



# **Sustainable Policymaking: Bridging the Gap between Policy Formulation and Implementation**

Inaugural-Dissertation

zur Erlangung des Doktorgrades an der Sozialwissenschaftlichen Fakultät  
der Ludwig-Maximilians-Universität München

vorgelegt von

Christina Steinbacher

2025



Erstgutachter: Prof. Dr. Christoph Knill

Zweitgutachter: Prof. Dr. Josef Philipp Trein

Tag der mündlichen Prüfung: 26. November 2025



## Contents

<i>Deutschsprachige Zusammenfassung der Dissertation</i> .....	iii
<i>Acknowledgements</i> .....	xi
<b>Framework Paper</b> .....	1
1 Introduction .....	1
2 Literature review .....	4
2.1 Steering for policy success: Top-down perspectives and policy design .....	5
2.2 Putting policies into practice: Bottom-up perspectives and street-level implementation .....	7
2.3 Managing complexity: Administrative coordination and policy integration approaches .....	8
2.4 Overarching research gaps .....	10
3 VPI and the influence of politico-administrative structures on policymaking performance .....	12
3.1 The basics of the VPI concept .....	12
3.2 VPI and the economy, efficiency and effectiveness of democratic government ....	15
4 Summaries of the four constituent papers .....	19
4.1 Paper I: Sustaining statehood: A comparative analysis of vertical policy-process integration in Denmark and Italy (Knill, Steinbacher & Steinebach, 2021b) .....	20
4.2 Paper II: Bureaucratic quality and the gap between implementation burden and administrative capacities (Fernández-i-Marín, Knill, Steinbacher & Steinebach, 2024a) .....	22
4.3 Paper III: The pursuit of welfare efficiency: When institutional structures turn ‘less’ into ‘more’ (Steinbacher, 2024).....	23
4.4 Paper IV: The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes (Steinbacher, 2025) .....	25
5 Discussion .....	26
6 Conclusion .....	28
References .....	31
Appendix to Framework Paper .....	39
 <b>Paper I: Sustaining statehood: A comparative analysis of vertical policy-process integration in Denmark and Italy</b> .....	 43
 <b>Paper II: Bureaucratic quality and the gap between implementation burden and administrative capacities</b> .....	 45
 <b>Paper III: The pursuit of welfare efficiency: when institutional structures turn ‘less’ into ‘more’</b> .....	 47
 <b>Paper IV: The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes</b> .....	 49



**Langfristig wirksame Politikgestaltung durch  
Vertikale Integration von Politikformulierung und Politikumsetzung**

Die Fähigkeit demokratischer Systeme, ihre Steuerungsaufgaben zu erfüllen und Politiken so zu gestalten, dass sie langfristig wirksam sind, ist ein zentraler Grundpfeiler ihres Fortbestands. Ohne effektive Politiken kann der Wählerauftrag, auf dem demokratische Herrschaft beruht, nicht umgesetzt werden. Systemische Defizite, die Politikgestaltung behindern, die Steuerungsfähigkeit untergraben und wiederholt zu Politikversagen oder anderen Fehlentwicklungen führen, gefährden die Legitimität und Akzeptanz demokratischer Herrschaft. Ein Staat, der nicht in der Lage ist, „zu liefern“, wird angreifbar für antidemokratische Kräfte.

Trotz dieser zentralen Bedeutung des „policymaking“ geraten demokratische Regierungen zunehmend in Schwierigkeiten, die wachsenden Herausforderungen zu bewältigen. Zum einen machen stetig wachsende Politikbestände die Politikgestaltung komplexer und erhöhen das Risiko von negativen Wechselwirkungen zwischen Politiken (Adam et al., 2019). Ein höherer Bedarf an Koordination und Ressourcen ist die Folge. Zum anderen werden demokratische Systeme mit immer mehr „wicked problems“ konfrontiert, die mit Unsicherheit und Konflikten einhergehen (Head & Alford, 2015). Polarisierung und fragmentierte Interessen heizen die Stimmung auf. Dazu kommen wiederkehrende Krisen, wachsende institutionelle Komplexität und eine tiefere Einbettung in internationale und supranationale Regime. Eine wissenschaftliche Auseinandersetzung ist angesichts dieser komplexen Anforderungslage dringend erforderlich, um die Leistungsfähigkeit demokratischer Staaten zu unterstützen.

Bisherige Forschung zum funktionalen Erfolg und Misserfolg von Public Policies führt Probleme typischerweise auf Mängel im Politikdesign, Herausforderungen in der Umsetzung oder Koordinationserfordernisse zurück. Politiken können auf unzutreffenden oder unvollständigen Designtheorien beruhen, unter schlechten Kompromissen und Mehrdeutigkeiten leiden oder auf Wechselwirkungen mit bestehenden Politikbeständen stoßen (vgl. Howlett & Rayner, 2007; Mettler, 2016; Pressman & Wildavsky, 1973; Schneider & Ingram, 1997). In der Umsetzung dagegen stellen begrenzte Verwaltungskapazitäten, rechtliche

Unsicherheiten, ungelöste Konflikte oder nicht-kooperierende Behörden Herausforderungen dar. Während Bottom-up-Perspektiven die Notwendigkeit von Ermessensspielräumen in der Umsetzung betonen (Lipsky 1980; Maynard-Moody & Musheno, 2000), legen Top-down-Ansätze Hauptaugenmerk auf Kontrolle und auf eine lineare Übertragung politischer Beschlüsse in die Praxis, um ein erfolgreiches „policymaking“ zu gewährleisten (Pressman & Wildavsky, 1973; Sabatier & Mazmanian, 1980). Die Lösung des Problems, dass darüber hinaus institutionelle Komplexität und Fragmentierung Zuständigkeiten und Interdependenzen verschleiern, steht dagegen im Zentrum der Forschung zu Politikkoordination und -integration (Knill et al., 2020; Peters, 2018; Steinbacher, 2023; Trein et al., 2019).

Diese drei Forschungsstränge liefern zwar wertvolle Einsichten in einzelne Determinanten erfolgreicher Politikgestaltung, offenbaren aber drei zentrale Forschungslücken, die diese Dissertation adressieren will. Erstens fehlen Ansätzen, die die Erkenntnisse aus Design- und Implementationsstudien verbinden und mögliche kumulative oder interdependente Effekte im Blick haben. Zweitens mangelt es an einer strukturellen Perspektive, die die Rolle institutioneller Strukturen für die Aufrechterhaltung staatlicher Leistungsfähigkeit betont, insbesondere im Umgang mit Ambiguität und Konflikten über Zeit hinweg. Drittens bedarf es neuer methodischer Ansätze und Konzepte, die die hohe Kontextsensibilität der Politikgestaltung angemessen erfassen können und damit systematische vergleichende Analysen ermöglichen.

Vor diesem Hintergrund führt die Dissertation das Konzept der Vertical Policy-Process Integration (VPI) ein. Es beschreibt politisch-administrative Strukturen, die die Beziehung und Interaktion zwischen den Ebenen der Politikformulierung und der Umsetzung bestimmen. Das VPI-Konzept erfasst sektorale Politikgestaltung entlang zweier Dimensionen. Die Top-down Dimension von VPI misst, in welchem Ausmaß die Politikformulierung verpflichtet ist, für die Umsetzung ihrer Ergebnisse durch Rechenschaftspflichten (Indikator: *accountability*), Ressourcen (Indikator: *resources*) oder organisatorische Verantwortung (Indikator: *organization*) Sorge zu tragen. Die Bottom-up Dimension hingegen beschreibt die institutionellen Möglichkeiten der Umsetzungsakteure, in die Politikgestaltung einzuwirken – etwa durch Evaluation (Indikator: *evaluation*), Konsultation (Indikator: *consultation*) oder artikulative Kapazitäten (Indikator: *articulation*). Dadurch eröffnet das Konzept die Möglichkeit, den Design-Umsetzungs-Nexus sowie die Folgen des Verhältnisses dieser beiden Politikgestaltungsphasen systematisch über Länder, Politikfelder und Zeit hinweg zu bewerten und zu vergleichen. VPI führt eine strukturelle Perspektive auf wichtige Rahmenbedingungen



ein, die die Politikgestaltung in modernen Demokratien prägen, und dient zugleich als praktisches Vergleichsinstrument.

Aufbauend auf den beiden VPI-Dimensionen, Top-down und Bottom-up Integration, argumentiert die Dissertation, dass VPI entscheidenden Einfluss auf den Erfolg und die langfristige Wirksamkeit der Politikgestaltung hat. Während die Top-down Integration primär dazu beiträgt, dass Politiken ihre Wirksamkeit entfalten können, indem die notwendigen Kapazitäten für ihre Umsetzung zur Verfügung gestellt werden, sorgt Bottom-up Integration für ausreichend Praxiswissen und Umsetzungsexpertise bei der Neuformulierung oder Überarbeitung von Politiken. Kumulative Effekte – wie das Zügeln ungebremsster Politikakkumulation (siehe *Paper I*), das Maßhalten bei Umsetzungslast und -kapazität (*Paper II*) oder die Verstärkung der Wirkmechanismen bei Knappheit (*Paper III*) – zeigen, dass der Nutzen der VPI-Dimensionen besonders im Zusammenspiel zu finden ist.

Zur Untersuchung der VPI-Effekte setzt die Dissertation methodisch vorwiegend auf Mixed-Methods-Designs mit quantitativem Schwerpunkt. Die den Analysen zugrunde liegenden VPI-Paneldaten decken politisch-administrative Strukturen in der Sozial- und Umweltpolitik von 1976 bis 2020 in 21 OECD-Ländern ab. Ein einzelner Datenpunkt eines Indikators (Land-Sektor-Jahr) entspricht einer Art Mini-Fallstudie und beruht auf umfassenden Länderberichten, deren Erstellung maßgeblich von der Autorin dieser Dissertation geleitet, koordiniert und umgesetzt wurde (vgl. *Supplement IV* im Anhang des Rahmenpapiers). Einem klaren Aggregationsschema folgend lassen sich aus den Daten zu den Einzelindikatoren Indizes für Top-down und Bottom-up Integration sowie Gesamt-VPI entwickeln. Der Datensatz umfasst die Länder Australien, Österreich, Belgien, Kanada, Dänemark, Finnland, Frankreich, Deutschland, Griechenland, Irland, Italien, Japan, Niederlande, Neuseeland, Norwegen, Portugal, Spanien, Schweden, Schweiz, Vereinigtes Königreich und Vereinigte Staaten. Qualitative Fallstudien sowie Informationen aus zusätzlichen Experten- und Praktiker-Interviews ergänzen oder plausibilisieren darüber hinaus die in den empirischen Einzelstudien quantitativ demonstrierten Wirkmechanismen und Zusammenhänge.

Die vorliegende kumulative Dissertation basiert im Kern auf vier Beiträgen, die bereits in führenden internationalen Fachzeitschriften veröffentlicht werden konnten (Fernández-i-Marín et al., 2024; Knill et al., 2021; Steinbacher, 2024; 2025). Zur besseren Strukturierung der VPI-Effekte im Rahmenpapier, in dem die Kernbeiträge ausführlich besprochen und diskutiert werden, dienen die drei E's staatlicher Leistungsfähigkeit (Frederickson, 2010): das Economy-Kriterium, das den Fokus auf Ressourcenmanagement bei vorgegebenen Aufgaben legt; das Efficiency-Kriterium mit Schwerpunkt auf Aufgabenmanagement bei vorgegebenen

Ressourcen; und zuletzt das Effectiveness-Kriterium, dem Ausmaß, in dem Politiken die anvisierten Ziele erreichen. Daraus ergibt sich folgende Arbeitsteilung zwischen den Kernbeiträgen der Dissertation: Während *Paper I* das VPI-Konzept vorstellt und anhand von qualitativen Fallstudien illustriert, untersucht *Paper II* den Economy-Effekt von VPI, indem es die Fähigkeit und Verpflichtung von Regierungen betrachtet, Ressourcen und Policy-Outputs in Einklang zu bringen. *Paper III* analysiert den Efficiency-Effekt von VPI, also in welchem Maße Ressourcen in Ergebnisse übersetzt werden können, für den Bereich der Sozialpolitik. *Paper IV* schließlich konzentriert sich auf die Effectiveness und untersucht die direkten und indirekten Effekte der Bottom-up Integration.

*Paper I* (Knill et al., 2021) führt das VPI-Konzept ein und entwickelt ein erstes Instrumentarium zu seiner Messung (s. oben angeführte Indikatoren). Ausgehend vom Phänomen der Politikakkumulation und der damit verbundenen „Responsivitätsfalle“ (Adam et al., 2019), die die langfristige Wirksamkeit der Politikgestaltung in modernen Demokratien bedrohen, schlägt *Paper I* VPI als institutionelle Antwort vor, um Responsivität und Effektivität in ein Gleichgewicht zu bringen: Bottom-up-Integration erhöht die Effektivität von Politiken, indem sie die Umsetzungsebene in das Politikdesign einbezieht und verringert den Bedarf an ständig zusätzlichen Politiken. Top-down Integration dagegen macht politische Entscheidungsträger für die Umsetzung verantwortlich und erhöht dadurch die Kosten übermäßiger Responsivität. Die vorgeschlagenen Wirkmechanismen werden mit Hilfe eines Vergleichs der sozial- und umweltpolitischen Strukturen in Italien und Dänemark, zweier Extremfälle ausgeprägter und geringer Politikakkumulation, illustriert und können tentativ bestätigt werden. *Paper I* liefert erste Anhaltspunkte, dass die durch VPI erfassten institutionellen Strukturen geeignet sind, zur Erklärung von Makrophänomenen beizutragen. Daneben zeigt sich, dass das VPI-Konzept nuanciert genug ist, um Binnenunterschiede und zeitliche Varianz abzubilden.

*Paper II* (Fernández-i-Marín et al., 2024) vertieft die Analyse der VPI-Effekte auf staatliche Leistungsfähigkeit durch erste quantitative Tests. In *Paper II* wird ein Economy-Argument entwickelt, das sich dem Zusammenhang zwischen VPI und dem Verhältnis zwischen neuen Policies und den zugewiesenen Umsetzungskapazitäten im Bereich der Sozial- und Umweltpolitik widmet. Zur Abbildung dieses wichtigen Verhältnisses, der *Burden-Capacity Gap*, wurde ein neues relatives Maß entwickelt. Es setzt die Umsetzungslast – gemessen an der Summe der umzusetzenden Politiken – in Relation zu den verfügbaren Verwaltungskapazitäten, die durch eine Kombination verschiedener Kapazitätsaspekte aus unterschiedlichen Datensätzen erfasst werden. *Paper II* gelingt es mittels bayesianischer

linearer Modelle zu zeigen, dass VPI nicht nur ein, sondern der entscheidende Faktor zur Verringerung der *Burden-Capacity Gap* ist und damit das Design von politisch-administrativen Strukturen zu einer nachhaltigeren Politikgestaltung beitragen kann. Untermuert werden die Ergebnisse des Weiteren durch verschiedene Robustheitstests und Interviewdaten.

*Paper III* (Steinbacher, 2024) greift das Efficiency-Kriterium auf und zeigt im Bereich der Sozialpolitik für das Ländersample, dass VPI die Effizienz steigert, mit der Sozialausgaben in Wohlfahrtsergebnisse übersetzt werden. Der Effekt wird besonders deutlich unter Bedingungen fiskalischer Knappheit, da hier das Implementationsfeedback durch Bottom-up Integration und die Kosten der Politikformulierung durch Top-down Integration besonders zum Tragen kommen. Es zeigt sich, dass Wohlfahrtssysteme, deren politisch-administrative Strukturen sich durch ein hohes Maß an VPI auszeichnen, teils sogar die negativen Effekte von Kürzungen im Sozialbudget kompensieren können. Die Mechanismen dieser Knappheitseffekte werden durch Interviewfallstudien gestützt. In den quantitativen Zeitreihen-Querschnittsmodellen kommt zudem zur Messung der sozialpolitischen Leistungsfähigkeit ein neu entwickelter *Welfare Performance Index* zum Einsatz, der Variablen für Armutsinzidenz mit Schätzern für Armutsrisiken kombiniert.

Schließlich behandelt *Paper IV* (Steinbacher, 2025) die erwarteten Auswirkungen von VPI auf die Effektivität der Politikgestaltung. Dabei konzentriert sich *Paper IV* auf die Rolle von Bottom-up Integration, dem theoretischen Treiber des Effektivitätsarguments. Als Untersuchungsgegenstand dienen die umweltpolitischen politisch-administrativen Systeme der 21 Länder des Samples zwischen 1980 und 2012. An der Literatur zur Street-Level Bureaucracy anknüpfend, gelingt es im vierten Forschungsartikel dieser Dissertation zu zeigen, dass Strukturen zur Einbindung von Akteuren an der Basis sowohl die Umsetzungsleistung als auch die Qualität von Politiken verbessern. Dadurch lassen sich effektivere Politikergebnisse hervorbringen, in diesem Fall eine bessere Umweltperformance. Darüber hinaus ergeben die Panelregressionen, dass die indirekten Effekte von Bottom-up Integration vor allem bei der Pflege und Überarbeitung existierender Politikbestände zum Tragen kommen.

