy. First, we separate a paradigm from a policy system. Contemporary policymaking (and much of policy research) occurs within, what can be labelled as, *Cartesian-Split-Mechanistic* scientific paradigm (Overton 2015). As we argued, while this reductionist view has seen success in physics and helped us answer questions about the social world, it is reaching its limits, both in practice and formally (Chapter 6, 7). An alternate paradigm from which we work here recognizes the special properties of complex systems, requiring new approaches to both the study and practice of policy making. When considered together, research in complexity policy, i.e. the complexity frame (Colander and Kupers 2014), and insights from the Patterns of Evolution, suggest that evolutionary progression in policy systems (i.e. increasing dynamism and controllability, evolution towards microlevel, etc.) leads to a complexity approach to

policy (Chapter 6, 7). Hence, Kuhn's crisis will not bring about change in a policy, but in a meta-theory informing the studies of the social world and the orientation towards policy and policy making.

Second, Kuhn's view captures the power of increasing returns and the resulting S curve growth that scientific paradigms share with other technologies. These are due to the same reasons: the growing investments into tools, equipment, training, and related dependencies mean it is increasingly difficult to change course. Change can only happen following the depletion stage, when the relative effectiveness of the system is diminished. Given, as hinted, the characteristics of complex systems, we can neither determine the triggers nor the timing of instabilities (Chapter 6, 7). In sum, separating paradigms from policy systems, and further their subsystems, and understanding the shared dynamics of both not only validates Kuhn's theory but also ensures its continued applicability.

Evolution toward Increased Dynamism and Controllability. Policy systems tend to evolve a greater responsiveness and a facility to adapt to changing conditions, thus expanding their capacity to minimize unintended consequences. As discussed, evolutionary view sees policies as products of a number interrelated, continually changing factors. They depend equally on the development of shared meanings, institutional and administrative structures, among other technologies, in addition to human capital. This produces structures increasingly capable of identifying problems, exploring solutions, making decisions, and executing on these decisions. Fraser (1984) describes one model of this transformation:

The first stage involved the revelation of some 'intolerable' evil ... which, it was assumed, could be legislated out of existence by a prohibitory Act. The second stage involved the realisation of the ineffectiveness of the initial legislation and its replacement with new legislation involving the use of inspectors for enforcement. Third, the momentum created by a body of professionals familiar with the problems ... led to a growing *centralisation* and superintendence by some central agency. Fourth, the growth of professional expertise among the administrators brought an awareness that the problems could not be swept away by some magnificent all-embracing gesture but would require *continuous* slow regulation and re-regulation. Finally, the bureaucratic machine pursued research and brought in scientific aids to produce adequate preventive measures which passed almost unnoticed into law. A *self-generating* mechanism gave to the administrators discretionary executive powers typical of modern bureaucracy. (115, emphases added)

While not applicable in all areas, this interpretation brings forward the tensions between centralization and local administration. This was the case, for example, with the new Poor Laws, where local needs and practices often conflicted with central mandates, leading to resistance in their full implementation. Further, this model highlights measures were a product of an ongoing search, given the limits to data and experience. And we may begin to discern that such processes may lead to an accumulated complexity of the bureaucratic state, leading to instability and attempts at resolution.

Increased Complexity then Simplification. Policy systems tend to alternate between phases of an increased complexity and simplification. That is, a cumulative complexity of functions, rules, dependencies, and processes is followed by an overall simplification in the policy system. Among the key contributions of research in welfare modernization are the many questions it opens. It begins by mapping change it finds as multidimensional, outcomes not in line with conventional expectations of politics. What is behind such complexity? It leads to examine the politics behind these changes, and

ultimately, recognize not only the economic but also the social transformations. We also begin to note the social policy's own role in these transformations. As Bernild (2003) explains:

Looking back at the Danish experience it seems obvious that the Danish brand of social insurance functionally interacted with the social movements in civil society, transforming them into a plurality of organized lifeforms, coordinated by the state in a corporatist way, while the tax-funded universal Welfare State dissolved the structured civil society into a atomistic mass of citizens, occasionally clients in the state's social administration. (6)

New welfare constituencies along with such a fragmentation, as has been argued, make possible coalitional engineering by a tactical use of varied reform packages, thus increasing complexity in policy (Häusermann 2012). This is, of course, a partial, if important, part of the explanations behind the increasing complexity. We may argue that further fragmentation, coupled with ongoing techno-economic change, may lead to basic income-like solutions, and thus a deep simplification of social policy (Chapter 7).

