1 *Introduction*

In recent years, new policy challenges have emerged in the field of health policy. On the one hand, caseloads have increased, such as with cancer and diabetes. On the other hand, infectious diseases have returned, for example, the Ebola epidemic which recently hit countries in Western Africa. Other instances of infectious diseases include resistant influenza viruses (such as H5N1), the MERS (Middle East respiratory syndrome) coronavirus, tuberculosis, and antibiotic-resistant bacteria, all of which have become primary concerns for health policymakers worldwide (WHO, 2013b, 2014). Furthermore, preventing noncommunicable diseases (UN General Assembly, 2010; OECD, 2011; WHO, 2013a), such as cancer and diabetes, has become an important challenge for policymakers around the globe. During the last sixty years, life expectancy and the share of elderly in the population increased in many OECD (Organisation for Economic Co-operation and Development) countries. This poses a new policy challenge for many nations as a larger percentage of older people will come along with higher caseloads of chronic diseases. Consequently, there is a demand for more preventive health policies – in addition to curative interventions. These new health policies will cause additional health expenditure (Russell, 1986, 2009), but will also lead to improved health outcomes (McDaid, Sassi, and Merkur, 2015, xxi–xxiii). At the same time, health expenditures are consuming an increasing share of the national income overall in many countries. For example, in 1960, countries like the United States spent around 5 percent of their GDP on health (care and prevention) whereas in other countries, such as Australia and the United Kingdom, it was a bit less. By 2010, this share had doubled and in the United States, it had more than tripled (Figure 1.1).

To deal with these health policy challenges efficiently, health systems have to manage complex cases of multiple morbidities as well as new threats from resistant viruses and bacteria, which can travel easily in a

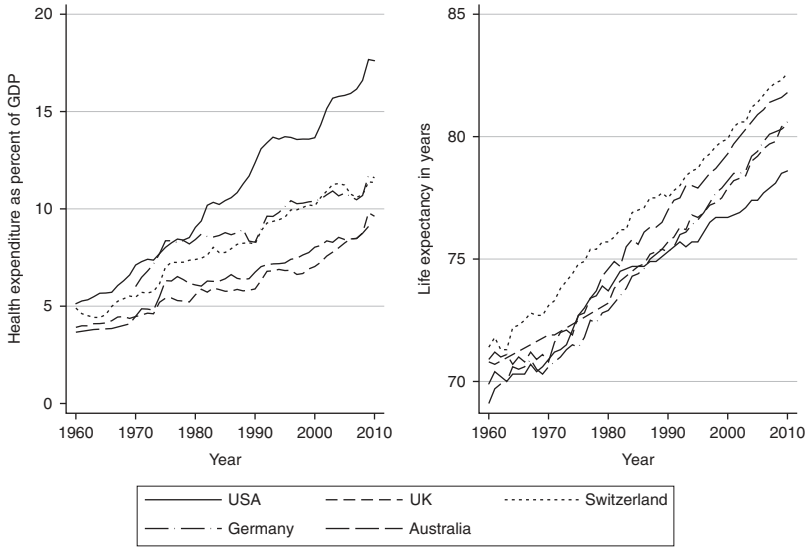

Figure 1.1 Health expenditure and life expectancy.

globalized world, along with increasing pressure for cost containment. It is the goal of this book to analyze how different health systems have dealt with these policy challenges, notably how to coordinate and integrate preventive, curative, individual, and population aspects in health policy from a comparative historical perspective.

Policy responses to the aforementioned challenges can be distinguished according to two dimensions: preventive approaches, which attempt to tackle origins of a disease before it breaks out, and cure, which comprises of policy instruments to regulate, finance, and provide treatment of sick individuals or groups. This book identifies these two approaches as health care and public health. In short, *health care* refers to policies organized along the illness or individual-based principle. Illness-based refers to the moment of intervention against a disease, which occurs when a patient is already suffering from an illness. Individual-based means that health care sector policies are designed to foster treatment of individuals by doctors who cure diseases. *Public health* focuses on policies that take a health hazard or population-based perspective. Health hazard denotes that the moment of intervention is when health is in danger, which is before the outbreak of a disease. Public health interventions are population-based,

which means that they are designed to affect the entire population, or groups, rather than just individuals (Trein, 2017a).

This distinction of the two policy sectors is ideal-typical, which means that in the real world they must work together effectively to deal with policy challenges that require the coordination of both fields. For example, this is the case with chronic diseases – e.g., cancer or diabetes – which require the combination of individual cures, individual medical screening, and group- or population-focused primary prevention measures (Busse et al., 2010; Nolte, Knai, and Saltman, 2014). Nevertheless, readers should keep in mind that the proposed distinction between health care and public health is ideal-typical and serves as an analytical tool to analyze the relationship of the two principles, but that it does not describe the full range of the term's use among practitioners.