Insgesamt leistet die Dissertation damit drei zentrale Beiträge vor allem im Bereich der Public Policy-Forschung und der Verwaltungswissenschaft. Diese Beiträge sind literaturbezogen, konzeptionell-theoretisch und empirisch-methodologisch:

Erstens stellt die Dissertation eine neue strukturelle Perspektive auf Staatstätigkeit und Politikgestaltung vor, die die Brücke zwischen Politikdesign-, Umsetzungs- und Koordinationsforschung schlägt. Dadurch trägt die Dissertation zur Schließung zentraler Forschungslücken bei. Durch den Fokus auf institutionelle (vertikale) Strukturen und durch das

Verlassen der sonst typischen Mikroebene können Erkenntnisse aus Policy Design- und Implementationsforschung miteinander verbunden und Debatten zu Politikkoordination und -integration bereichert werden (siehe auch Steinbacher, 2023). Angesichts komplexer Steuerungsherausforderungen kommt institutionellen Strukturen eine Schlüsselrolle bei der Bewältigung von Unsicherheit und Interessenskonflikten zu.

Zweitens entwickelt die Dissertation mit dem VPI-Rahmenwerk einen innovativen konzeptionell-theoretischen Beitrag. Auf Ebene verschiedener Politikbereiche identifiziert VPI institutionalisierte Verknüpfungen zwischen Politikformulierung und -umsetzung und differenziert zwei Dimensionen, Top-down und Bottom-up Integration (Knill et al., 2021). Dadurch gelingt es dem VPI-Konzept, Interaktionen zwischen den beiden Politikgestaltungsfunktionen zu erfassen und Ansätze für die Erklärung der daraus folgenden Effekte für die staatliche Leistungsfähigkeit zu liefern (Fernández-i-Marín et al., 2024; Steinbacher 2024; 2025). Das VPI-Konzept erfasst also nicht nur Aspekte, die die Qualität von Policy Design und Implementation betreffen, sondern schafft es auch, die Brücke zu strukturellen Herausforderungen – wie etwa der Responsivitätsfalle (Adam et al., 2019; Knill et al., 2021) oder wachsenden *Burden-Capacity Gaps* (Fernández-i-Marín et al., 2024) – zu schlagen.

Drittens leistet die Dissertation einen empirisch-methodologischen Beitrag. Sie stellt ein neues vergleichendes Instrument vor und beruht auf einem neuen Datensatz, der VPI über Länder, Sektoren und Zeit erfasst und damit bislang verborgene Strukturen und deren Entwicklung auf System-Ebene sichtbar macht (neben Illustrationen in den Kernbeiträgen, vgl. auch *Supplement IV* im Anhang des Rahmenpapiers). Die Anwendung des Konzepts und der Daten in den vier Kernartikeln zeigt dessen analytische Tragfähigkeit. Mit der VPI trägt diese Dissertation also dazu bei, dass bisherige Forschungsergebnisse sinnvoll zusammengeführt werden können, und bietet eine vielversprechende Grundlage für vergleichende Analysen und praxisnahe Reformempfehlungen.

## Literaturverzeichnis

- Adam, C., Hurka, S., Knill, C., & Steinebach, Y. (2019). *Policy accumulation and the democratic responsiveness trap*. Cambridge: Cambridge University Press.
- Fernández-i-Marín, X., Knill, C., Steinbacher, C., & Steinebach, Y. (2024). Bureaucratic quality and the gap between implementation burden and administrative capacities. *American Political Science Review*, 118(3), 1240-1260.
- Frederickson, H. G. (2010). *Social equity and public administration: Origins, developments, and applications*. New York: M.E. Sharpe, Inc.
- Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration & society*, 47(6), 711-739.
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in ‘new governance arrangements’. *Policy and society*, 26(4), 1-18.
- Knill, C., Steinbacher, C., & Steinebach, Y. (2020). Policy integration: Challenges for public administration. In B. G. Peters & I. Thynne (Eds.), *Encyclopedia of public administration*. Oxford: Oxford University Press.
- Knill, C., Steinbacher, C., & Steinebach, Y. (2021). Balancing trade-offs between policy responsiveness and effectiveness: the impact of vertical policy-process integration on policy accumulation. *Public Administration Review*, 81(1), 157-160.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public service*. New York: Russell Sage Foundation.
- Maynard-Moody, S., & Musheno, M. (2000). State agent or citizen agent: Two narratives of discretion. *Journal of public administration research and theory*, 10(2), 329-358.
- Mettler, S. (2016). The polycyscape and the challenges of contemporary politics to policy maintenance. *Perspectives on Politics*, 14(2), 369-390.
- Peters, B. G. (2018). The challenge of policy coordination. *Policy design and practice*, 1(1), 1-11.
- Pressman, J., & Wildavsky, A. (1973). *Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes*. Berkeley, CA: University of California Press.
- Sabatier, P., & Mazmanian, D. (1980). The implementation of public policy: A framework of analysis. *Policy studies journal*, 8(4), 538-560.
- Schneider, A., & Ingram, H. (1997). *Policy Design for Democracy*. Lawrence, CA: University Press of Kansas.
- Steinbacher, C. (2023). Analytical perspectives on environmental policy integration. In H. Jörgens, C. Knill & Y. Steinebach (Eds.), *Routledge handbook of environmental policy* (pp. 122-135). Abingdon: Routledge.
- Steinbacher, C. (2024). The pursuit of welfare efficiency: when institutional structures turn ‘less’ into ‘more’. *Policy Sciences*, 57(2), 353-378.
- Steinbacher, C. (2025). The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes. *Regulation & Governance*, 19(2), 540-557.
- Trein, P., Meyer, I., & Maggetti, M. (2019). The integration and coordination of public policies: A systematic comparative review. *Journal of Comparative Policy Analysis: Research and Practice*, 21(4), 332-349.



## *Acknowledgements*

A doctoral dissertation is not a sprint but a marathon, as I have come to realize over the past years. And without people who occasionally hand you a sip of water, keep an eye on the course, and advise you to take a break when needed, it would be impossible to make it to the finish line. I therefore owe gratitude to many more people than I can possibly mention here – people who helped me persevere and supported me along the way.

My deepest thanks go to my supervisor and chair, Christoph Knill. Without Christoph's encouragement, this dissertation would not exist. He believed in the potential of my ideas on the VPI and gave me the space to develop them. Working at his chair has been a constant source of inspiration, fueled by his intellectual drive and commitment, as well as by the many discussions at the traditional after-work dinners. Over the past years, I have also learned – lastly painfully – that life is not only about professional endeavors. Here too, I would like to thank Christoph deeply for his steadfast support and trust, even at times when my own confidence faltered.

I am also very grateful to my co-supervisor, Philipp Trein, whom I first met at my first 'big' conference in Wrocław, which I attended alone, and where he immediately drew me into constructive and insightful conceptual discussions. His guidance has always been extremely valuable, especially at crucial moments of my dissertation project.

Beyond this, I want to thank all my colleagues, some of whom I also had the pleasure of working with as co-authors: Christian Adam, Christian Aschenbrenner, Max Haag, Carmen Heinrich, Steffen Hurka, Markus Hinterleitner, Vytautas Jankauskas, Constantin Kaplaner, Nir Kosti, Alexa Lenz, Julian Limberg, Laura Lindner, Vanessa Millich, Christian Severin, Yves Steinebach, Xavier Fernández-i-Marín, Olivia Mettang, Louisa Bayerlein, Dionys Zink, Chamina Rietze – and of course also Annette Ohlenhard and Patricia Schüttler, whose administrative and interpersonal support were extremely helpful. My gratitude also goes to Anat Gofen, Eva Thomann and Fritz Sager, who gave me new strength and encouragement with PSG XIII at the EGPA just as I was approaching the final stretch.

I would particularly like to highlight Yves Steinebach, who was an important role model and with whom I felt a deep intellectual connection; Xavier Fernández-i-Marín, such a kind office mate who seemed to have unshakable faith in me; Constantin Kaplaner, who so successfully stepped into those big "office mate shoes" and with whom working together was a joy; and, last but not least, Alexa Lenz – without whom, as both a colleague and a dear friend, I could not have managed this. Having you as an ally and companion was indispensable for completing this dissertation and remains a steady support in managing life's challenges, past and future.

Scholarship also benefits from experiences beyond one's immediate field. I am therefore deeply grateful to many of my former colleagues and friends, whose conversations enriched my understanding of policymaking and administrative structures. In particular, I would like to thank Udo Zolleis, a consistently wise advisor and source of perspective, Stephanie Bachmann and her family, trusted companions and role models in many regards, and Felix Schulz, a true bundle

of positivity, with whom every phone call inspires and uplifts me anew. I am also grateful to the many students I had the privilege to teach over the years, for the structure that teaching provided and for helping me maintain focus on the essentials.

In closing, I wish to thank my friends and family, who always supported me unfailingly. They have given me strength and comfort beyond what they may realize, even though I have not always made it easy for them. The very last words of these acknowledgments are dedicated to my little niece, Leonora, who I hope will give strong and colorful wings to her own ideas, just as she has given wings to many of mine.

*Christina Steinbacher*

*Munich, September 2025*



## Framework Paper

*Christina Steinbacher*

### 1. Introduction

“It is the object of administrative study to discover, first, what government can properly and successfully do, and, secondly, how it can do these proper things with the utmost possible efficiency and at the least possible cost either of money or of energy. On both these points there is obviously much need of light among us; and only careful study can supply that light.”

(Wilson, 1887, p. 197)

The general ability of democratic systems to make policies that are effective and sustainable in the long run is a central cornerstone of democracies’ preservation. Systemic deficiencies that methodically impede high-quality policymaking and repeatedly lead to policy failure and escapades endanger the legitimacy and acceptance of democratic governance. A state that is incapable of ‘delivering’ is vulnerable to attacks from antidemocratic forces.

Despite this centrality of policymaking, democratic governments increasingly struggle to manage mounting challenges. First, the global democratic phenomenon of continuously expanding policy stocks has made policymaking more complex, increasing the risk of policy interactions and demanding stronger coordination and capacity (Adam et al., 2019a). Second, democratic systems must also handle more ‘wicked’ problems, characterized by uncertainty and conflict (Head & Alford, 2015). They face recurring crises, increasing institutional complexity, and deeper entanglement in international and supranational regimes. These developments, combined with increasing polarization and fragmented interests, add strain on democratic governments and require also an academic response to ensure sustained policymaking performance.

Typically, research on the functional success and failure of public policies attributes problems to flaws in policy design and challenges in implementation. Policy formulation may rest on inaccurate or incomplete design theories, suffer from poor compromises and ambiguities, or encounter unforeseen interactions with existing policy stocks, as highlighted by numerous scholars (e.g., Howlett & Rayner, 2007; Mettler, 2016; Pressman & Wildavsky, 1973; Schneider & Ingram, 1997). Likewise, policy implementation often faces difficulties due

to limited administrative capacity, legal uncertainty, unresolved conflicts, or non-compliant authorities. While bottom-up perspectives emphasize the need for discretion in implementation (Lipsky 1980; Maynard-Moody & Musheno 2000), top-down approaches stress control and the linear translation of policy into practice (Pressman & Wildavsky, 1973; Sabatier & Mazmanian, 1980). Institutional complexity and fragmentation further obscure responsibilities and interdependencies, drawing attention to the relevance of policy coordination and integration research (Knill et al., 2020; Peters, 2018; Steinbacher, 2023; Trein et al., 2019).

While these three strands of literature offer valuable insights into the determinants of policymaking success, they reveal three key research gaps that this dissertation seeks to address. First, they fall short of integrating perspectives from policy design and implementation, and they insufficiently account for aggregate effects and interdependencies between the factors they identify. Second, they lack a structural perspective that emphasizes the role of institutional structures in sustaining government effectiveness, particularly in managing ambiguity and conflict over time. This aspect is of particular importance given the macro-level, cumulative nature of many challenges confronting democratic policymaking. Third, there is a shortage of methodological approaches and concepts capable of adequately addressing context-dependency in policy and implementation research. The potential for systematic comparative analysis is considerable, yet largely untapped.

Against this backdrop, this dissertation introduces the concept of Vertical Policy-Process Integration (VPI). The VPI concept captures politico-administrative structures that define the relationship and interactions between policy formulation and implementation bodies<sup>1</sup> in different policymaking sectors. It does so based on two dimensions: VPI's top-down dimension assesses the extent to which policy formulation is obliged to care for the implementation of its policy outputs through *accountability*, *resources* or *organizational* costs. Bottom-up integration, on the other hand, proxies the institutional opportunity structures of implementation bodies to contribute to policy design through *evaluation*, *consultation* or their *articulative* capacity. Based on these two dimensions, this dissertation suggests profound effects of VPI on the success of policymaking. As traditional components of governmental performance (Frederickson, 2010), the three E's are used to structure and nuance the effects of VPI within this framework paper: *economy* focuses on resource management (with tasks as 'fixed' input), *efficiency* emphasizes

---

<sup>1</sup> In the context of the VPI concept, the terms policy design and policy formulation are used interchangeably. The same applies to politico-administrative and institutional structures, with the former emphasizing VPI's role at the interface between the more 'political' sphere of policy formulation and the more 'administrative' sphere of implementation.

task management (with resources as ‘fixed’ input), and *effectiveness* means the extent to which policies reach their intended goals (Frederickson, 2010).

While *Paper I* introduces the initial VPI concept and its measurement with four illustrative case studies, *Paper II* develops the *economy* argument by examining the relationship between newly adopted policies and the resources allocated for their implementation across social and environmental policy. It shows that VPI is a crucial factor reducing the burden-capacity gap, a newly introduced aggregate measure of relative implementation capacity. VPI helps to curb excessive policy production and to make policymaking more sustainable by tying it to parallel capacity provision. *Paper III* continues with the *efficiency* argument. Focusing on social policy, it demonstrates that VPI enhances the *efficiency* with which social spending translates into welfare outcomes. These *efficiency* gains are particularly strong under conditions of fiscal scarcity, where VPI’s mechanisms appear most effective. Finally, *Paper IV* addresses *effectiveness* by examining the role of bottom-up integration in environmental policy. It shows that involving street-level actors in policy design improves both implementation performance and policy quality, leading to more effective outcomes.

With regards to methods used and cases analyzed, this dissertation relies on mixed-methods with a quantitative emphasis. The VPI database covers politico-administrative structures in social and environmental policy between 1976 and 2020 in 21 OECD countries building on comprehensive country reports (see *Supplement IV* to this dissertation). These countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the United States. *Paper I* illustrates the VPI concept through an empirical case study comparing social and environmental politico-administrative structures for two extreme cases of policy accumulation, Italy and Denmark. *Paper II* tests the effects of VPI across the two policy sectors in 21 OECD countries over 43 years using a Bayesian linear model. Additional interview data is used to qualitatively substantiate the argument. *Paper III* concentrates on the policy-cost intensive social sector to analyze the translation of welfare efforts into outcomes for the same country sample over 30 years. Using a newly developed Welfare Performance Index (WPI) as dependent variable, social spending as main independent variable, and VPI as interaction term, the analysis relies on time-series cross-sectional models with fixed effects or first-difference estimators. Again, interview-based mini case studies illustrate the argument. Finally, *Paper IV* tests the direct and indirect effects (via changes in policy portfolios) of bottom-up integration on changes in environmental performance across 21

OECD countries over 33 years. To do so, *Paper IV* employs linear panel regression models with country and year fixed effects and robust standard errors clustered by country.<sup>2</sup>

In sum, this dissertation makes three core contributions to the study of policymaking. First, it offers a literature-oriented contribution by introducing a structural perspective that bridges gaps between policy design, implementation, and coordination research, and highlights the overlooked vertical dimension of policy integration. Second, it delivers an original conceptual-theoretical contribution by developing the VPI framework, which theorizes how institutional linkages, through top-down and bottom-up integration, shape policymaking performance and sustainability. The presented evidence of the constituent papers corroborates its value. Third, this dissertation provides an empirical-methodological contribution by introducing a new comparative tool and corresponding dataset capturing VPI across countries, sectors, and time (see also *Supplement IV*). In doing so, this dissertation synthesizes previous literature, provides promising avenues for comparative, cross-contextual research and uncovers so far hidden macro-level governance dynamics. Together, these contributions not only advance academic debates but also offer practical insights for institutional reform.