Evolution with Matching and Mismatching Elements. Policy designs are subject to a variety of constraints, ranging from social commitments, including vested interest, to technological and resource limits. Policy systems are thus adapted to these conditions, often integrating together unmatched or mismatched elements. We thus must highlight here that these processes may be far from deliberate, as many of our examples demonstrated. In the UK, for instance, the national government inaction in the realm of social policy in the 19th century resulted in the emergence of various cooperative societies addressing the needs of increasing numbers of industrial workers. As well, there were adaptations of existing systems to address the unmet needs of segments of the population. Fraser explains that "through the medical officers and the workhouse infirmaries the Poor Law had become an embryo state medical authority providing in effect general practitioners and state hospitals for the poor. This had been unexpected, contrary to the ethos of the new Poor Law and the pragmatic response to practical need" (1984, 94). Both cases were part of further evolution. Major provider of health insurance, Friendly Societies, became part of the public and private architecture of the health insurance component of the National Insurance Act of 1911. And, the Poor Law infirmaries ended up providing nearly half of the country's public hospital capacity at the start of the Second World War (Fraser 1984). Ultimately, the system was integrated and universalized in a major post-war transformation of social policy (Chapter 9).

Evolution toward the Multilevel. Centralized, rule-driven policy systems evolve towards distributed micro systems, effective in coping with a growing diversity and complexity of the target environment. Our analyses reveal that historical transitions, for example, from the agricultural to industrial economy, and later from industrial to post-industrial economy, have brought with it many challenges to the existing systems ranging from governance to social provision. Many such challenges stem from an increasing diversity of conditions, needs, or risks, where centralized, one-size-fits-all policy and administrative systems have limited effectiveness.

A development that should, for completeness, be mentioned is related to the restructuring brought about by global economic integration, in particular its new phase termed Globalization 2.0 (Berggruen and Gardels 2013). Defined by new kinds of interdependence and diversity, the next phase of globalization brings about new kinds of

challenges. Among these is the rise of nation-sized megacities, powerful nuclei of globalization, connected by flows of information, people, money, and goods and services. Such urban areas, often coupled by these flows more extensively to the *outside* world than to their own polities, are different than the cities of the past. Their diverse, connected, and assertive populations face unique social, infrastructural and environmental issues. At the same time, tensions remain between satisfying their short-term consumer wants and long-term sustainability (Berggruen and Gardels 2013). Coping with these issues demands new governance and policy making structures, ultimately reflected in the policies and delivery systems tailored closely to local needs. Such are the new drivers of evolution to the microlevel (and related patterns), which, as we observed, are equally dependent on politics as on technologies, enabling accountability, communication, or real-time service management.

Evolution toward Decreased Human Involvement. Innovation makes possible to reduce gradually the involvement of humans in policy systems. This pattern suggests the inextricable connection between technological innovation and policy change. This, however, may not necessarily imply the development of, what we conventionally expect to be, new devices or processes. An immediate example here is the development of shared beliefs, social technology, among whose functions is to stabilize the social order. These cultural constructs mean less coercion is required, reducing thus the number of people needed to maintain such order. This is, after all, also the goal of much of policy design: managing some aspects of social systems without resorting to coercion, which can be undesirable, resource intensive, and less effective. Consider also our example of platform crowding solutions across two jurisdictions that evolved differently, though from a similar starting point (Chapter 7). While there are a number of factors that led to the reduction of the need for the *oshiya*, a type of transit attendant, Japanese authorities also implemented some findings from behavioural economics in order to speed up platform flows and improve public safety. Here we discern an overarching theme of the evolutionary view: socio-technical development is driven by a number of interrelated factors—including trial and error and scientific discovery—expressed, over time, in the patterns of evolution.

Evolution toward Increased Ideality. Policy systems have inherent contradictions that lead to adverse outcomes. As we begin to think closely about this pattern and how to assess it, we are also reminded that it is a relative concept. Assessing it must take place in context of a particular (and changing) environment: the same policy may bring about more adverse outcomes in a different context. We also noted that adverse outcomes stem from contradictions among policy subsystems; resolving them increases the ratio of positive to negative effects, raising the system's ideality. And, we add, increasing ideality of an existing system can extend its growth curve. This is why, for example, the universalistic health care and retirement solutions appear as relatively stable.