The remainder of this framework paper is structured as follows. The next section reviews the literature this dissertation seeks to speak to and identifies three overarching research gaps. The subsequent section presents the conceptual and theoretical core of the dissertation: it introduces and explains the VPI concept and elaborates on its implications for the three E's of performance – *economy*, *efficiency*, and *effectiveness* – which together form an organizing framework to structure and relate the dissertation's core papers. This is followed by summaries of the four constituent papers.<sup>3</sup> The discussion section then reflects on the key findings, their limitations, and the opportunities they present for future research. Finally, the conclusion synthesizes the main contributions of the dissertation.

## 2. Literature review

Explaining the outcomes of policymaking, specifically how policy goals are implemented in practice and which effects they produce, is a crucial objective of public policy and administration research (Knill & Tosun, 2020; Mayntz, 1983) and has been explored in various strands of literature. Approaches stretch from theories that take individual and aggregate behavior as point of departure (see, e.g., Hood, 2010; Lipsky 1980; or Simon, 1997) to

---

<sup>2</sup> These descriptions naturally sketch only the methodological framework; further details and robustness checks are provided in the individual papers.

<sup>3</sup> An appendix to the framework paper provides additional information on the supplementary contributions supporting this dissertation.

approaches that emphasize overarching structural and institutional characteristics of politico-administrative systems (see, e.g., Crozier, 1964; Lijphart, 1999; Painter & Peters, 2010) or different steering and governance models (see, e.g., Ansell & Gash, 2008; Hood, 1991; Klijn & Koppenjan, 2000; Wilson, 1887). Given the interdisciplinary character of the phenomenon, scholars draw insights not only from public policy and administration research but from psychology, sociology, law, economics and management.

This thesis argues that a crucial, yet overlooked, determinant for successful and sustainable policymaking is constituted by institutional structures that couple the often separately-conceptualized stages of policy formulation and implementation. While the different mechanisms suggested by this thesis are inspired by a multitude of approaches, some of them mentioned above, the proposed concept and its presented effects speak primarily to three strands of literature originating in implementation studies and public policy research. These are 1) policy design approaches, adopting a top-down perspective on policymaking and implementation, 2) street-level bureaucracy, approaching the phenomenon from bottom-up and 3) policy integration, considering the complex interdependencies between policies and their context.

## ***2.1 Steering for policy success: Top-down perspectives and policy design***

Policy design plays a crucial role in determining policy success defining both the objectives and the toolkit (including both instrument choice and implementation capacity and structure) to achieve them (Schneider & Ingram, 2005, p. 206; see, also, Sabatier & Mazmanian, 1980). Typically, policy design studies adopt a top-down perspective on policy implementation, as “[t]op-down theorists see policy designers as the central actors and concentrate their attention on factors that can be manipulated at the central level” (Matland, 1995, p. 146). From this perspective, the goal of implementation is the linear translation of policy design into practice. Accordingly, policy success hinges on the quality of the program theory, i.e., the logical link between policy instruments and goals. Furthermore, and drawing on principal-agent theory and its focus on control and delegation risks (Kiewiet & McCubbins, 1991), policy success also depends on the steering capacity embedded in the policy design to limit implementation complexity and actor involvement. Policy success is seen “as a consequence of adequate control and unambiguous attribution of competencies” (Buzogány & Pülzl, 2024, p. 116). The following literature review is structured around these two sets of determinants, both of which were already emphasized by Pressman and Wildavsky (1973) in their seminal work that laid the foundation for the top-down perspective.

Considering first the quality of the program theory, the basic idea is that if the underlying assumptions and causal logic of the policy are flawed, the policy is unlikely to achieve its intended goals. Besides the complementarity or counterproductivity of specific policy instrument combinations (Grabosky, 1995; Gunningham & Sinclair, 1999; Hou & Brewer, 2010), the consistency and coherence of policy mixes frequently serve as more abstract design criteria (Howlett & Rayner, 2013; Rogge & Reichardt, 2016). Considering interactions and growing policy stocks, scholars also discuss the role of sequencing (Bemelmans-Videc et al., 1998; Gunningham & Sinclair, 1999; Howlett, 2019), pace of change and innovation (Compton et al., 2019; Fernández-i-Marín et al., 2024b; Peters & Fontaine, 2022), policy maintenance (Knill et al., 2024a; Mettler, 2016) and information flows that foster evidence-based policymaking (Fleming & Rhodes, 2018; Kuehnhanss, 2019; Stoker & John, 2009). However, these considerations encounter inherent limitations. First, policymaking is not driven solely by functional considerations; it also involves political negotiations, compromises, risk–benefit calculations and blame games (see, e.g., Bardach, 1977; Baumgartner & Jones, 1993; Hinterleitner, 2020; Hood, 2010; Hood & Lodge, 2006). Second, policy problems are increasingly complex, given their cross-cutting, ambiguous, and normatively laden nature (Head & Alford, 2015), as well as their interaction with ever more densely populated ‘policyscapes’ (Mettler, 2016; see, also, Adam et al., 2019a). In such contexts, proposed solutions often depend on how the problem is initially defined, thereby limiting the scope for objective approaches (Peters & Fontaine, 2022, p. 3; Head & Alford, 2015, p. 715). Finally, the accessibility, quality and applicability of information and evidence regarding what works best, when, and where is typically constrained by significant contextual dependencies, making it difficult to transfer findings across diverse circumstances.

The second broad condition determining policy success from a top-down perspective focuses on the ability of the policy to structure and steer implementation by keeping complexity at bay. As Pressman and Wildavsky (1973) argue, the likelihood of successful implementation declines as the number of actors involved increases, due to challenges related to coordination, divergent priorities and interests, or operational inconsistencies. While Fagan (2023) shows that the risk of policy disasters increases with the number of veto players, which constrain the incremental adaptability of policies, Haag, Hurka, and Kaplaner (2025) demonstrate that the clarity of implementation structures in policy design significantly affects implementation performance. To mitigate these risks, several scholars advocate for greater centralization and simplification (Andrews et al., 2009; Fagan, 2023; Haag et al., 2025; Pressman & Wildavsky, 1973; Raudla et al., 2015).

The reality of implementation structures, however, is evolving differently. Driven by the expansion of governmental responsibilities, task complexity, institutional stickiness, resource competition and efficiency concerns, a diverse array of increasingly complex and networked implementation structures has emerged (Compton et al., 2019; Klijn & Koppenjan, 2000; O'Toole, 1997) blurring accountability and limiting central control (Thomann et al., 2018a). Policy implementation no longer occurs within the classic 'single lonely organization' (Hjern & Porter, 1981). Instead, it typically involves the interaction of multiple, often heterogeneous actors. Furthermore, the adequacy of institutional set-ups depends on contextual factors such as existing governance arrangements (Howlett & Rayner, 2007; Knill & Lenschow, 1998; Steinebach, 2023), organizational behavior (Andrews et al., 2009), properties of the policy problem (Ingram & Schneider, 1990; Porter & Olsen, 1976) or state capacity (O'dwyer & Ziblatt, 2006). Policy success has also been demonstrated to depend on factors that run contrary to top-down expectations, such as increased inclusivity and collaboration (Compton et al., 2019), or on an adequate balance between control and discretion, centralization and decentralization (Altamimi, Liu & Jimenez, 2023; Ingram & Schneider, 1990).

## ***2.2 Putting policies into practice: Bottom-up perspectives and street-level implementation***

While top-down scholars emphasize a linear and controlled translation of policy design into practice, bottom-up perspectives respond by highlighting the crucial role of implementation actors and local conditions in shaping policy outcomes (Lipsky 1980; Maynard-Moody & Musheno, 2000). Drawing on concepts such as backward mapping (Elmore, 1979), bottom-up approaches look at the concrete realities of local implementation and the behavioral changes expected from the target group – rather than abstract policy goals – to identify the policy adjustments needed at higher levels of government. In doing so, the bottom-up perspective resonates with the complexification of implementation structures (Hjern & Porter, 1981).

Central to the bottom-up perspective is Michael Lipsky's concept of street-level bureaucracy (Lipsky, 1980). It underscores the discretion and autonomy exercised by frontline workers – such as health professionals, environmental inspectors, or welfare officers – that operate at the interface between the state and citizens or bodies of regulatees. Street-level bureaucrats (SLBs) themselves 'make' policies (see, also, Brodtkin, 2011) and adapt them to local needs. While it can be distinguished between different forms of discretion (Thomann et al., 2018b; Tummers & Bekkers, 2014), it is one of the basic assumptions of bottom-up

approaches that some discretion is inevitable due to resource constraints, policy ambiguity and imperfect control.

As a result, policy success is not viewed as a function of policy design, but as a product of discretionary decision-making and the capacities of individual implementers, shaped by personal, organizational, and environmental factors (Brodkin, 2011; Cohen, 2021). Considering organizational conditions, policy success is determined by SLBs' 'action resources' which range from budget and staffing to productivity levels and professional qualifications (Hupe & Buffat, 2014; see, also, Knill et al., 2024b; Thomann, 2015). Considering personal factors, individual enforcement styles influence how regulatees adjust their behavior in accordance with policy objectives (May & Wood, 2003). Implementers' performance is furthermore affected by SLBs' beliefs in the policy and its purpose (May & Winter, 2009; Tummers, 2011) as well as in their own efficacy (Winter et al., 2022). In this context, discretion contributes to SLBs' motivation, willingness and capacity for implementation (Masood & Nisar, 2022; Thomann et al., 2018b; Tummers & Bekkers, 2014), the supportiveness of their enforcement styles (de Boer & Raaphorst, 2023) and their ability to successfully adapt the policy to local needs (Maynard-Moody & Musheno, 2000) and manage local resource and contextual requirements (Lenz & Eckhard, 2023). Characteristic of bottom-up approaches, the focus shifts from comparing effectiveness across different types of policies to examining how the same policy performs across varying implementation contexts.

Yet, on the downside, discretionary decisions can result in implementation gaps and policy divergence (Gofen, 2014; Ting, 2003) and cause concerns about democratic legitimacy, political accountability, and the principles of administrative equality and impartiality (Rivera & Knox, 2023; Sager et al., 2021). Although SLBs bring valuable local knowledge and experience, their perspective remains limited compared to that of higher-level policymakers. This can lead to suboptimal decisions, even when SLBs exhibit a high degree of professionalism and a strong commitment to public service values (Maynard-Moody & Musheno, 2000). Linder and Peters (1987) warn of the normative consequences for democratic policy control when "what *should* be done becomes defined by what *can* be done" (p. 464).

### ***2.3 Managing complexity: Administrative coordination and policy integration approaches***

Like other hybrid approaches, administrative coordination and policy integration draw on both top-down and bottom-up perspectives to address the growing complexity from policy design to local implementation. Growing complexity in institutional structures, policy portfolios, and societal problems necessitates coordination among actors and institutions, as



well as integration across policy processes and outputs (*Supplement I*, see Knill et al., 2020; Peters, 2018; *Supplement III*, see Steinbacher, 2023; Trein & Maggetti, 2020). Coordination and integration function both as means and ends, and typically describe different intensities of the “adjustments” made to a set of decisions so “that the adverse consequences of any one decision for other decisions in the set are to a degree and in some frequency avoided, reduced, counterbalanced, or outweighed” (Lindblom, 1965, p. 154; see, also, Alexander, 1995). Ultimately, these approaches seek to foster more harmonized and inclusive policymaking for greater policy success (Ansell et al., 2017; Candel & Biesbroek, 2016; Peters, 2018) by avoiding malfunctions and, ideally, enhancing synergies (Scharpf, 1994).

To do so, the literature distinguishes between administrative coordination, that aims at greater collaboration between actors changing processes and organizational relationships, and substantive policy integration denoting comprehensive policy solutions that cut across traditional policy sectors (Trein & Maggetti, 2020; Trein et al., 2019). Furthermore, a distinction can be made between the horizontal and vertical dimensions of coordination and integration. Horizontality typically denotes coordination and integration between actors and policy sectors at the same level of government, while verticality refers to the (different) institutional levels involved in policy design and implementation (Howlett & del Río, 2015; *Supplement I*, see Knill et al., 2020; Underdal, 1980). Yet, most studies concentrate on horizontal administrative coordination and policy integration leaving the vertical dimension underexplored.

Research on administrative coordination and policy integration originates in practical efforts to address tensions between institutional structures and policy problems. Beginning in the 1990s in Anglo-Saxon countries, initiatives such as Joined-up Government (UK), Whole-of-Government (Australia), and Horizontal Management (Canada) emerged in response to fragmentation, decentralization, and specialization associated with New Public Management reforms (Cejudo & Michel, 2017; Christensen & Lægreid, 2007), reflecting concerns raised by top-down implementation studies. However, evidence of their impact on policy success remains mixed, due to coordination costs, power struggles, and accountability issues (Kavanagh & Richards, 2001; Peters, 2018), as well as variations in coordinative modes such as hierarchy, networks, competition, and negotiation (Lægreid et al., 2016; Mom et al., 2007). Outcomes furthermore depend on policy complexity and contextual factors (Lundin, 2007).

Similarly, policy integration efforts were typically driven by cross-sectoral challenges, such as environmental issues (*Supplement III*; see Steinbacher, 2023), and have led to a growing use of intersectoral policy instruments (Kaplaner et al., 2025; Trein & Maggetti, 2020). Yet,

evidence of their effectiveness in achieving cross-cutting objectives remains limited and often only derives from micro-level case studies. A negativity bias in implementation research skews attention toward failed integration initiatives. While the need for coordination and integration varies by context (Peters, 2018; Lundin, 2007), reformers frequently struggle to align demand and supply (Knill et al., 2024a; Trein & Maggetti, 2020).

## ***2.4 Overarching research gaps***

While numerous individual debates and disagreements exist, three major research gaps emerge from the literature that this dissertation project seeks to address. First, although long acknowledged, the disconnect between policy design and implementation remains unresolved, and further efforts are needed to reconcile these perspectives in both theory and practice. Second, despite the growing scholarly focus on complexity, insufficient attention has been paid to politico-administrative structures and their capacities to maintain government effectiveness managing ambiguity and conflict over time. Third, existing scholarship lacks adequate conceptual and methodological tools to address the empirical complexity currently thwarting comparative research on policy implementation and performance.

While continuing tensions between policy design and implementation are well recognized (Ansell et al., 2017; Hupe & Hill, 2016; Linder & Peters, 1990), they remain far from resolved. Existing literature consistently demonstrates that both policy design and implementation practice are critical to policy success and that they are interdependent rather than distinct stages (see., e.g., Hood & Lodge, 2006; Peters & Fontaine, 2022; Polman & Alons, 2021). Policy design shapes implementation by (co-)creating conditions, such as administrative discretion and capacity, while implementation practice (co-)determines the fit of a design and provides expertise. SLBs may even become active policy entrepreneurs (Cohen, 2021; Edri-Peer et al., 2023). Although hybrid models – such as Matland’s ambiguity-conflict model (1995) – attempt to reconcile top-down and bottom-up perspectives (Linder & Peters, 1987), finding an appropriate balance remains a persistent challenge for democratic governance. The true ‘missing link’ between policy goals and outcomes (Hargrove, 1975) appears to lie in the insufficiently understood interface between policy design and implementation, particularly across multiple levels of government (Benz, 2019; Adam et al., 2019b; Trein & Maggetti, 2020).

Second, institutional structures that shape policymaking across policy design and implementation along with actor relationships have received insufficient scholarly attention. While well-established concepts such as patterns of democracy (Lijphart, 1999), veto players

(Tsebelis, 1999), and corporatism (Jahn, 2016a) illuminate how institutions influence decision-making and power dynamics on the input and design side, the output and implementation side remains underexplored. Yet, research shows that the interaction between institutional structures and policy significantly affects performance (Knill & Lenschow, 1998; Steinebach, 2019) and that institutional structures shape the behavior and attitudes of actors (Simon, 1997). Highlighting this gap, Sager and Gofen (2022) call for greater focus on the ‘polity of implementation’ that shapes important implementation factors, such as discretion. Although recent work on coordination and integration increasingly considers actor constellations and institutional networks, it mainly remains case-based and typically focuses more on horizontal than on vertical relationships, more on causes than on consequences (Ansell et al., 2017; Behnke & Hegele, 2024; Lubell et al., 2014; Peters, 2015; Trein et al., 2023). Paying greater attention to institutional structures provides a promising avenue for practical, theoretical and empirical advancements. Especially in light of growing complexity, institutional structures are vital for managing uncertainty, enabling iterative adaptation, and mediating between competing interests (Behnke & Hegele, 2024; Fagan, 2023). Moreover, reform activities in politico-administrative systems provide fertile ground for time-sensitive comparative analysis.

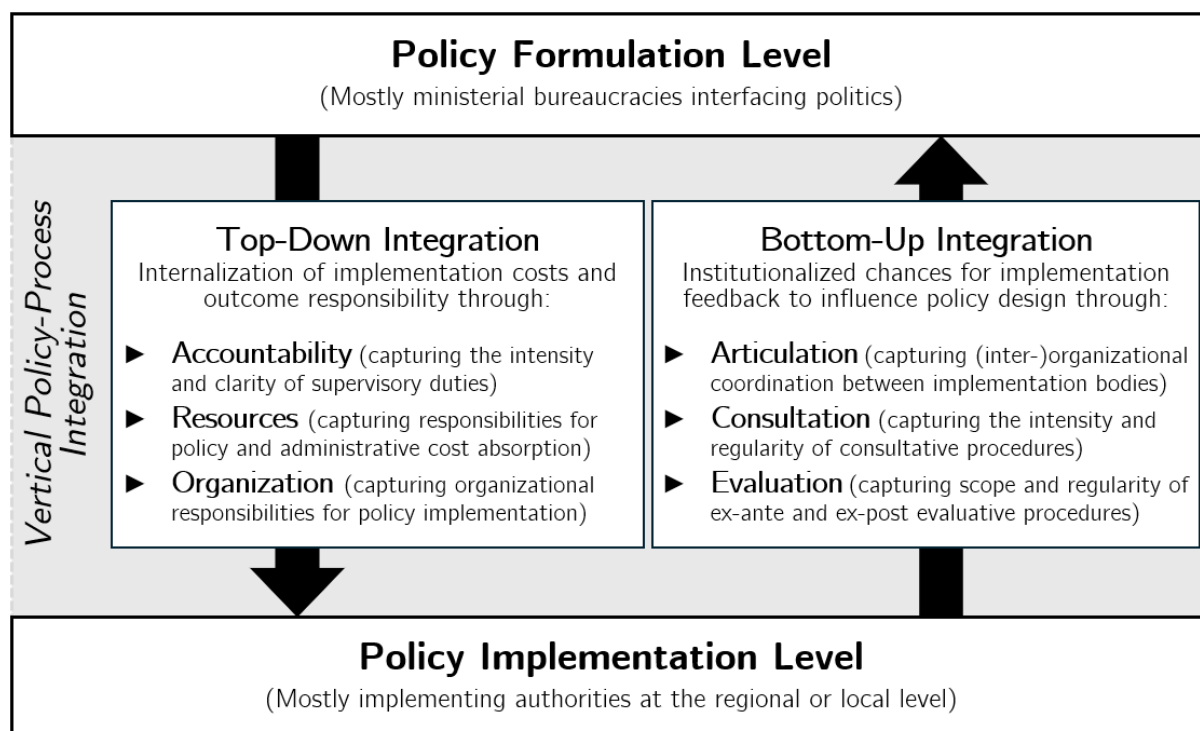
Finally, this points to the third research gap: the lack of a comparative perspective beyond the micro level. Most studies focus on individual policy programs and struggle to generate generalizable findings. Design scholars, for example, often produce case studies that offer ex post explanations of policy failure within specific contexts or propose abstract design principles that are difficult to test empirically (Fernández-i-Marín et al., 2021). Bottom-up approaches face similar constraints, with comparative work typically limited to variations in the implementation of the same policy (Hupe & Buffat, 2014). Quantitative analyses frequently rely on perception-based survey data, further complicating interpretation. Coordination and integration approaches also lack robust comparative frameworks and tend to rely on qualitative single-case studies (see, Kaplaner et al., 2025; Trein et al., 2021a; 2023). Even recent policy process theories that emphasize comparison, such as the Institutional Analysis and Development Framework (Ostrom, 2011), remain largely descriptive and offer only limited tools for abstracting or simplifying real-world complexity. This lack of a comparative perspective leads to three key problems. First, it hinders the accumulation and synthesis of findings across cases and contexts. Second, it limits the formulation of actionable policy recommendations. Third, by focusing narrowly on the micro level, it overlooks broader dynamics such as rising interdependencies and complexity within policy portfolios and institutional structures, that only become visible at the macro level.

### 3. VPI and the influence of politico-administrative structures on policymaking performance

Addressing these gaps, this dissertation introduces the concept of Vertical Policy-Process Integration (*Paper I*). VPI refers to the politico-administrative structures that link the bodies and actors involved in policy design and implementation across different governmental and institutional levels. By measuring the degree of VPI through its two dimensions, top-down and bottom-up integration, the concept offers a chance to systematically assess and compare the design-implementation-nexus and the consequences of this relationship across countries, policy sectors and time. VPI introduces a structural perspective on important conditions shaping policymaking in modern democracies and serves as a practical comparative tool that strikes an appropriate balance between specificity and degree of abstraction. After explaining the VPI concept and measurement, the subsequent subsections outline the hypothesized effects of VPI. As components of governmental performance, the traditional three E's – *economy*, *efficiency*, and *effectiveness* – serve as a structuring framework for the effects of VPI that are addressed in *Papers II, III, and IV* of this dissertation.

#### 3.1 *The basics of the VPI concept*

The VPI concept – introduced in *Paper I* – systematizes the politico-administrative structures that shape the interactions between the policy formulation and the policy implementation level. Accordingly, VPI presents an institutional characteristic. The policy formulation level is considered to be mainly situated at the 'top' of the executive in ministerial bureaucracies interfacing politics. The policy implementation level encompasses mostly implementing authorities and agencies at different institutional levels with their usual center of gravity at the local level at the 'bottom' of government. To capture their reciprocal relationship and its distinct functions across diverse, country- and sector-specific institutional settings, VPI employs two dimensions: top-down and bottom-up integration. *Figure 1* gives an overview of the concept and its indicators. Patterns of VPI vary not only across countries but also between policy sectors, and may evolve over time.

**Figure 1:** VPI systematizing the relationship between policy formulation and implementation.

The conceptualization of the top-down integration is guided by the idea that the policy formulation level, as the political principal in the design-implementation relationship, should account for implementation costs and bear outcome responsibility when issuing mandates. This aims to curb short-term political incentives for (over)production of policies and the creation of unfunded mandates, while helping to manage institutional complexity and ensure sufficient administrative capacity (Adam et al., 2019a; Dasgupta & Kapur, 2020; Gratton et al., 2021). The extent of top-down integration of implementation costs and outcome responsibility into policy design varies with three factors: first, *accountability* that measures the intensity and clarity of supervisory duties such as legal or technical-administrative oversight and therewith the extent to which the formulation level can be held responsible for policy outcomes; second, *resources* refers to the distribution of policy and administrative costs between the policy formulation and implementation level; finally, *organization* captures which tier is responsible for setting up the organizational structures for implementation and determining who is in charge for which task<sup>4</sup>.

Bottom-up integration, by contrast, focuses on the institutional linkages that structure information flows from policy implementation into formulation. Its purpose is to ensure that

<sup>4</sup> See *Paper I* for further explanations.

implementation reality – in terms of capacity requirements, policy interactions, actor conflicts and other contextual conditions – is considered during the design phase. By generating, streamlining, and channeling feedback from the implementation level, bottom-up integration can enhance not only the quality of policy design (Ansell et al., 2017; Howlett & Rayner, 2013) but also implementers' performance (see, also, *Paper IV*). Bottom-up integration is assessed through three indicators: first, *articulation* captures the organizational capacity of relevant implementation bodies to coordinate and voice shared implementation positions through, for example, umbrella organizations; second, *consultation* refers to the presence, extent and bindingness of consultative structures involving the implementation level in policy (re)design processes; finally, *evaluation* systematizes the scope and regularity of ex ante and ex post evaluative procedures generating implementation feedback and assessments of policy success.

Since VPI and its indicators capture latent constructs, there is no universal configuration of VPI applicable across politico-administrative systems. What constitutes effective VPI depends on institutional context. Hence, for the data collected and used in this dissertation project, each data point in the panel data (comprising country-year-sector observations) presents a 'mini' case study triangulating data from legislative documents, gray and secondary literature, and interviews where necessary. In collaboration with a team of seven researchers and assistants, the author coordinated and compiled a comprehensive, more than 100-page country report documenting VPI patterns in 23 OECD countries between 1976 and 2020 (*Supplement IV*) and forming the backbone of the quantitative data set. Aggregating VPI scores, VPI as family resemblance concept relies on substitutable indicators (Goertz, 2006). This additive structure allows VPI to reflect the diversity and complexity of real-world governance systems by accommodating variation across cases without requiring a single, necessary configuration of attributes. Depending on the specific institutional context and the degree to which integrative mechanisms are utilized, each indicator is scored as '0' (low), '0.5' (medium), or '1' (high). Accordingly, the VPI index ranges from a theoretical minimum of '0', indicating a complete absence of vertical integration, to a maximum of '6', reflecting full integration between policy formulation and implementation.<sup>5</sup>

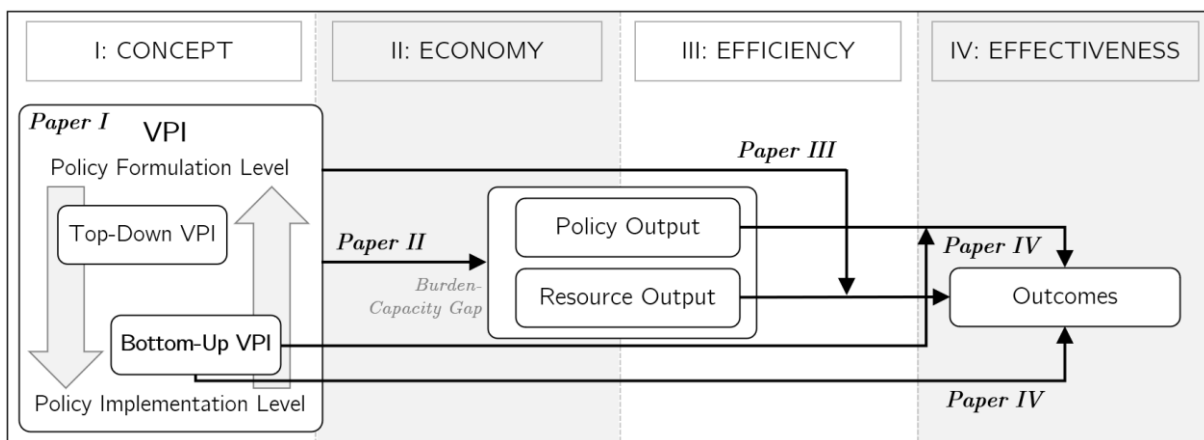
Based on this comprehensive dataset, the remainder of this dissertation (*Paper II, III, IV*) is concerned with the effects of VPI on policymaking performance. To test these assumed effects and present them in a holistic framework, this dissertation classifies VPI effects along the three E's – *economy* (*Paper II*), *efficiency* (*Paper III*), and *effectiveness* (*Paper IV*) –

---

<sup>5</sup> Visualizations and further overviews of the VPI data can be found in *Papers II, III* (social), and *IV* (environmental), as well as in their appendices.

constituting traditional components of governmental performance (Frederickson, 2010). *Figure 2* presents the relationship between the papers. *Paper II* analyses the effect of VPI on *economy*, with VPI influencing governments' ability and obligation of matching resources and policy output. *Paper III* scrutinizes *efficiency* effects of VPI on how well resources can be translated into outcomes. Finally, *Paper IV* concentrates on *effectiveness* analyzing bottom-up integration's direct and indirect effects on how policy outputs translate into outcomes. The following sections outline VPI's *economy*, *efficiency* and *effectiveness* effects and explain how the core papers contribute to their testing.

**Figure 2:** *Theoretical considerations and workshare between the papers.*



**Note:** Policy output refers to the set of adopted policies that constitute a sectoral policy portfolio, while resource output denotes the capacities and resources available for their implementation. Outcomes reflect the extent to which overall policy goals are achieved. Arrows that point at links between variables indicate an interaction with this relationship.

### 3.2 VPI and the economy, efficiency and effectiveness of democratic government

*Economy*, *efficiency*, and *effectiveness* represent core principles of good government and public administration (see, Wilson, 1887) and have a long tradition of being used to assess the performance of state action (e.g., Newland, 1976; George et al., 2019). *Effectiveness* is about achieving the intended goal, such as whether and to what extent a measure brings about the desired change in behavior among the policy's target group. *Economy* and *efficiency*, in contrast, are about *how* the effect is achieved presenting two sides of the same coin: *economy* focuses on resource management (with tasks as 'fixed' input), *efficiency* emphasizes task management (with resources as 'fixed' input) as the key to optimizing performance. As Frederickson notes: "Efficiency – to achieve as much public good as possible for the available dollars – is a compelling rationale for administrative practices. Economy – to accomplish a

public goal for the fewest possible tax dollars – is an equally beguiling objective” (Frederickson, 2010, p.60). In this dissertation project, the three E’s serve as a conceptual simplification to classify the different effects of VPI on policymaking performance and underline the potential of the proposed macro perspective. The following subsections further explain the effects of VPI and its dimensions in relation to the three E’s while adapting the latter to public policy and implementation research.

**VPI and its effect on economy.** ‘Economical’ policymaking seeks to realize (prescribed) policy goals in the ‘cheapest’ way with the fewest resources possible. VPI contributes to policymaking systems’ capability and likelihood to do so in several regards: top-down integration linking policy formulation activity to implementation requirements, first, contributes not only to the provision of resources but, second, also to their parsimonious employment. It makes envisioned policy projects partially contingent on available implementation capacities increasing political competition for limited resources (Dasgupta & Kapur, 2020). High levels of *accountability* that come with top-down integration make it more likely that resource wastage will be punished by the electorate (Hood, 2010) considering trade-offs between different policy programs (e.g., Bonoli et al., 2019). Third, bottom-up integration provides feedback on capacity needs and resource allocation (Ansell et al., 2017; Polman & Alons, 2021), supporting sustainable top-down resource management. In short, VPI increases the chances that prescribed policy goals are provided with just sufficient administrative capacities for their implementation.

Yet, VPI’s *economy* mechanisms also exert second-order effects on policy goals (Capano & Howlett, 2021). Treating policies as fixed inputs serves as conceptual simplification. Outcome responsibility and awareness of resource constraints encourage policy formulators to also craft policies more economically considering both their feasibility and resource demands. Misplaced incentives that lead to overly responsive or wasteful policy design are structurally counterbalanced by *accountability* mechanisms (Adam et al., 2019a; Gratton et al., 2021). Ultimately, a well-designed policy, supported by adequate implementation capacities and capable of addressing the problem, is more economical than a series of under-resourced, half-baked policies that fail to deliver and require continual, inefficient supplementation.

Against this background, *Paper II* conceptualizes *economy* as the sustainable alignment of policy tasks and administrative capacities. It tests VPI’s *economy* mechanism by examining sectoral burden-capacity gaps over time. Economical policymaking is achieved when capacity grows in parallel with task expansion (this is implementation burden), minimizing mismatches



between demands and resources. This interpretation of *economy* is reinforced by the paper's observation that public debt – reflecting fiscal irresponsibility – increases the gap, while economic prosperity and most prominently VPI help reduce it.

**VPI and its effect on efficiency.** The *efficiency* mechanism is the counterpart to the *economy* mechanism. While the value of *economy* aims to accomplish mandated tasks or objectives with the least possible resources, *efficiency* regards resources as predetermined. *Efficiency* focuses on using these resources to achieve the greatest possible effect in terms of policy objectives. This means concentrating resources on tasks expected to have the greatest impact and economizing them in relation to less effective tasks. VPI influences the ability and obligation to make the necessary evaluations and decisions to distinguish between different policy tasks.

Policy *efficiency* is most evident at the implementation level, where costs and effects converge. Implementers directly observe whether a policy delivers value or wastes resources – for example, when land acquisition for an environmental measure is blocked by conflict and bureaucracy, or when a new pension scheme requires complex and comprehensive administrative revisions but benefits only a small subset of the potential target population. In such cases, implementers recognize when costs outweigh benefits, making them a critical source of insight for efficient resource allocation and task prioritization (Cohen, 2021; Frisch Aviram et al., 2021). Bottom-up integration – via evaluations, consultations, or vocal implementer associations – feeds this feedback into policy design, counterbalancing political incentives during formulation and serving as critical informational precondition for efficient policymaking. Additionally, top-down integration reinforces this mechanism by holding policy formulators accountable for implementation costs and outcomes. Again, the holistic perspective on policymaking performance shows that optimizing policies for *efficiency* will have positive repercussions on the volume of resources spent, i.e., *economy*.

*Paper III* empirically investigates the *efficiency* effects of VPI by examining how it moderates the relationship between public expenditure and social policy outcomes. Focusing on the social policy sector – characterized by high, often uncontrollable costs linked to entitlements and risk, as well as complex allocation logics (Korpi & Palme, 1998) –, the study assesses whether VPI enhances the *efficiency* with which spending translates into welfare performance. *Paper III* shows that VPI's *efficiency* effects are most pronounced under resource constraints, where bottom-up feedback becomes more valuable and top-down mechanisms reinforce its use.