This pattern, along with a number of its counterparts, can also help us think differently about some outstanding evolutionary questions (Streeck 2010). What is the direction of evolution? How can we define progress? First, the patterns suggest that rather than towards complexity, systems alternate between phases of cumulative complexity and simplification. These processes are closely related to increasing ideality. "Because complexity causes an increase in cost and harm, increasing simplicity will increase ideality if the benefits stay the same," explain (Rantanen et al. 2018, 72). Though, to be

sure, increasing ideality is not necessarily connected with increased simplification. The possibility of obtaining a greater insight into the nature of change and concept of progress in policy systems invites investment in this potentially fruitful line of research.

Future Research

In this study, we reached to research in technology innovation whose novel theory of technological change, we argue, can advance our understanding of policy evolution. More specifically, we adopted an application of I-TRIZ, the Patterns of Evolution, which, along with updated assumptions on how social systems function, formed the basis for what we called the structure-in-evolution view of policy. As among our main goals was to provide support for this view, we only hinted to the advanced ecosystem of TRIZ related tools developed to support strategic innovation. Given our positive findings, it may be useful to briefly introduce the key products in this area, not the least as they point the way to future research in the context of policy.

As hinted, TRIZ emerged from work in engineering science seeking to find repeatable ways to solve inventive problems. Among its central contributions were the formulation of a number of inventive principles and the identification of patterns of technological evolution, both of which saw further development over time. And while the former have become central to much research and practice of problem solving (Cavallucci 2017; Chechurin 2016; Savransky 2000), the latter have been recognized as a more valuable finding as it supplied “a means of controlling the evolution of technological systems rather than merely solving ongoing problems” (Zlotin and Zusman 2006, 2). Indeed, this contribution encouraged evolutionary thinking and led to applications beyond technical systems (Zlotin et al. 2001). In time, TRIZ was transformed into a more general theory of systems evolution, driving the development of “a new methodology for managing/controlling evolution,” known as Directed Evolution (Zlotin and Zusman 2001, 19).

Directed Evolution and its proprietary set of tools have proven their use in commercial systems while demonstrating its potential as a way of thinking. At a high level, Directed Evolution process follows five stages (Zlotin and Zusman 2006), briefly outlined here with reference to policy. The first step is discovery, involving leaning about the past and present developments and parameters of the policy system and its subsystems. The goal is to reveal any trends, problems, contradictions, alternatives, and potentials for improvements. This is followed by diagnostics, a central phase whose objective is to map the system’s evolution in terms of the Patterns and the Lines of Evolution and to situate the system along these Lines. This includes S curve analysis for the system and its subsystems, revealing their progression along the stages of evolution. Ultimately, we seek to identify deficiencies, contradictions, future paths, and the possibilities for change. Synthesis and decision making define the third and fourth stages concerned with problems and their strategic resolution. Mindful of the continually changing environment, the final and ongoing stage of the process involves monitoring and adjustment.

As a process, Directed Evolution could help improve policy making outcomes, and thus should be of much interest to practice. For example, we gain tools to plan strategically for the replacement of a policy system, first by locating it along its

evolutionary trajectory, and, based on patterns and sequences, identify the current state and any possible next (and optimal) designs. While some of these are yet to be devised, other tools are immediately relevant to policy studies and our understanding of policy change. This provides a rationale for investments in the development of such tools and the supporting constructs, the key of which we now turn to.

Lines of Evolution. In this study, we have focused on validating the Patterns of Evolution, “a compilation of trends that document strong, historically-recurring tendencies” in the evolution of creative systems (and, according to some, natural systems). TRIZ research associates these patterns with the Lines of Evolution, capturing “the historical sequence of changes that a technological system undergoes during its evolution” (Zlotin and Zusman 2006, 9). While technology research has identified around 400 lines for physical systems, these are yet to be developed for policy systems. Like in technology, this will require historical analyses of developments in policy systems complemented by latest research providing a look ahead in policy and administration. Consider an example of the Line of Increasing Controllability, equally applicable to policy as to other systems (Table 10.1). Increasing policy effectiveness means to increase our control over outcomes. With time, we can evolve our systems through a series of designs, made also possible by the broader socio-technical development, to a greater controllability. The Lines are not only essential to advanced approaches to policy design but also to understanding of evolutionary change.