**VPI and its effect on effectiveness.** *Effectiveness* means that policies, after having been implemented, achieve or contribute to the solution of the problems for which they have been designed. Accordingly, *effectiveness* constitutes the core component of governmental performance also forming part of economical and efficient policymaking. While the first three papers of this dissertation project address aspects of *effectiveness* through theory (*Paper I*)<sup>6</sup>, explicit testing (*Paper II*)<sup>7</sup> or implied by measurement (*Paper III*)<sup>8</sup>, *Paper IV* explicitly focuses on the mechanisms of bottom-up integration highlighting the role of the quality of policy design and its implementation.

First, bottom-up integration<sup>9</sup> is argued to increase the likelihood of improved performance at the implementation level. Bottom-up integration activates behavioral ‘discretion’ effects which enhance goal attainment – motivation, role expectations, reduced policy alienation, and a sense of making a difference (Cohen, 2021; Thomann et al., 2018b; Tummers & Bekkers, 2014). Moreover, its evaluative, consultative, and coordinative procedures foster learning and coordination (Ansell et al., 2017), thereby enhancing expert and practical knowledge among street-level bureaucrats. Second, bottom-up integration is assumed to improve policy design quality. Implementation feedback enriches the information base of policy formulators, particularly regarding feasibility, policy interactions, and design coherence (Ansell et al., 2017; Howlett & Ramesh, 2016). Institutionalized exchange also fosters mutual understanding and helps reconcile tensions between control and discretion, an essential condition for *effectiveness*, especially in complex settings (Bovens & Zouridis, 2002; Ingram & Schneider, 1990; Willem & Lucidarme, 2014).

These two *effectiveness* mechanisms via which bottom-up integration is assumed to foster design quality and implementation performance are systematically tested in *Paper IV*. Distinguishing between enabled and disabled bottom-up integration, the paper demonstrates that the participation of the implementation level in policy formulation not only independently increases sectoral goal attainment through improved implementation but also contributes to effective policymaking via improved policy design. Especially incremental and moderate policy changes gain in effect size through the presence of integrative institutional structures. This latter finding highlights the *effectiveness* potentials of bottom-up integration in light of

---

<sup>6</sup> *Paper I* establishes the theoretical foundations of the VPI concept, focusing on *effectiveness* concerns regarding the long-term functioning of democratic policymaking.

<sup>7</sup> *Paper II*, in its appendix, tests the effect of the burden-capacity gap (as influenced by VPI) on environmental policy performance in reducing pollutants and substantiates the link through additional semi-structured interviews.

<sup>8</sup> *Paper III* demonstrates that VPI enhances welfare performance, as measured by the WPI.

<sup>9</sup> In *Paper IV*, bottom-up integration is conceptually refined and relabeled as street-level integration. Its essence and underlying data remain the same.

organizational and policy learning (Mom et al., 2007) and policy maintenance (Knill et al., 2024a; Mettler, 2016).

#### 4. Summaries of the four constituent papers

Having outlined relevant literature gaps and introduced the conceptual and theoretical foundations of VPI, along with the relationship among the constituent papers, I now briefly summarize the four conceptual and empirical studies. These summaries highlight the individual contributions of each article to the cumulative dissertation as well as their methodological proceedings. While all four papers build on the VPI concept, their differentiated focus – on different policy fields, dependent variables and model configurations – enables a comprehensive analysis of its effects on the various components of policymaking performance. Collectively, they demonstrate the theoretical, empirical, and methodological potential of VPI as a structural perspective on the relationship between policy design and implementation. *Table 1* offers an overview of the four constituent papers.

**Table 1:** *Overview of the four core papers of the dissertation.*

	<b>Title</b>	<b>Authorship</b>	<b>Publication</b>
<b>Paper I</b>	Sustaining Statehood: A Comparative Analysis of Vertical Policy-Process Integration in Denmark and Italy	Co-authored	Public Administration, 2021 5-Year Impact Factor 2024: 5.5
<b>Paper II</b>	Bureaucratic Quality and the Gap between Implementation Burden and Administrative Capacities	Co-authored	American Political Science Review, 2024 5-Year Impact Factor 2024: 8.5
<b>Paper III</b>	The pursuit of welfare efficiency: when institutional structures turn ‘less’ into ‘more’	Single-authored	Policy Sciences, 2024 5-Year Impact Factor 2024: 4.4
<b>Paper IV<sup>10</sup></b>	The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes	Single-authored	Regulation & Governance, 2025 5-Year Impact Factor 2024: 3.8

In addition, the contributions of the four core papers are complemented by four supplementary works, as listed in *Table 2*. The two book chapters (*Supplements I* and *III*) help situate the VPI concept within the broader literature, while the viewpoint article (*Supplement II*) offers an initial introduction to the VPI idea, albeit without empirical substantiation. *Supplement IV* presents detailed country reports that systematically track the evolution of VPI

<sup>10</sup> Honored with the JCPA Best Comparative Policy Paper Award (EGPA 2023)

characteristics in sectoral politico-administrative structures. This dataset forms the basis for both qualitative and quantitative VPI estimations. Abstracts or summaries of these supplementary contributions are included in the appendix of this framework paper.

**Table 2:** *Overview of the four supplementary contributions of the dissertation.*

	<b>Title</b>	<b>Authorship</b>	<b>Publication</b>
<b>Supplement I</b>	Policy Integration: Challenges for Public Administration	Co-authored	Chapter in Oxford Research Encyclopedia of Politics, 2020
<b>Supplement II</b>	Balancing Trade-Offs between Policy Responsiveness and Effectiveness: The Impact of Vertical Policy-Process Integration on Policy Accumulation	Co-authored	Public Administration Review, 2021 5-Year Impact Factor 2024: 7.3
<b>Supplement III</b>	Analytical Perspectives on Environmental Policy Integration	Single-authored	Chapter in Routledge Handbook of Environmental Policy, 2023
<b>Supplement IV</b>	Vertical Policy-Process Integration Country Reports 1976-2020	Co-authored, lead author	Dataset ready for publication, latest version 2023

#### **4.1 *Paper I: Sustaining statehood: A comparative analysis of vertical policy-process integration in Denmark and Italy (Knill, Steinbacher & Steinebach, 2021b)***

*Paper I* introduces the VPI concept and its first empirical presentation. *Paper I* demonstrates how VPI can be measured and how its two dimensions can be assessed based on concrete indicators that reflect real sectoral institutional structures. It employs two qualitative case studies – based on expert interviews, secondary literature, and official documents and reports – to illustrate how the proposed theoretical mechanisms apply in practice, and, importantly, how the interplay between policy formulation and implementation may explain and classify the phenomenon of policy accumulation endangering sustainable policymaking (Adam et al., 2019a).

The risk of democracies falling into a ‘democratic responsiveness trap’ (Adam et al., 2019a) serves as the starting point for *Paper I*. In response to societal demands and political incentives, governments tend to introduce more policies than they repeal, resulting in policy accumulation. This growth can overburden implementation bodies with increasingly complex tasks and interactions (see, also, Knill et al., 2024a). When policies fall short, unresolved problems trigger further policy responses, starting a vicious cycle. *Paper I* proposes VPI as an institutional response to balance responsiveness and effectiveness. More sustainable policymaking is linked to VPI’s two dimensions: bottom-up integration, which involves

implementers in policy design to improve effectiveness and reduce the need for constant responses; and top-down integration, which holds policymakers accountable for implementation, thereby increasing the cost of excessive responsiveness.

To empirically capture the two VPI dimensions and to compare their variations across countries and sectors, three indicators are used for each dimension. Each indicator can have different levels<sup>11</sup>. For the top-down dimension, *accountability* shows the oversight duties that the policy formulation level has over implementation (full legal and administrative oversight). The *resources* indicator measures the costs that the policy formulation level must cover (full policy and administrative costs). The *organization* indicator assesses how much the implementation is organizationally integrated within the policy formulation level (e.g., a central implementation agency within the national ministry structure). For the bottom-up dimension, *articulation* indicates the extent to which different implementation bodies relevant to a policy field are horizontally integrated (e.g., through a central and well-funded umbrella organization). The *consultation* indicator measures the institutionalization of consultative procedures (e.g., legal prescription prior to decision-making), while the final *evaluation* indicator does the same for evaluative mechanisms (e.g., mandatory ex ante and ex post impact assessments).

To illustrate the VPI concept and theoretical mechanisms in relation to policy accumulation, *Paper I* performs empirical case studies. With Italy and Denmark, it compares two countries that reflect relative extreme cases of either high or low policy accumulation across two different sectors, environmental and social policymaking. While Denmark is considered an environmental leader and comprehensive welfare state, it only shows very moderate policy growth for both areas. In Italy, in contrast, policy accumulation is very high for both policy fields.

The results of the qualitative analyses corroborate the suggested VPI mechanisms. In Denmark, especially bottom-up integration is fully realized across the two policy fields. Implementation bodies can effectively contribute to policy design, an observation that is reinforced by a pronounced commitment of policy formulators to improve policymaking based on evaluation and evidence. A slightly different picture evolves with regards to top-down integration. Here, Danish policy formulation is only moderately involved in social policy implementation relativizing the ‘cost brake’ to policy accumulation. In Italy, in contrast, bottom-up integration performs consistently low. For top-down integration, too, the link

---

<sup>11</sup> Values in parentheses represent the highest level.

between central responsibility and local implementation needs appears to be largely broken, especially when it is about social policymaking.

In consequence, *Paper I* provides first evidence that institutional structures linking policy formulation and implementation, as captured by VPI, help explain macro-level phenomena such as policy accumulation. Moreover, VPI seems to be able to also capture and meaningfully explain within-country differences. Finally, the case studies indicate that some politico-administrative structures are less static and more reformable than generally assumed. In doing so, *Paper I* paved the way for a more nuanced theorization and examination of the mechanisms and effects of VPI, as explored in the subsequent constituent papers of this thesis.

#### ***4.2 Paper II: Bureaucratic quality and the gap between implementation burden and administrative capacities (Fernández-i-Marín, Knill, Steinbacher & Steinebach, 2024a)***

*Paper II* highlights the significance of VPI as key bureaucratic quality for ensuring *economy* in the policymaking process. In this context, *economy* refers to how implementation demands are met by capacity supply. Without VPI, modern democracies are likely to succumb to imbalanced incentive structures. The production of policies is stimulated by public demands, interest group politics (Fernández-i-Marín et al., 2025), and electoral competition (Gratton et al., 2021), whereas the provision of administrative capacities for their implementation lacks strong independent drivers (Dasgupta & Kapur, 2020; Gratton et al., 2021). If these institutional imbalances that foster the overproduction of policies while undersupplying capacities are not addressed, suboptimal outcomes undermine the legitimacy and performance of democratic systems contradicting the principle of *economy*.

To bring visibility to these creeping yet plausible issues and address them, *Paper II* conceptualizes and first measures burden-capacity gaps in modern democracies as the ratio of policy accumulation and administrative capacity, presenting a systematic relative measure of implementation capacity. If additional policies are not accompanied by additional resources, a gap between implementation burden and administrative capacities arises. The greater the gap, the greater the implementation deficits, which ultimately may lead to democratic problems as governments lose their credibility and ‘hollow out’ (Adam et al., 2019a). Since there is no ‘natural’ benchmark to calibrate the burden-capacity gap, it is important to validate its accuracy and ability to capture real-world differences. Hence, the paper provides an additional qualitative substantiation of the measure and demonstrates that higher burden-capacity gaps lead to decreased policy *effectiveness*.

The new aggregate measure shows that burden-capacity gaps vary by country, policy area, and over time, revealing institutional imbalances between policy production and implementation. VPI, in turn, addresses these imbalances by structurally linking the two phases through reciprocal mechanisms: Top-down integration increases the cost of policy production by holding formulators accountable for outcomes, slowing burden growth and encouraging appropriate capacity allocation. Bottom-up integration improves policy design through feedback, reduces unnecessary policy production, and communicates capacity needs.

To test the effects of VPI, the article first introduces a comprehensive, quantitative panel data set on VPI and employs a Bayesian linear model to analyze year-to-year shifts in the burden-capacity gap. The model includes an autoregressive component of order one (AR1) to capture time dynamics. It integrates time-fixed effects (decade dummy), while employing clustered standard errors by country for robust estimation. Several robustness and plausibility probes, such as checking for policies' differential effects on implementation burden assuming different learning curves, ensure the validity of the proceedings.

The models' results indicate that VPI significantly reduces the burden-capacity gap, both in statistical and substantive terms. This is particularly noteworthy as VPI and its two dimensions are the only factors that consistently and significantly contribute to narrowing the burden-capacity gap in environmental and social policymaking subsystems. Apart from the intensity of electoral competition, which slightly reduces the gap, other relevant variables either change their effect direction across sectors, such as political constraints, GDP per capita, and EU membership, or exacerbate the gap, such as trade dependency, debt levels, and corporatism.

#### ***4.3 Paper III: The pursuit of welfare efficiency: When institutional structures turn 'less' into 'more' (Steinbacher, 2024)***

While *Paper II* analyzes the impact of vertically integrated institutional structures on the *economy* of aggregate policymaking processes (and has shown that the size of the burden-capacity gap matters for policies' chances to reach their goals), *Paper III* focuses on the impact of vertically integrated structures on the *efficiency* of policymaking. To this end, the article considers the public spending attached to public policies as independent 'input' variable (rather than growing policy stocks) that provokes different outcomes. As a case in point, it deals with the performance of different welfare states and their social policies, analyzing 21 OECD countries from 1990 to 2019.

The article's starting point is the still relevant puzzle why some countries achieve better social policy outcomes at the same or even at lower costs. Since the effectiveness of welfare

regimes, understood in the article as the extent to which welfare states successfully reduce poverty rates and tackle the risks of falling into poverty, is commonly linked to considerable public expenditure (Brady & Bostic, 2015; Gugushvili & Laenen, 2021), the pursuit of welfare *efficiency* poses an especially intricate challenge. It requires an optimal handling and balancing of costs and effectiveness. Previous explanations for variations typically focus on welfare state types, policy strategies (Brady & Bostic, 2015; Jacques & Noël, 2018), policy instrument mixes (Chindarkar et al., 2017; Levi-Faur, 2014), or integration efforts (Cejudo & Michel, 2017; Trein et al., 2021b). Yet, scholars pronounce these factors' dependence on legal, administrative, and political context conditions (e.g., Ascher, 2023). The lack of more nuanced comparative tools hampers efforts to address context-dependence and to explain cross-national and temporal differences in welfare outcomes (Ciccio & Javornik, 2019).

Addressing this gap, the paper argues that a systematic comparison of institutional structures offers a valuable lens for understanding how social policy systems process information and cope with complex challenges and interdependencies. Specifically, it contends that VPI shapes policymakers' capacity and commitment to pursue cost-effective solutions. VPI ensures (1) central-level responsibility for outcomes and fiscal sustainability (activating the 'cost lever' of *efficiency*, see, also, Bonoli et al., 2019; Jensen et al., 2014), and (2) the incorporation of implementation feedback into policy design, enhancing context sensitivity and activating the 'effectiveness lever' of *efficiency* (see, also, Damgaard & Torfing, 2010; Polman & Alons, 2021). These *efficiency* effects are furthermore expected to be stronger under constrained welfare budgets, where accountability and informed resource allocation become more critical. Interviews with social policy formulators and implementers in Italy and Ireland – two countries facing similar austerity conditions but differing significantly in institutional design and *efficiency* – illustrate these theoretical mechanisms.

To finally probe the *efficiency* effects of vertically integrated institutional structures, time-series cross-sectional models using fixed effects or first-differenced estimators were employed. To estimate how well (changes in) yearly public social spending per capita translate into (differences in) welfare performance, *Paper III* develops a new Welfare Performance Index that combines measures of poverty incidence and poverty risk, thereby reducing typical endogeneity and comparability issues in evaluating social policy effects (Greve, 2017). Besides typical socioeconomic control variables, the models control for welfare strategies and contribute innovative ways to account for differing social policy styles. Additional model replications, substituting social spending with replacement rates and the new index with the established Human Development Index, ensure the robustness and plausibility of the results.



The analyses show that higher levels of VPI may indeed turn ‘less’ into ‘more’. Under the condition of high VPI, smaller social ‘purses’ may be equally or even more effective than considerably bigger social ‘purses’ that are not backed by vertically integrated institutional structures. High levels of VPI are able to compensate for spending cuts which would otherwise have led to losses in welfare performance. While the level of social expenditure remains the primary driver behind the performance of welfare regimes, VPI influences its *efficiency* and appears to compensate for a lack or reduction of welfare transfers.