Stage	Line	Example
1	Uncontrollable system	Independent process-based policy, independent implementation
2	Forced controllable system	Central process-based policy, independent implementation
3	Semiautomatic control	Central outcomes-based policy, central implementation
4	Self-controlled system (controlled but able to adapt to its environment in the necessary way)	Central outcomes-based policy, independent implementation

Table 10.1 Line of Increasing Controllability as discerned in policy systems (Source: author’s example; lines from Clarke 2000).

S curve analysis. Earlier (Chapter 6), we presented a chart of global per capita consumption of energy over time, expressed as a series of S curves. This pattern has been observed in socio-technical systems at multiple levels of abstraction, including in policy systems and its subsystems. While for technical system, whose adoption and growth can be measured by sales, patents, or licenses, S curve analysis can be straightforward, it may not be so for policy systems. Here, work remains on identifying the best procedures for growth analyses in policy systems.

System boundaries. Policy systems are CAS, which are, by definition, open (Chapter 6). Their study thus depends first on establishing analytical boundaries and on other, related decisions including the level of abstraction at which to work. While boundary setting is a subjective exercise dependent on the analyst and the question at hand, achieving a level of consistency in data collection and analyses of policy systems would benefit from the development of a shared analytical framework. For example, with

a transition to goal-based policy systems or sub-systems, critical to analysis become the top-down policy structures developed to support such systems.

Ideality. Policy systems, according to the Patterns of Evolution, tend towards an increasing ideality. As we discussed, assessing ideality, calculated as the ratio of beneficial to adverse effects, in policy systems is a very different task than for a discrete technological product. We hinted to the possibility of an objective assessment of ideality, particularly in historical-comparative context. While thought has been given to ideality in technical contexts (for example in Rantanen et al. 2018), more work is needed to develop a capacity to formally determine desired and adverse policy effects in the context of the changing environment.

Epilogue: Investing Anew

Social sciences and their subfields dealing with the public sphere, including public administration and public policy, have seen, relative to some of their counterparts, fragmentation and hesitant progress. This is not to undervalue the many valiant research efforts of social scientists striving enhance our understanding of social outcomes. While building on the work of others, such efforts are mostly done by individuals or small groups rather than large research teams supported by abundant data and technology. And a comparison of investments (and their growth) made into social research versus natural sciences and engineering reveals huge disparities, reflected, too, in the corresponding research outputs (NSB 2018, Ch. 5). This is despite the field's importance to our understanding and management of markets, organizations, and social systems more generally. How then can we help advance social inquiry?

Convinced that innovation did not have to be a subjective enterprise, a young patent clerk once set out to find a better way of solving technical problems. Through a systematic review of more than 200,000 patents, he developed the Theory of Inventive Problem Solving, opening new paths not only to innovation but also to a more fundamental understanding of change in creative systems. And now, two million patents and a number of rigorous studies of technological development later, we have further tools and methods which, as we began to show, should also be taken seriously in the field of policy. Hence, one way to advance social sciences is by drawing on outside research and making the case for its utility.

The second, more fundamental way to advance social sciences is to recognize that the social world cannot be reduced to physics. This is no longer a philosophical debate, thanks to scholars transcending domains to demonstrate formally the boundaries to what can be known (Gödel-Turing-Post) and developing ways to observe and study the novel properties of complex systems (Holland-Bak-Arthur) (Markose 2005). Awaiting thus is a new foundation for social sciences based in different assumptions, research priorities, and methods of inquiry (i.e. simulation-driven experimentation). What is more, these scholars' efforts provide a proof that the greatest potential for the advancement of our knowledge can be found at the intersection of disciplines. And this is perhaps where the road ahead begins.