#### ***4.4 Paper IV: The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes (Steinbacher, 2025)***

Finally, *Paper IV* explores the potential of vertically integrated politico-administrative structures to enhance policymaking *effectiveness*. Building on the general VPI framework, it highlights the crucial role of the implementation level – and thus VPI’s bottom-up dimension – in achieving sectoral policy goals. Hence, *Paper IV* examines whether institutional structures that enable the integration of the implementation level into policy design processes – referred to as street-level integration – lead to improved sectoral policy outcomes.

Theoretically, *Paper IV* contributes to the literature on street-level bureaucracy (Lipsky, 1980; Maynard-Moody & Musheno, 2000) by providing a structural perspective to its micro-level insights. Existing research shows that SLBs influence policy outcomes directly, through their implementation performance – shaped by individual capacity, motivation, and discretion (Thomann et al., 2018b; Tummers & Bekkers, 2014) – and indirectly, by taking part in policy formulation (Cohen, 2021; Edri-Peer et al., 2023; Polman & Alons, 2021). *Paper IV* contends that these micro-level dynamics are shaped by street-level integration, i.e., the extent to which implementation is structurally integrated into policy design. Street-level integration can occur through three distinct channels, depending on whether the implementation level assumes a passive role (via *evaluation*), an active role (via *consultation*), or an autonomous role (via *articulation*) in contributing to policy formulation. These channels are argued to enhance policy *effectiveness* both directly, by improving implementation through better knowledge, coordination, and SLBs’ motivation (Matland, 1995; Peters, 2015; Thomann et al., 2018b; Tummers & Bekkers, 2014), and indirectly, by strengthening policy design through institutionalized feedback on implementation reality and learning (Mom et al., 2007; Polman & Alons, 2021; Shafran, 2022).

To test the assumed direct and indirect effects of institutional structures on policymaking *effectiveness*, the article analyzes national environmental outcomes (Jahn, 2016b) in relation to

sectoral street-level integration – measured as a binary variable based on VPI’s bottom-up dimension – and policy outputs (Adam et al., 2019a) across 21 OECD countries from 1980 to 2012. The analysis employs linear panel regression models with country and year fixed effects, and heteroscedasticity-robust standard errors clustered at the country level. Robustness checks using more lenient and stricter measures of the key independent variable, as well as interaction effects between the different channels of street-level integration confirm the validity of the findings.

*Paper IV*’s results widely corroborate the expectations. First, street-level integration directly increases environmental outcomes and appears to constitute an independent bureaucratic quality. Second, street-level integration indirectly enhances policy (re)design quality so that environmental policymaking activities more readily translate into outcomes. While these findings demonstrate the general potential of institutional design in channeling implementation feedback and guiding SLBs’ behavior to contribute to sectoral goal attainment (see, Thomann et al., 2018b, p. 599), the study highlights that the indirect effect of street-level integration especially applies to the *effectiveness* of existing policy stocks and incremental policy adaptations (Mettler, 2016). For massive policy reform events, by implication, the policy design effects of street-level integration decrease or even vanish altogether.

## 5. Discussion

This dissertation not only introduces the concept and theoretical foundations of VPI (*Paper I*), but also empirically captures the vertical integration of politico-administrative structures and demonstrates their impact on key dimensions of policymaking performance: *economy*, *efficiency*, and *effectiveness*. The findings reveal that VPI influences policy outcomes by determining how well administrative capacities are aligned with growing implementation demands (*economy* focus of *Paper II*), how well policy objectives can be met within resource constraints (*efficiency* focus of *Paper III*), and how successfully sectoral policy goals are achieved (*effectiveness* focus of *Paper IV*).

VPI’s two dimensions – top-down and bottom-up integration – activate first-order mechanisms (Capano & Howlett, 2021), such as implementation feedback or formulator accountability, which support better policy design and more effective implementation. These mechanisms can reinforce one another and produce broader second-order effects, including for example a deceleration of policy accumulation by reducing the need for ever-more policies and thereby mitigating the risk of a ‘democratic responsiveness trap’ (Adam et al., 2019a). The findings thus highlight that it is not only the individual stages of policy formulation and

implementation that determine overall quality of policymaking, but also the institutional mechanisms that link them. These linkages help to balance competing demands, enhance coordination, and address long-standing conceptual and empirical challenges in the policy literature (Adam et al., 2019a; Peters, 2018; Trein & Maggetti, 2020).

However, this dissertation also shows that the performance effects of VPI are not entirely unconditional. *Paper II* reveals variation in the size of the VPI effect on the burden-capacity gap across policy fields. *Paper III*, further indicates that the strength of the VPI effect depends on input conditions and the specific implementation requirements of policies. *Paper IV* finds that bottom-up integration – particularly through evaluative channels – is most beneficial for incremental policy change but shows little impact during periods of major reform. Although the VPI concept draws on insights into policymaking under more extraordinary conditions (e.g., Cohen, 2021; Lenz & Eckhard, 2023; Masood & Nisar, 2022), it remains unclear how its coordinative mechanisms perform in crisis contexts characterized by heightened complexity and urgency. Therefore, future research should investigate the conditions under which VPI is most effective – and whether, in some constellations, the costs of institutional integration and coordination might outweigh its benefits (Lundin, 2007; Scharpf, 1994). To do so, more detailed studies investigating the mechanisms of VPI are needed that go beyond the qualitative substantiations within this dissertation project.

While this dissertation successfully demonstrates the value of examining politico-administrative structures in policymaking, the findings are primarily based on two policy areas – environmental and social policy – and a sample of 21 OECD countries. The selection of these fields follows a most diverse case selection strategy (Gerring, 2008), capturing a regulatory and a redistributive domain that differ in maturity, implementation demands, and political dynamics. Nonetheless, the generalizability of VPI's effects beyond these sectors remains an open question (Wenzelburger & Jensen, 2022). An extension of the data is needed to assess how VPI performs in other policy domains. Moreover, it remains to be tested how well the VPI concept travels beyond the context of established Western democracies – so far, Japan is the only non-Western country in the dataset – and beyond classic policy sectors into more granular policymaking settings.

Another important avenue for future research lies in positioning VPI within the landscape of established institutional frameworks. While the quantitative papers control for the effects of institutional variables such as decision-making constraints, corporatism or regional authority, systematically comparing VPI's explanatory power would help clarify the extent to which VPI captures distinct structural features of policymaking and on what bases these patterns vary

across countries and between sectors. In this way, exploring VPI's institutional foundations could not only provide further insight into its ability to reflect within-country variation but also into its temporal dynamics and adaptive capacity.

Finally, future research should turn to another key dimension of policymaking performance that this dissertation could not address: legitimacy. Legitimacy is commonly conceptualized in terms of input, throughput, and output legitimacy, all of which VPI mechanisms may influence. Input legitimacy concerns citizen participation, interest aggregation, and government responsiveness; throughput legitimacy refers to the quality of governance processes, particularly regarding accountability, transparency, inclusiveness, and participatory procedures; and output legitimacy captures the effectiveness and public value of policy outcomes (see, e.g., Schmidt & Wood, 2019). These dimensions are closely tied to debates central to the VPI framework, such as the discretion-control dilemma (Ingram & Schneider, 1990; Linder & Peters, 1987; Maynard-Moody & Musheno, 2000). The politico-administrative structures captured by VPI may shape how legitimate policymaking is perceived by citizens and stakeholders, as well as how the different dimensions of legitimacy interact (Lieberherr & Thomann, 2020; Wallner, 2008). Understanding the legitimacy effects of VPI – and of politico-administrative structures more broadly – has become particularly important given growing political dissatisfaction, rising populism, and declining public trust in democratic institutions.

## 6. Conclusion

This dissertation begins with the concern that systemic deficiencies threaten the effectiveness and long-term sustainability of policymaking in modern democracies, and with it, the stability of democratic governance. Recent research has highlighted aggregate challenges such as the ‘democratic responsiveness trap’ (Adam et al., 2019a) and the growing complexity of governance processes (Head & Alford, 2015; Mettler, 2016). While prior studies emphasize the importance of both policy design and implementation as key – yet sometimes conflicting – determinants of policy success, a comprehensive framework that bridges these two stages to enable more sustainable policymaking remains largely absent.

To address this gap and respond to macro-level challenges, this dissertation examines the potential of sectoral politico-administrative structures to strengthen coordination between policy formulation and implementation. It develops the concept of Vertical Policy-Process Integration – including its theoretical foundations, operationalization, and measurement (*Paper 1*) – and demonstrates its largely significant and positive effects on three key dimensions of

policymaking performance: *economy* (*Paper II*), *efficiency* (*Paper III*), and *effectiveness* (*Paper IV*). These effects are shown over time and across 21 OECD countries, within the domains of social and environmental policy.

In doing so, the dissertation makes three core contributions that are literature-oriented, conceptual-theoretical and empirical-methodological in nature. First, the dissertation addresses key research gaps in existing scholarship mainly by providing a novel structural perspective to the literature. By focusing on institutional structures, this dissertation bridges insights from policy design and implementation research, while also advancing debates in policy coordination and integration. In light of the complex challenges facing modern governance, institutional structures play a crucial role in managing uncertainty and mediating between competing interests (Behnke & Hegele, 2024; Fagan, 2023), and thus merit greater scholarly attention. The VPI concept contributes to this effort. Focusing on institutional structures gives the chance to extend bottom-up perspectives beyond their typical micro-level focus and illuminates the vertical dimension of policy integration that has so far been largely overlooked (*Supplement I*, see Knill et al., 2020; *Supplement III*, see Steinbacher, 2023).

Second, by introducing and theorizing the VPI framework, this dissertation makes an original conceptual-theoretical contribution. VPI not only identifies and describes the institutional linkages between policy formulation and implementation, but also develops two theoretically grounded dimensions – top-down and bottom-up integration – that help explain their interaction and respective effects on policymaking performance. These dimensions have been used to theorize distinct effects on the quality of policy design and implementation, while VPI's aggregate impact has been shown to contribute to the macro-level sustainability of policymaking. Specifically, it addresses structural imbalances such as the burden-capacity gap and mitigates systemic risks like the 'democratic responsiveness trap' (Adam et al., 2019a). Moreover, by capturing mechanisms rooted in diverse scholarly traditions – from behavioral science to management and organizational theory – the VPI framework fosters interdisciplinary exchange and underscores the value of more holistic approaches to studying policymaking and implementation (Pülzl & Treib, 2007).

Finally, the dissertation provides an empirical-methodological contribution, offering new avenues for comparative research. It introduces the VPI measure along with a comprehensive dataset that systematically captures politico-administrative structures across sectors, countries, and over time (see also *Supplement IV*). Its application across the four core papers, supported by qualitative techniques and interview material, demonstrates its explanatory potential. The measure achieves a productive balance between conceptual abstraction and empirical

specificity, rendering it analytically robust and practically applicable. It facilitates the accumulation and synthesis of research findings across cases and contexts, helping to overcome the fragmentation of existing research. Moreover, it strengthens the basis for deriving policy recommendations that are grounded in cross-national and cross-sectoral insights. Lastly, by moving beyond a narrow micro-level focus, the measure also helps reveal broader macro-level dynamics – such as rising interdependencies and complexity within policy portfolios and institutional structures – that are critical to understanding contemporary governance challenges. In doing so, VPI inspires the development of additional macro-level measures such as the burden-capacity gap, an original relative indicator of implementation capacity, or the novel Welfare Performance Index in this dissertation. Hence, the VPI measure provides an important comparative impetus for advancing policy and implementation research (Tosun & Workman, 2023; Trein et al., 2021a).

The insights and contributions of this dissertation are not only of academic relevance but also carry important practical implications. The empirical findings make a strong case for institutional reforms aimed at improving the quality and sustainability of policymaking systems. In particular, strengthening bottom-up integration emerges as both the most effective and the most adaptable dimension across the dissertation's core studies and underlying data. In this context, information technologies and knowledge sharing play a critical role (Bovens & Zouridis, 2002; Olan et al., 2022): Recent advances in artificial intelligence and large language models offer promising opportunities to enhance feedback mechanisms and address persistent information bottlenecks between policymaking actors. These opportunities warrant further exploration in future research and practice.

## References

- Adam, C., Hurka, S., Knill, C., & Steinebach, Y. (2019a). *Policy accumulation and the democratic responsiveness trap*. Cambridge: Cambridge University Press.
- Adam, C., Hurka, S., Knill, C., Peters, B. G., & Steinebach, Y. (2019b). Introducing vertical policy coordination to comparative policy analysis: The missing link between policy production and implementation. *Journal of Comparative Policy Analysis: Research and Practice*, 21(5), 499-517.
- Alexander, E. (1995). *How organizations act together: Interorganizational coordination in theory and practice*. Luxembourg: Gordon and Breach.
- Altamimi, H., Liu, Q., & Jimenez, B. (2023). Not too much, not too little: Centralization, decentralization, and organizational change. *Journal of Public Administration Research and Theory*, 33(1), 170-185.
- Andrews, R., Boyne, G. A., Law, J., & Walker, R. M. (2009). Centralization, organizational strategy, and public service performance. *Journal of public administration research and theory*, 19(1), 57-80.
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of public administration research and theory*, 18(4), 543-571.
- Ansell, C., Sørensen, E., & Torfing, J. (2017). Improving policy implementation through collaborative policymaking. *Policy & Politics*, 45(3), 467-486.
- Ascher, W. (2023). Coping with the ambiguities of poverty-alleviation programs and policies: A policy sciences approach. *Policy Sciences*, 56(2), 325-354.
- Bardach, E. (1977). *The implementation game: What happens after a bill becomes a law*. Cambridge, MA: MIT Press.
- Baumgartner, F. R., & Jones, B. D. (1993). *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Behnke, N., & Hegele, Y. (2024). Achieving cross-sectoral policy integration in multilevel structures—Loosely coupled coordination of “energy transition” in the German “Bundesrat”. *Review of Policy Research*, 41(1), 160-183.
- Bemelmans-Videc, M.-L., Rist, R. C., & Vedung, E. (Eds.). (1998). *Carrots, sticks, and sermons: Policy instruments and their evaluation*. New Brunswick, NJ: Transaction Publishers.
- Benz, A. (2019). Conclusion: Governing under the condition of complexity. In N. Behnke, J. Broschek & J. Sonnicksen (Eds.), *Configurations, dynamics and mechanisms of multilevel governance* (pp. 387-409). Cham: Palgrave Macmillan.
- Bonoli, G., Natili, M., & Trein, P. (2019). A federalist’s dilemma: Trade-offs between social legitimacy and budget responsibility in multi-tiered welfare states. *Journal of European Social Policy*, 29(1), 56-69.
- Bovens, M., & Zouridis, S. (2002). From street-level to system-level bureaucracies: how information and communication technology is transforming administrative discretion and constitutional control. *Public administration review*, 62(2), 174-184.
- Brady, D., & Bostic, A. (2015). Paradoxes of social policy: Welfare transfers, relative poverty, and redistribution preferences. *American Sociological Review*, 80(2), 268-298.
- Brodkin, E. Z. (2011). Policy work: Street-level organizations under new managerialism. *Journal of public administration research and theory*, 21(suppl\_2), i253-i277.
- Buzogány, A., & Pülzl, H. (2024). Top-down and bottom-up implementation. In F. Sager, C. Mavrot & L. R. Keiser (Eds.), *Handbook of public policy implementation* (pp. 116-126). Cheltenham: Edward Elgar Publishing.
- Candel, J. J., & Biesbroek, R. (2016). Toward a processual understanding of policy integration. *Policy Sciences*, 49, 211-231.