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Appendices

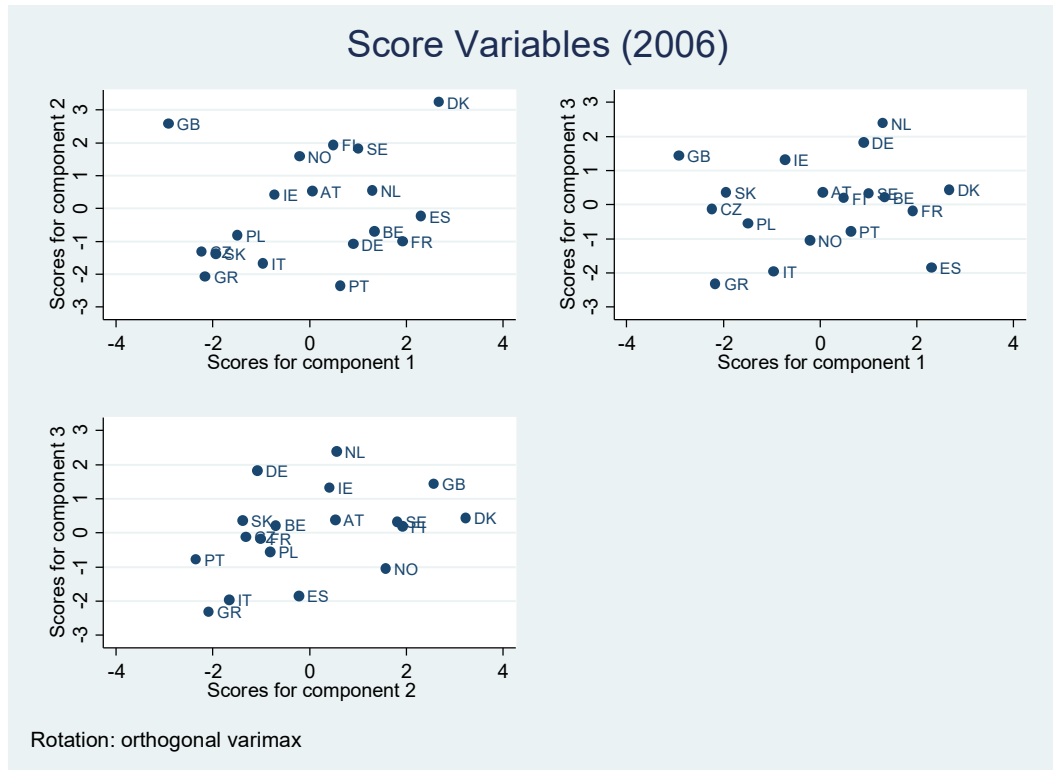


Figure A3.1 Country positions with respect to the three PCA components for 2006.

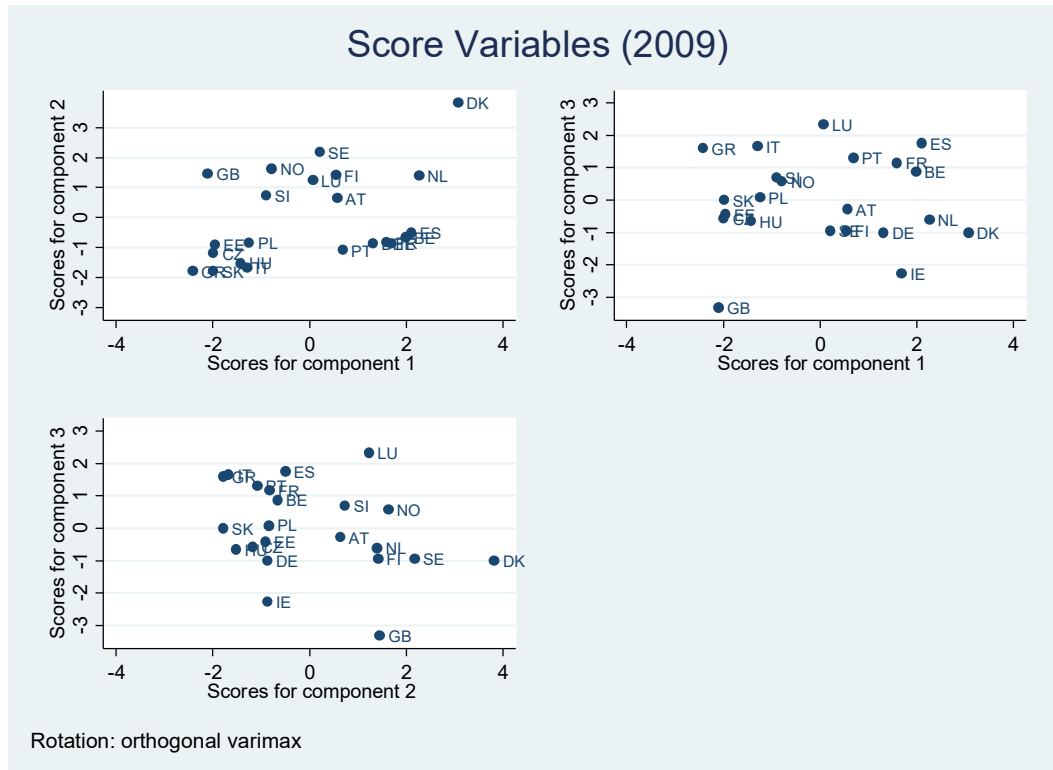


Figure A3.2 Country positions with respect to the three PCA components for 2009.

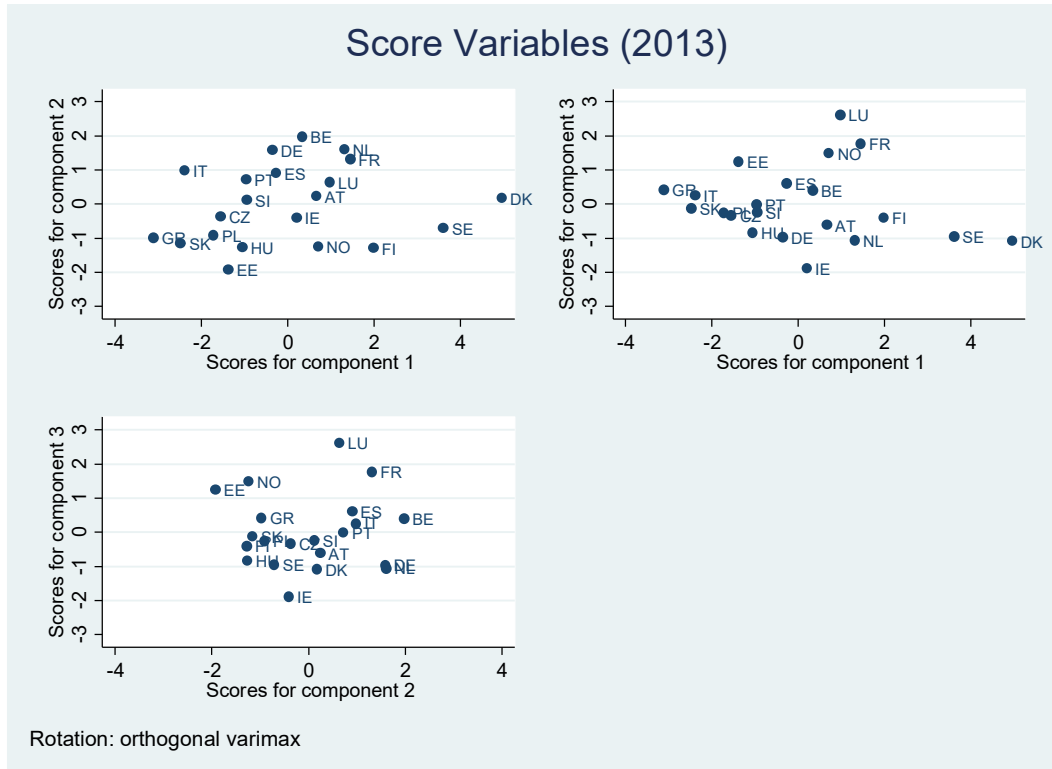


Figure A3.3 Country positions with respect to the three PCA components for 2013.