- Capano, G., & Howlett, M. (2021). Causal logics and mechanisms in policy design: How and why adopting a mechanistic perspective can improve policy design. *Public policy and administration*, 36(2), 141-162.
- Cejudo, G. M., & Michel, C. L. (2017). Addressing fragmented government action: Coordination, coherence, and integration. *Policy Sciences*, 50, 745-767.
- Chindarkar, N., Howlett, M., & Ramesh, M. (2017). Conceptualizing effective social policy design: Design spaces and capacity challenges. *Public Administration and Development*, 37(1), 3–14.
- Christensen, T., & Lægreid, P. (2007). The whole-of-government approach to public sector reform. *Public administration review*, 67(6), 1059-1066.
- Ciccia, R., & Javornik, J. (2019). Methodological challenges for comparative welfare state research: Capturing intra-country variation in cross-national analyses. *Journal of Comparative Policy Analysis: Research and Practice*, 21(1), 1–8.
- Cohen, N. (2021). *Policy entrepreneurship at the street level: Understanding the effect of the individual*. Cambridge: Cambridge University Press.
- Compton, M. E., Luetjens, J., & Hart, P. T. (2019). Designing for policy success. *International Review of Public Policy*, 1(1: 2), 119-146.
- Crozier, M. (1964). *The bureaucratic phenomenon*. Chicago: The University of Chicago Press.
- Damgaard, B., & Torfing, J. (2010). Network governance of active employment policy: the Danish experience. *Journal of European Social Policy*, 20(3), 248-262.
- Dasgupta, A., & Kapur, D. (2020). The political economy of bureaucratic overload: Evidence from rural development officials in India. *American Political Science Review*, 114(4), 1316-1334.
- De Boer, N., & Raaphorst, N. (2023). Automation and discretion: explaining the effect of automation on how street-level bureaucrats enforce. *Public Management Review*, 25(1), 42-62.
- Edri-Peer, O., Silveira, M. C., Davidovitz, M., Frisch-Aviram, N., Shehade, J., Diab, H., Golan-Nadir, N. & Cohen, N. (2023). Policy entrepreneurship on the street-level: A systematic literature review. *European Policy Analysis*, 9(4), 356-378.
- Elmore, R. F. (1979). Backward mapping: Implementation research and policy decisions. *Political science quarterly*, 94(4), 601-616.
- Fagan, E. J. (2023). Political institutions, punctuated equilibrium theory, and policy disasters. *Policy Studies Journal*, 51(2), 243-263.
- Fernández-i-Marín, X., Hinterleitner, M., Knill, C., & Steinebach, Y. (2025). Testing theories of policy growth: public demands, interest group politics, electoral competition, and institutional fragmentation. *Journal of European Public Policy*, 32(3), 784-809.
- Fernández-i-Marín, X., Knill, C., & Steinebach, Y. (2021). Studying policy design quality in comparative perspective. *American Political Science Review*, 115(3), 931-947.
- Fernández-i-Marín, X., Knill, C., Steinbacher, C., & Steinebach, Y. (2024a). Bureaucratic quality and the gap between implementation burden and administrative capacities. *American Political Science Review*, 118(3), 1240-1260.
- Fernández-i-Marín, X., Knill, C., Steinbacher, C., & Zink, D. (2024b). Tackling blind spots in Europeanisation research: the impact of EU legislation on national policy portfolios. *Journal of European Public Policy*, 1-29.
- Fleming, J., & Rhodes, R. (2018). Can experience be evidence? Craft knowledge and evidence-based policing. *Policy & politics*, 46(1), 3-26.
- Frederickson, H. G. (2010). *Social equity and public administration: Origins, developments, and applications*. New York: M.E. Sharpe, Inc.
- Frisch Aviram, N., Beerli, I., & Cohen, N. (2021). From the bottom-up: Probing the gap between street-level bureaucrats' intentions of engaging in policy entrepreneurship and their behavior. *The American Review of Public Administration*, 51(8), 636-649.



- George, B., Walker, R. M., & Monster, J. (2019). Does strategic planning improve organizational performance? A meta-analysis. *Public administration review*, 79(6), 810-819.
- Gerring, J. (2008). Case selection for case-study analysis: Qualitative and quantitative techniques. In J. M. Box-Steffensmeier, H. E. Brady & D. Collier (Eds.), *The Oxford handbook of political methodology* (pp. 645–684). Oxford: Oxford University Press.
- Goertz, G. (2006). *Social Science Concepts: A User's Guide*. Princeton: Princeton University Press.
- Gofen, A. (2014). Mind the gap: Dimensions and influence of street-level divergence. *Journal of public administration research and theory*, 24(2), 473-493.
- Grabosky, P. N. (1995). Counterproductive regulation. *International journal of the Sociology of Law*, 23(4), 347-369.
- Gratton, G., Guiso, L., Michelacci, C., & Morelli, M. (2021). From Weber to Kafka: Political instability and the overproduction of laws. *American Economic Review*, 111(9), 2964-3003.
- Greve, B. (2017). How to measure social progress? *Social Policy & Administration*, 51(7), 1002–1022.
- Gugushvili, D., & Laenen, T. (2021). Two decades after Korpi and Palme's 'paradox of redistribution': What have we learned so far and where do we take it from here? *Journal of International and Comparative Social Policy*, 37(2), 112–127.
- Gunningham, N., & Sinclair, D. (1999). Regulatory pluralism: Designing policy mixes for environmental protection. *Law & Policy*, 21(1), 49-76.
- Haag, M., Hurka, S., & Kaplaner, C. (2025). Policy complexity and implementation performance in the European Union. *Regulation & Governance*, 19(3), 656-674.
- Hargrove, E. (1975). *The Missing Link: The Study of the Implementation of Social Policy*. Washington, DC: The Urban Institute.
- Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration & society*, 47(6), 711-739.
- Hinterleitner, M. (2020). *Policy controversies and political blame games*. Cambridge: Cambridge University Press.
- Hjern, B., & Porter, D. O. (1981). Implementation structures: A new unit of administrative analysis. *Organization studies*, 2(3), 211-227.
- Hood, C. (1991). A public management for all seasons? *Public administration*, 69(1), 3-19.
- Hood, C. (2010). *The blame game: Spin, Bureaucracy, and Self-Preservation in Government*. Princeton, NJ: Princeton University Press.
- Hood, C., & Lodge, M. (2006). *The politics of public service bargains: Reward, competency, loyalty – and blame*. Oxford: Oxford University Press.
- Hou, Y., & Brewer, G. A. (2010). Substitution and supplementation between co-functional policy instruments: Evidence from state budget stabilization practices. *Public Administration Review*, 70(6), 914-924.
- Howlett, M. (2019). Procedural policy tools and the temporal dimensions of policy design. Resilience, robustness and the sequencing of policy mixes. *International Review of Public Policy*, 1(1: 1), 27-45.
- Howlett, M., & del Río, P. (2015). The parameters of policy portfolios: Verticality and horizontality in design spaces and their consequences for policy mix formulation. *Environment and Planning C: Government and Policy*, 33(5), 1233-1245.
- Howlett, M., & Ramesh, M. (2016). Achilles' heels of governance: critical capacity deficits and their role in governance failures. *Regulation & Governance*, 10(4), 301-313.
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in 'new governance arrangements'. *Policy and society*, 26(4), 1-18.
- Howlett, M., & Rayner, J. (2013). Patching vs packaging in policy formulation: Assessing policy portfolio design. *Politics and governance*, 1(2), 170-182.

- Hupe, P. L., & Hill, M. J. (2016). 'And the rest is implementation.' Comparing approaches to what happens in policy processes beyond Great Expectations. *Public Policy and Administration*, 31(2), 103-121.
- Hupe, P., & Buffat, A. (2014). A public service gap: Capturing contexts in a comparative approach of street-level bureaucracy. *Public management review*, 16(4), 548-569.
- Ingram, H., & Schneider, A. (1990). Improving implementation through framing smarter statutes. *Journal of public policy*, 10(1), 67-88.
- Jacques, O., & Noël, A. (2018). The case for welfare state universalism, or the lasting relevance of the paradox of redistribution. *Journal of European Social Policy*, 28(1), 70-85.
- Jahn, D. (2016a). Changing of the guard: Trends in corporatist arrangements in 42 highly industrialized societies from 1960 to 2010. *Socio-Economic Review*, 14(1), 47-71.
- Jahn, D. (2016b). *The politics of environmental performance*. Cambridge: Cambridge University Press.
- Jensen, C., Knill, C., Schulze, K., & Tosun, J. (2014). Giving less by doing more? Dynamics of social policy expansion and dismantling in 18 OECD countries. *Journal of European Public Policy*, 21(4), 528-548.
- Kaplaner, C., Knill, C., & Steinebach, Y. (2025). Policy integration in the European Union: Mapping patterns of intersectoral policy-making over time and across policy sectors. *Journal of European Public Policy*, 32(1), 26-51.
- Kavanagh, D., & Richards, D. (2001). Departmentalism and joined-up government. *Parliamentary Affairs*, 54(1), 1-18.
- Kiewiet, D. R., & McCubbins, M. D. (1991). *The logic of delegation*. Chicago: University of Chicago Press.
- Klijn, E. H., & Koppenjan, J. F. (2000). Public management and policy networks: foundations of a network approach to governance. *Public Management and International Journal of Research and Theory*, 2(2), 135-158.
- Knill, C., & Lenschow, A. (1998). Coping with Europe: the impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy*, 5(4), 595-614.
- Knill, C., & Tosun, J. (2020). *Public policy: A new introduction*. London: Bloomsbury Publishing.
- Knill, C., Steinbacher, C., & Steinebach, Y. (2020). Policy integration: Challenges for public administration. In B. G. Peters & I. Thynne (Eds.), *Encyclopedia of public administration*. Oxford: Oxford University Press.
- Knill, C., Steinbacher, C., Steinebach, Y., Severin, C., Zink, D., Aschenbrenner, C., & Lenz, A. (2023). Vertical Policy-Process Integration: Country Reports 1976 – 2020. *Unpublished*.
- Knill, C., Steinbacher, C., & Steinebach, Y. (2021a). Balancing trade-offs between policy responsiveness and effectiveness: the impact of vertical policy-process integration on policy accumulation. *Public Administration Review*, 81(1), 157-160.
- Knill, C., Steinbacher, C., & Steinebach, Y. (2021b). Sustaining statehood: A comparative analysis of vertical policy-process integration in Denmark and Italy. *Public Administration*, 99(4), 758-774.
- Knill, C., Steinbacher, C., Steinebach, Y., & Trein, P. (2024a). Policy growth and maintenance in comparative perspective. *Regulation & Governance*. <https://doi.org/10.1111/rego.12611>
- Knill, C., Steinebach, Y., & Zink, D. (2024b). How policy growth affects policy implementation: bureaucratic overload and policy triage. *Journal of European Public Policy*, 31(2), 324-351.
- Korpi, W., & Palme, J. (1998). The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the Western countries. *American sociological review*, 661-687.
- Kuehnhanss, C. R. (2019). The challenges of behavioural insights for effective policy design. *Policy and Society*, 38(1), 14-40.

- Lægreid, P., Randma-Liiv, T., Rykkja, L. H., & Sarapuu, K. (2016). Coordination challenges and administrative reforms. In G. Hammerschmid, S. Van de Walle, R. Andrews & P. Bezès (Eds.), *Public administration reforms in Europe: The view from the top* (pp. 244–258). Cheltenham: Edward Elgar Publishing.
- Lenz, A., & Eckhard, S. (2023). Conceptualizing and explaining flexibility in administrative crisis management: A cross-district analysis in Germany. *Journal of Public Administration Research and Theory*, 33(3), 485-497.
- Levi-Faur, D. (2014). The welfare state: A regulatory perspective. *Public Administration*, 92(3), 599–614.
- Lieberherr, E., & Thomann, E. (2020). Linking throughput and output legitimacy in Swiss forest policy implementation. *Policy Sciences*, 53(3), 495-533.
- Lijphart, A. (1999). *Patterns of democracy: Government forms and performance in thirty-six countries*. New Haven, CT: Yale University Press.
- Lindblom, C. E. (1965). *The intelligence of democracy: Decision making through mutual adjustment*. New York: Free Press.
- Linder, S. H., & Peters, B. G. (1987). A design perspective on policy implementation: The fallacies of misplaced prescription. *Review of Policy Research*, 6(3), 459-475.
- Linder, S. H., & Peters, B. G. (1990). An institutional approach to the theory of policy-making: The role of guidance mechanisms in policy formulation. *Journal of Theoretical Politics*, 2(1), 59-83.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public service*. New York: Russell Sage Foundation.
- Lubell, M., Robins, G., & Wang, P. (2014). Network structure and institutional complexity in an ecology of water management games. *Ecology and society*, 19(4).
- Lundin, M. (2007). When does cooperation improve public policy implementation?. *Policy Studies Journal*, 35(4), 629-652.
- Masood, A., & Nisar, M. A. (2022). Repairing the state: Policy repair in the frontline bureaucracy. *Public Administration Review*, 82(2), 256-268.
- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of public administration research and theory*, 5(2), 145-174.
- May, P. J., & Winter, S. C. (2009). Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of public administration research and theory*, 19(3), 453-476.
- May, P. J., & Wood, R. S. (2003). At the regulatory front lines: Inspectors' enforcement styles and regulatory compliance. *Journal of public administration research and theory*, 13(2), 117-139.
- Maynard-Moody, S., & Musheno, M. (2000). State agent or citizen agent: Two narratives of discretion. *Journal of public administration research and theory*, 10(2), 329-358.
- Mayntz, R. (1983). The conditions of effective public policy: A new challenge for policy analysis. *Policy & Politics*, 11(2), 123-143.
- Mettler, S. (2016). The polycscape and the challenges of contemporary politics to policy maintenance. *Perspectives on Politics*, 14(2), 369-390.
- Mom, T. J., Van Den Bosch, F. A., & Volberda, H. W. (2007). Investigating managers' exploration and exploitation activities: The influence of top-down, bottom-up, and horizontal knowledge inflows. *Journal of Management Studies*, 44(6), 910–931.
- Newland, C. A. (1976). Public personnel administration: Legalistic reforms vs. effectiveness, efficiency, and economy. *Public Administration Review*, 36(5), 529-537.
- O'dwyer, C., & Ziblatt, D. (2006). Does decentralisation make government more efficient and effective?. *Commonwealth & Comparative Politics*, 44(3), 326-343.

- Olan, F., Arakpogun, E. O., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, 145, 605-615.
- Ostrom, E. (2011). Background on the institutional analysis and development framework. *Policy studies journal*, 39(1), 7-27.
- O'Toole Jr, L. J. (1997). Treating networks seriously: Practical and research-based agendas in public administration. *Public administration review*, 45-52.
- Painter, M., & Peters, B. G. (2010). *Tradition and public administration*. London: Palgrave Macmillan UK.
- Peters, B.G. (2015). *Pursuing horizontal management: The politics of public sector coordination*. Lawrence: University Press of Kansas.
- Peters, B. G. (2018). The challenge of policy coordination. *Policy design and practice*, 1(1), 1-11.
- Peters, B. G., & Fontaine, G. (2022). Introduction to the Research Handbook of Policy Design: operationalizing the policy design framework. In B. G. Peters & G. Fontaine (Eds.), *Research handbook of policy design* (pp. 1-38). Cheltenham: Edward Elgar Publishing.
- Polman, D., & Alons, G. (2021). Reap what you sow: implementing agencies as strategic actors in policy feedback dynamics. *Policy Sciences*, 54(4), 823-848.
- Porter, D. O., & Olsen, E. A. (1976). Some critical issues in government centralization and decentralization. *Public Administration Review*, 72-84.
- Pressman, J., & Wildavsky, A. (1973). *Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes*. Berkeley, CA: University of California Press.
- Pülzl, H., & Treib, O. (2007). Implementing public policy. In F. Fischer, G.J. Miller & M. S. Sidney (Eds.), *Handbook of public policy analysis: Theory, politics, and methods* (pp. 89–107). Boca Raton: CRC Press.
- Raudla, R., Douglas, J. W., Randma-Liiv, T., & Savi, R. (2015). The impact of fiscal crisis on decision-making processes in European governments: Dynamics of a centralization cascade. *Public Administration Review*, 75(6), 842-852.
- Rivera, J. D., & Knox, C. C. (2023). Bureaucratic discretion, social equity, and the administrative legitimacy dilemma: Complications of New Public Service. *Public Administration Review*, 83(1), 65-77.
- Rogge, K. S., & Reichardt, K. (2016). Policy mixes for sustainability transitions: An extended concept and framework for analysis. *Research policy*, 45(8), 1620-1635.
- Sabatier, P., & Mazmanian, D. (1980). The implementation of public policy: A framework of analysis. *Policy studies journal*, 8(4), 538-560.
- Sager, F., & Gofen, A. (2022). The polity of implementation: Organizational and institutional arrangements in policy implementation. *Governance*, 35(2), 347-364.
- Sager, F., Thomann, E., & Hupe, P. (2021). Accountability of public servants at the street level. In H. Sullivan & H. Dickinson (Eds.), *The Palgrave handbook of the public servant* (pp. 801–818). Cham: Springer International Publishing.
- Scharpf, F. W. (1994). Games real actors could play: Positive and negative coordination in embedded negotiations. *Journal of theoretical politics*, 6(1), 27-53.
- Schmidt, V., & Wood, M. (2019). Conceptualizing throughput legitimacy: Procedural mechanisms of accountability, transparency, inclusiveness and openness in EU governance. *Public Administration*, 97(4), 727-740.
- Schneider, A., & Ingram, H. (1997). *Policy Design for Democracy*. Lawrence, CA: University Press of Kansas.