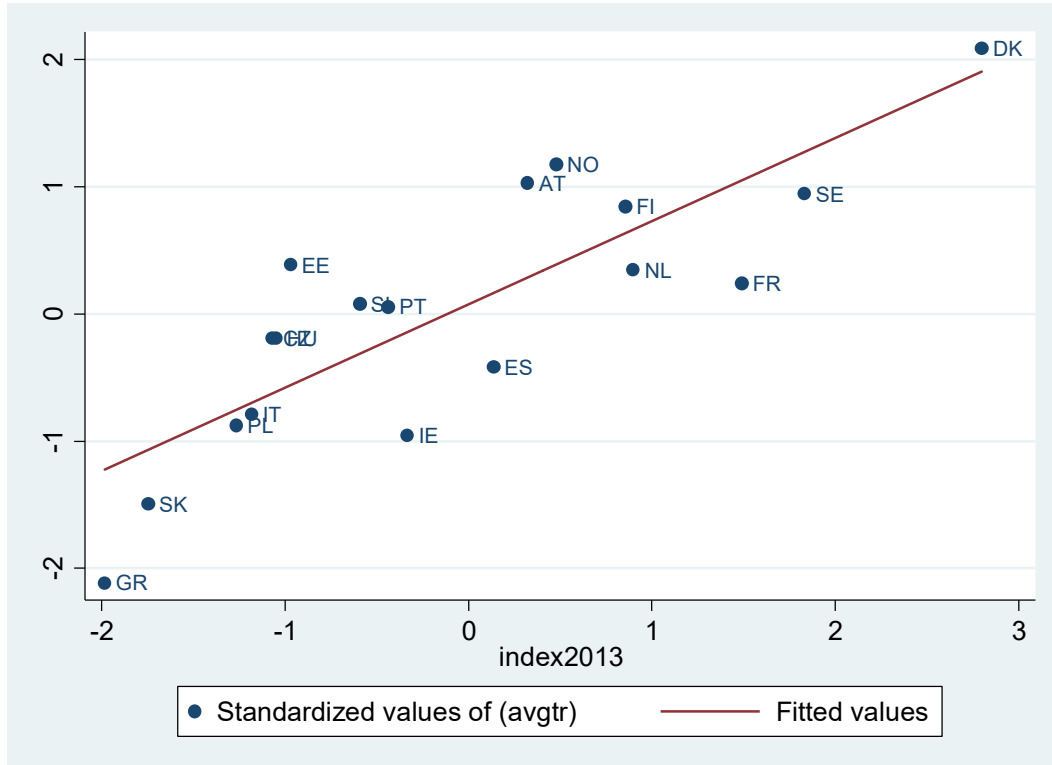


Figure A3.4 Flexicurity index (2013) and its correlation with employment transition rates (2011-2017 average).

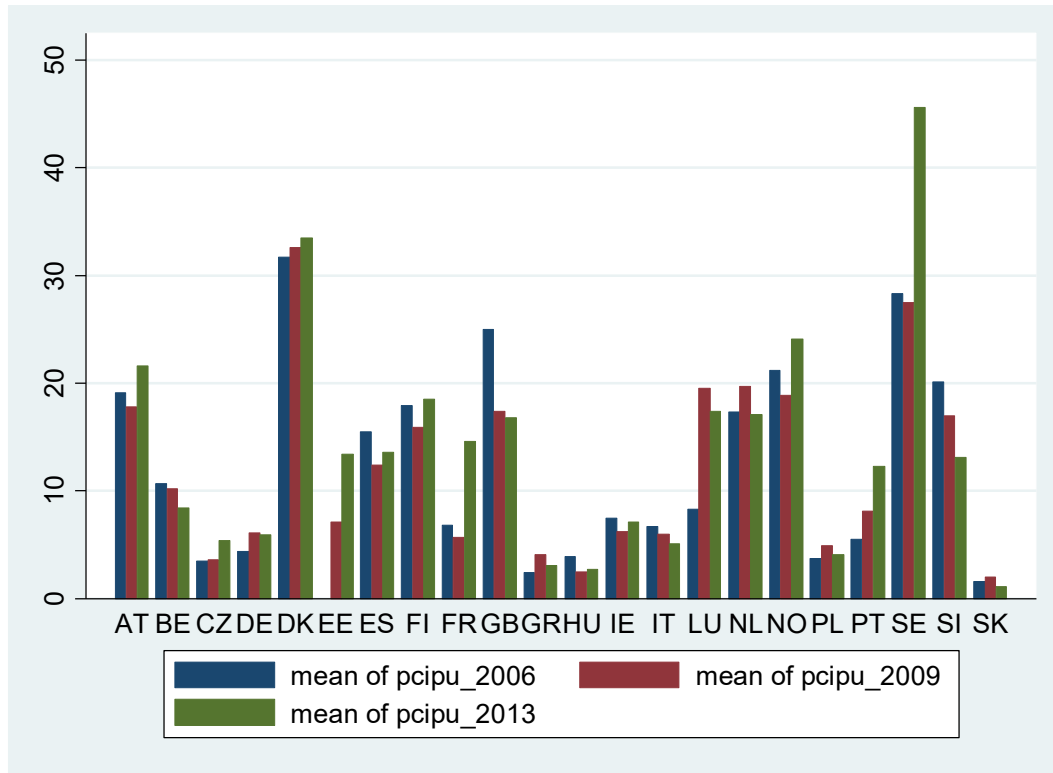


Figure A3.5 Participation of unemployed adults (25-64) in education and training over the past 4 weeks.