- Schneider, A., & Ingram, H. (2005). Policy design. In J. Rabin (Ed.), *Encyclopedia of Public Administration and Public Policy* (pp. 204-208). Boca Raton, FL: Taylor & Francis Group.
- Shafran, J. S. (2022). More than agents: Federal bureaucrats as information suppliers in policymaking. *Policy Studies Journal*, 50(4), 921–943.
- Simon, H. A. (1997). *Administrative Behavior* (4th ed.). New York: Free Press.
- Steinbacher, C. (2023). Analytical perspectives on environmental policy integration. In H. Jörgens, C. Knill & Y. Steinebach (Eds.), *Routledge handbook of environmental policy* (pp. 122-135). Abingdon: Routledge.
- Steinbacher, C. (2024). The pursuit of welfare efficiency: when institutional structures turn ‘less’ into ‘more’. *Policy Sciences*, 57(2), 353-378.
- Steinbacher, C. (2025). The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes. *Regulation & Governance*, 19(2), 540-557.
- Steinebach, Y. (2019). Water quality and the effectiveness of European Union policies. *Water*, 11(11), 2244.
- Steinebach, Y. (2023). Administrative traditions and the effectiveness of regulation. *Journal of European Public Policy*, 30(6), 1163-1182.
- Stoker, G., & John, P. (2009). Design experiments: Engaging policy makers in the search for evidence about what works. *Political Studies*, 57(2), 356-373.
- Thomann, E. (2015). Is output performance all about the resources? A fuzzy-set qualitative comparative analysis of street-level bureaucrats in Switzerland. *Public Administration*, 93(1), 177–194.
- Thomann, E., Hupe, P., & Sager, F. (2018a). Serving many masters: Public accountability in private policy implementation. *Governance*, 31(2), 299-319.
- Thomann, E., van Engen, N., & Tummers, L. (2018b). The necessity of discretion: A behavioral evaluation of bottom-up implementation theory. *Journal of Public Administration Research and Theory*, 28(4), 583–601.
- Ting, M. M. (2003). A strategic theory of bureaucratic redundancy. *American Journal of Political Science*, 47(2), 274-292.
- Tosun, J., & Workman, S. (2023). Struggle and triumph in fusing policy process and comparative research. In C. M. Weible (Ed.), *Theories of the policy process* (5th ed., pp. 322–354). New York: Routledge.
- Trein, P., & Maggetti, M. (2020). Patterns of policy integration and administrative coordination reforms: A comparative empirical analysis. *Public Administration Review*, 80(2), 198-208.
- Trein, P., Biesbroek, R., Bolognesi, T., Cejudo, G. M., Duffy, R., Hustedt, T., & Meyer, I. (2021a). Policy coordination and integration: A research agenda. *Public Administration Review*, 81(5), 973-977.
- Trein, P., Fischer, M., Maggetti, M., & Sarti, F. (2023). Empirical research on policy integration: A review and new directions. *Policy Sciences*, 56(1), 29-48.
- Trein, P., Maggetti, M., & Meyer, I. (2021b). Necessary conditions for policy integration and administrative coordination reforms: An exploratory analysis. *Journal of European Public Policy*, 28(9), 1410–1431.
- Trein, P., Meyer, I., & Maggetti, M. (2019). The integration and coordination of public policies: A systematic comparative review. *Journal of Comparative Policy Analysis: Research and Practice*, 21(4), 332-349.
- Tsebelis, G. (1999). Veto players and law production in parliamentary democracies: An empirical analysis. *American political science review*, 93(3), 591-608.
- Tummers, L. (2011). Explaining the willingness of public professionals to implement new policies: A policy alienation framework. *International Review of Administrative Sciences*, 77(3), 555-581.

- Tummers, L., & Bekkers, V. (2014). Policy implementation, street-level bureaucracy, and the importance of discretion. *Public Management Review*, 16(4), 527-547.
- Underdal, A. (1980). Integrated marine policy: what? why? how?. *Marine policy*, 4(3), 159-169.
- Wallner, J. (2008). Legitimacy and public policy: Seeing beyond effectiveness, efficiency, and performance. *Policy Studies Journal*, 36(3), 421-443.
- Wenzelburger, G., & Jensen, C. (2022). Comparative public policy analysis: Shortcomings, pitfalls, and avenues for the future. *Politische Vierteljahresschrift*, 63(2), 295-313.
- Willem, A., & Lucidarme, S. (2014). Pitfalls and challenges for trust and effectiveness in collaborative networks. *Public Management Review*, 16(5), 733-760.
- Wilson, W. (1887). The study of administration. *Political Science Quarterly*, 2(2), 197-222.
- Winter, S. C., Mikkelsen, M. F., & Skov, P. R. (2022). Individual agency in street-level bureaucrats' implementation of policy reforms: The role of their policy evaluation and self-efficacy. *Journal of Public Administration Research and Theory*, 32(4), 781-794.

## Appendix to Framework Paper

## Supplement I

<i>Title:</i>	Policy Integration: Challenges for Public Administration (Chapter)
<i>Year:</i>	2020
<i>Authorship:</i>	Co-authored (alphabetical order) with Christoph Knill and Yves Steinebach
<i>Publication status:</i>	Published (DOI: 10.1093/acrefore/9780190228637.013.1413)
<i>Book:</i>	Oxford Research Encyclopedia of Politics

**Summary (as published):** Modern policymaking becomes an ever more complex and fragmented endeavor: Across countries, the pile of public policies is continuously growing. The risk of unintended interactions and ineffective policies increases. New and cross-cutting challenges strain the organizational setup of policymaking systems. Against this background, policy integration is assumed to present an antidote by improving the coherence, consistency, and coordination of public policies as well as of the processes that produce these policy outputs.

Although various research attempts focus on policy integration, common concepts and theories are largely missing. The different facets of the phenomenon have only been covered disproportionally and empirical analyses remained fragmented. On these grounds, a more comprehensive and systematic view on policy integration is needed: To cope with complexity, governments are required to streamline and reconcile their products of policymaking (i.e., every single policy). Here, policymakers need to check for interactions with policies already adopted on the same level as well as with policies put in place by other levels of government (e.g., subnational). Moreover, policy integration also implies the creation and development of policymaking processes that systematically link political and administrative actors across various policy arenas, sectors, and levels. By elaborating on these process and product components of policy integration as well as on their horizontal and vertical manifestations, the different perspectives on policy integration are synthesized and embedded into a systematic framework.

On the basis of this scheme of identifying four policy integration categories, it becomes clear that there are still loopholes in the literature. As these blind spots culminate in the absence of almost any concept on vertical policy process integration, a way of capturing the phenomenon is introduced through arguing that vertical policy process integration depends on the structural linkages between the policy formulation at the “top” and the implementation level at the “bottom.” More precisely, it is necessary to take account of the extent to which the policy producers have to carry the burden of implementation, and the degree to which the implementers can influence the policy design over the course of formulation.

The proposed framework on policy integration is intended to serve as a guide for future research and to help to identify those aspects of policy integration in which further research efforts are required. Only in this way can policy integration as a theoretical and empirical concept be applied systematically across policy contexts—covering different countries, levels, and sectors— and serve as a stimulus for better policymaking.

**Supplement II**

<i>Title:</i>	Balancing Trade-Offs between Policy Responsiveness and Effectiveness: The Impact of Vertical Policy-Process Integration on Policy Accumulation ( <i>Viewpoint Article</i> )
<i>Year:</i>	2021
<i>Authorship:</i>	Co-authored (alphabetical order) with Christoph Knill and Yves Steinebach
<i>Publication status:</i>	Published (DOI: 10.1111/puar.13274)
<i>Journal (impact factor):</i>	Public Administration Review (2021: 6.39)

**Abstract (as published):** In modern democracies, policy stocks pile up over time. In many ways policy accumulation reflects societal modernization and progress. However, if policy accumulation is not matched by corresponding expansions in administrative capacities necessary for policy implementation, a negative trade-off between responsiveness and policy effectiveness evolves. We argue that aligning policy formulation and implementation activities through vertical policy-process integration (VPI) may curb policy accumulation towards a more sustainable level. Our conceptualization of VPI builds upon the distinction of two dimensions: (1) bottom-up integration affecting policy design and improving policies' effectiveness and (2) top-down integration concerning the allocation of implementation costs and, hence, constraining responsiveness incentives. It is the central aim of this viewpoint to raise awareness about the importance of VPI as a potential way out of the responsiveness trap that threatens modern democracies.

**Supplement III**

<i>Title:</i>	Analytical Perspectives on Environmental Policy Integration ( <i>Chapter</i> )
<i>Year:</i>	2023
<i>Authorship:</i>	Single-authored
<i>Publication status:</i>	Published (DOI: 10.4324/9781003043843-11)
<i>Book:</i>	Routledge Handbook of Environmental Policy

**Chapter Summary (as published):**

- Research on EPI suffers from a lack of systematization. Therefore, this chapter has offered four novel analytical perspectives on EPI, distinguishing between (1) horizontal and vertical EPI and (2) policy substance versus policy process orientations.
- By following a problem-led approach and paying attention to policy design and implementation stages, the proposed systematization facilitates future theory building and testing.
- It has been argued that the integration of policy-making processes (co-)determines and influences 'substantial' EPI: processes condition how integrated environmental policies can be effectively formulated and implemented.
- Horizontal EPI strives to remedy the cross-sectoral challenge of environmental policy-making, while vertical EPI seeks to manage complexity and to reduce the present EPI implementation gap.
- The reader has been provided with a wide range of empirical examples and graphic illustrations to clarify the argument.



## Supplement IV

<i>Title:</i>	Vertical Policy-Process Integration: Country Reports 1976-2020 (Data set)
<i>Year:</i>	2023 (last version)
<i>Authorship:</i>	Co-authored (2 <sup>nd</sup> author) with Christoph Knill (first author), Yves Steinebach, Christian Severin, Dionys Zink, Christian Aschenbrenner and Alexa Lenz
<i>Publication status:</i>	Ready for publication

**Summary:** The country reports present the manifestations and evolution of Vertical Policy-Process Integration in 23 OECD countries for two policy fields and for more than four decades. The sample covers VPI in environmental and social policymaking in Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States from 1976 to 2020. The data is gathered through a combination of secondary literature, official documents, and expert interviews, with rigorous coding processes supervised for consistency. Each country report follows a standardized structure, starting with an overview of VPI's progression and status quo in 2020, followed by introductions to the political and administrative context. Subsequently, the individual country reports explore specific indicators of top-down and bottom-up integration, considering national integrative arrangements and capacities.

The country reports provide a unique collection of comparative information on the reality and practice of political-administrative systems in the context of VPI. First, the country reports show that there is considerable variation between countries: some characteristics and developments are in line with expectations and follow the structure of the general polity or administrative tradition; others are at odds with general expectations and counterintuitive to the country's polity. Second, there is considerable variation with respect to time dynamics in VPI: for some countries, VPI shows a high level of stability and continuity, whereas for other countries manifestations are quite volatile and frequently altered. Finally, policy fields seem to possess their own logic with regards to suitable governance arrangements: sometimes, the structural capacities for coordinating processes of policy formulation and implementation show a greater variance within the same country across policy fields than within the same policy field across countries. Moreover, in some countries and over time, manifestations of VPI even move into opposite directions for different policy fields.

In essence, the country reports offer a comprehensive view of how VPI interacts with political and administrative factors in diverse countries and policy sectors. The systematic compilation of information on VPI and on the reality and practice of politico-administrative arrangements and their evolution within 23 OECD countries over 45 years may serve as a new impetus to comparative research and may prove useful to scholars and practitioners in the field of public administration, public management, and public policy.



Paper I:

**Sustaining statehood: A comparative analysis of  
vertical policy-process integration in Denmark and Italy**

*Christoph Knill*

*Christina Steinbacher*

*Yves Steinebach*

*Paper I of this dissertation has been published as:*

Knill, C., Steinbacher, C., & Steinebach, Y. (2021). Sustaining statehood: A comparative analysis of vertical policy-process integration in Denmark and Italy. *Public Administration*, 99(4), 758-774.

DOI: 10.1111/padm.12705

**Abstract**

In response to societal demands, democratic governments constantly adopt new policies. As existing policies are rarely abandoned, policies accumulate over time. Policy accumulation bears the challenge of overburdening implementation bodies, hence undermining policy effectiveness. Any escape from this situation requires democratic governments to strike a balance between policy responsiveness and effectiveness. We posit that the extent to which countries are able to achieve this depends on the vertical integration of processes of policy formulation and implementation. We provide a novel conceptualization of vertical policy-process integration (VPI) that is based on two channels. While bottom-up integration captures the extent to which policy implementers can communicate reasons for potential policy failure from the bottom up, top-down integration indicates the degree to which the policy formulation level has to cover the implementation costs of the policies they produce. We illustrate our argument by an empirical analysis of VPI patterns in Denmark and Italy.

*The full text of the paper and supporting information are available here:*

<https://doi.org/10.1111/padm.12705>



Paper II:

## **Bureaucratic Quality and the Gap between Implementation Burden and Administrative Capacities**

*Xavier Fernández-i-Marín*

*Christoph Knill*

*Christina Steinbacher*

*Yves Steinebach*

*Paper II of this dissertation has been published as:*

Fernández-i-Marín, X., Knill, C., Steinbacher, C., & Steinebach, Y. (2024). Bureaucratic quality and the gap between implementation burden and administrative capacities. *American Political Science Review*, 118(3), 1240-1260.

DOI: 10.1017/S0003055423001090

### **Abstract**

Democratic governments produce more policies than they can effectively implement. Yet, this gap between the number of policies requiring implementation and the administrative capacities available to do so is not the same in all democracies but varies across countries and sectors. We argue that this variation depends on the coupling of the sectoral bureaucracies in charge of policy formulation and those in charge of policy implementation. We consider these patterns of vertical policy-process integration an important feature of bureaucratic quality. The more the policymaking level is involved in policy implementation (top-down integration) and the easier the policy-implementing level finds it to feed its concerns into policymaking (bottom-up integration), the smaller the so-called “burden-capacity gap.” We demonstrate this effect through an empirical analysis in 21 OECD countries over a period of more than 40 years in the areas of social and environmental policies.

*The full text of the paper and supporting information are available here:*

<https://doi.org/10.1017/S0003055423001090>



Paper III:

**The pursuit of welfare efficiency:  
When institutional structures turn ‘less’ into ‘more’**

*Christina Steinbacher*

*Paper III of this dissertation has been published as:*

Steinbacher, C. (2024). The pursuit of welfare efficiency: when institutional structures turn ‘less’ into ‘more’. *Policy Sciences*, 57(2), 353-378.

DOI: 10.1007/s11077-024-09535-8

**Abstract**

Addressing current socio-economic crises strains public budgets and may threaten fiscal sustainability. Particularly in the welfare sector, where high expenditures meet poor controllability, efficient resource usage is essential to ensure future governments’ capability to act while alleviating current problems. Consequently, this paper asks: why are some countries more efficient in translating social expenditure into welfare outcomes? To answer this question, it is argued that efficiency is a matter of institutional structures and their vertical policy-process integration (VPI): efficiency depends on institutional structures’ capability to (1) ensure policymakers’ responsibility and to (2) provide coordinated feedback, thus pushing for considerate and informed resource use. Analysing the effect of VPI on the relationship between welfare efforts and social outcomes in 21 OECD countries over three decades, the results show that VPI can not only turn ‘less’ into ‘more’, but it also compensates for performance losses in the face of spending cuts.

*The full text of the paper and supporting information are available here:*

<https://doi.org/10.1007/s11077-024-09535-8>





Paper IV:

**The voice of implementation: Exploring the link between  
street-level integration and sectoral policy outcomes**

*Christina Steinbacher*

*Paper IV of this dissertation has been published as:*

Steinbacher, C. (2025). The voice of implementation: Exploring the link between street-level integration and sectoral policy outcomes. *Regulation & Governance*, 19(2), 540-557.

DOI:10.1111/regg.12605

**Abstract**

Ineffective policies plague democratic systems and challenge their legitimacy. While existing research highlights the importance of street-level bureaucrats (SLBs) as de facto “policymakers,” our understanding of SLBs’ aggregate effects on policy outcomes remains limited. Therefore, this paper proposes a shift in perspective, redirecting attention from the micro level toward institutional structures. It introduces the concept of street-level integration, which captures institutional structures enabling SLBs to form a strong voice of implementation and contribute to policy design through three integrative pathways. Analyzing the effects of street-level integration on environmental outcomes in 21 OECD countries over time, the findings reveal that street-level integration not only directly enhances outcomes through increased implementation performance but also acts as a vital factor for policy formulation increasing the effectiveness of existing and newly adopted policies. While highlighting the importance of institutional structures and SLBs for successful policymaking, the paper also offers practical recommendations for institutional reforms.

*The full text of the paper and supporting information are available here:*

<https://doi.org/10.1111/regg.12605>