Mode of Governance	Type of policy	Analytical core	Main mechanism	Examples	Default explanation
Negotiation	Any of those below	Formation of EU policy	Vertical (uploading)	Any	None specified
Hierarchy	Positive Integration	Market-correcting rules; EU policy templates	Vertical (downloading)	Economic and Monetary Union, Common Agricultural Policy, environmental policy	Goodness of fit
Hierarchy	Negative Integration	Market-making rules; absence of policy templates	Horizontal	Internal market, utilities regulation, corporate governance	Regulatory competition
Facilitated coordination	Coordination	Soft law, OMC, policy exchange	Horizontal	OMC, Common Foreign and Security Policy	Learning

Table A5.2 Europeanization and policy change (Source: Bulmer 2007).

Mechanism	Stimulus	Response
Imposition	Political demand or pressure	Submission
International harmonization	Legal obligation through international law	Compliance
Regulatory competition	Competitive pressure	Mutual adjustment
Transnational communication		
- Lesson-drawing - Transnational problem-solving - Emulation - International policy promotion	Problem pressure Parallel problem pressure Desire for conformity Legitimacy pressure	Transfer of model found elsewhere Adoption of commonly developed model Copying of a widely used model Adoption of a recommended model
Independent problem-solving	Parallel problem pressure	Independent similar response

Table A5.3 Convergence mechanisms and their associated stimuli (Source: Holzinger and Knill 2005).

Year	Reforms
1990	Youth Allowance Scheme: young unemployed persons (18-19) who refuse an activation offer become ineligible for social assistance
1992	Extension to the under 25
1994	Labour Market Reform <ul style="list-style-type: none"> • Duration of UB reduced from 9 to 7 years • Not possible to regain UB entitlements through activation • Individual action plans for the long-term unemployed
1994	Check up <ul style="list-style-type: none"> • Right and duty to activation after 4 years • Stronger availability requirements and sanctions • Unlimited rights to UB for 50-59 years old
1995	Labour Market Reform II <ul style="list-style-type: none"> • Duration of UB reduced to 5 years • Right and duty to activation after 2 years • Eligibility requirement raised from 26 to 52 weeks • Duty to accept appropriate job after 6 months • Duty to accept 4 hours commuting time
1998	Labour Market Reform III <ul style="list-style-type: none"> • Duration UB reduced to 4 years • Activation after one year • Duty to accept appropriate job after 3 months • Unlimited right to UB abolished for 50-54 years old <p>Law on Social Assistance replaced by new legislative package, including 'law on active social policy': 25-29 years old who refuse activation offer become ineligible for social assistance. The law stresses the duty to activation for everybody and duty to accept 'any appropriate job'</p>
2000	Duty to look actively for job for social assistance claimants whose only problem is employment

Table A8.1 Overview of the Danish labour reforms for 1990-2000 (via Daguerre 2007)

	1980	1990	2010
Benefit		Unemployment benefit (contributory) – UB; Income Support (means tested) – IS	Jobseeker’s Allowance (contributory) CB JSA; Jobseeker’s Allowance (income based) IB JSA
Benefit level	21% of average earnings	UB (single person): 14.2% of average earnings; IS: 13.9%	11% of average earnings
Benefit structure	Flat-rate plus earnings-related supplement	Flat rate (lower rates for under-25-year-olds if on IS)	Flat rate (lower rate for under-25-year-olds of either JSA type)
Entitlement	12 months	UB: 12 months; IS unlimited if circumstances unchanged	6 months (CB JSA); IB JSA unlimited if circumstances unchanged
Qualifying conditions (for UB; CB JSA)	Lenient	Two years of sufficient National Insurance contributions	As of 1990
Job-seeking requirements: (a): availability (b): seeking work (c): jobseeker’s agreement	Weak	(a) for each day of claim (UB); 24 hours per week (IS) (b) actively seeking work each week (c) voluntary	(a) 40 hours per week; after 13 weeks: travel to and from work up to 3 hours; (b) three ‘steps’ to actively looking for work each week; (c) mandatory; from 2013 ‘work for your benefit’ for longterm unemployed (JSA claim for 2 years).

Table A9.1 Basic changes in the UK benefit system 1980-2010 (Sources: Clasen 2005; Clasen 2011)