During the twentieth century, health policy has evolved toward a structural and professional dominance of the medical approach (Foucault, 1963) and, as a consequence, most of the health expenditures have gone into the cure of diseases (OECD, 2017). Nevertheless, due to the changing demands on health policymakers – notably the appearance of new infections and chronic diseases – public health (health hazard and population-focused) solutions, such as health promotion, have reappeared on the agenda of policymakers (McQueen et al., 2007). Around the world, health policymakers have dealt with this problem in many different ways to take into account the renewed demand for public health policies (Blank and Burau, 2013; Tulchinsky and Varavikova, 2014). Ideally, health care and public health would appear in a coordinated or even integrated (Chernichovsky and Leibowitz, 2010) manner in order to provide cost-effective focus on the patients' interests. Given the different legal approaches of health care and public health (Gostin, 2014), as well as the professional autonomy and power of the medical profession (Rodwin, 2011), it is not self-evident that coordination and integration of health care and public health will be implemented smoothly and conflicts are likely to occur. Given the variety of health care systems around the world (Böhm et al., 2013), there might be differences among countries regarding the capacity of the country to relate the two sectors and resolve the conflicts between them (Trein, 2017a). For these reasons, we need to know more about the relation of health care and public health and its development over time. Notably, insights from this

research could help to understand actor coalitions and the capacity to create policies combining health care and public health in different countries.

This research problem ties into a theoretical challenge of the political science literature. Public policies are separated into a large number of policy sectors or subsystems, which govern a part of the political system with a certain autonomy (Howlett, Ramesh, and Pearl, 2009, 81–88). Nonetheless, they interact constantly with one another. This dimension of sectoral interaction has been poorly researched by the political science literature – especially from a comparative perspective. Taking the viewpoint of the public policy and public administration research, Guy Peters referred to the search for the coordination of policy sectors as the "Holy Grail" for policymakers (Peters, 1998, 295). Recent contributions still emphasize the need for more empirical research on this problem (6, 2005; Tosun and Lang, 2017; Trein, Meyer, and Maggetti, 2018). Similarly, there is room for a deeper conceptual inclusion of the concept of institutional and sectoral coevolution in the literature (Pierson, 2000; Cusack, Iversen, and Soskice, 2010; Steinmo, 2010; Trampusch, 2010; Thelen, 2014).

1.1 Concepts and Theoretical Priors in Brief

Starting from these practical and theoretical problems, this book analyzes the institutional and policy relations of health care and public health and their change over time. Therefore, this book uses a number of concepts from the political science and public policy literature, such as policy sectors, coevolution, coupling, distinctiveness, responsiveness, integration, and coordination. Analytically, this book starts from hypotheses that I develop based on secondary literature to provide the conceptual background for the following empirical analysis. In this section, we will go through to the concepts and hypotheses guiding the analysis. The following section will discuss the results of the analysis.

1.1.1 Concepts

This book defines health care and public health as policy sectors. Analog to industrial sectors, policy sectors include specialization and provision of public services, but, next to service delivery, they also have a political component to them. The specialists (Rodwin, 2011) and organized interests participating in the delivery of services reach

out to decision makers and form subsectors to the overall political system, similar to narrower policy subsystems (Howlett, Ramesh, and Pearl, 2009, 81). In the sense used in this book, policy sectors entail the core elements of public policy analysis, such as "sectoral" policy paradigm (Béland, 2005, 8), actors, policy instruments, and institutions (Howlett, Ramesh, and Pearl, 2009). Given the (relative) autonomy of policy sectors, conflicts between sectors might occur when sectors attempt to coordinate – in our case – population, individual, curative, and preventive elements of health policy to deal with the discussed policy challenges (Trein, 2017a).

To analyze the relation between the health care and the public health sectors and their development over time, this book refers to *coevolution*. According to the literature on evolutionary biology, coevolution is an evolutionary change in one population as a reaction to a condition of a second population, which is followed by a change in the second population (Janzen, 1980, 611). This book transfers coevolution to policy analysis to understand the mutual influence and adaptation of the health care and the public health sectors and the change of the relation between both sectors over time. In the following, I will use coevolution as a metaphor and I do not identify evolutionary theory with political analysis (Ma, 2016, 225), as other authors have proposed (Lewis and Steinmo, 2010). This book refers to coevolution in the same way as research focusing on coevolution of dyads, such as capitalism and systems of political representation (Cusack, Iversen, and Soskice, 2010) or skills and welfare (Trampusch, 2010).[1] Thereby, this book accounts for two analytical dimensions: first, an intersectoral dimension that concerns the connection between the health care and the public health sectors and, second, a temporal dimension that refers to the development of the sectors' relations over time.

To analyze the relationship between policy sectors, I hark back to the concept of coupling (Orton and Weick, 1990; Weick, 1976) and propose four forms of coupling to denote different conditions of the relationship between policy sectors. These are tight coupling, loose coupling, decoupling, and noncoupling. Tight coupling entails the conditions of "no distinctiveness"[2] and "responsiveness" between the two sectors. No distinctiveness contains the presence of formal institutional unification, i.e., the sectors share common structures that intend to set up common organizational elements and policies to merge professional practices and interventions. Responsiveness means that professionals and administrators from the two policy

sectors formally coordinate political activities because they have "ideas about joint and holistic working" (6 et al., 2002, 33–34) or actors from both policy sectors engage in common discourse coalitions. For example, the medical profession (broadly defined) makes nonmedical public health policies, such as tobacco control, a political priority. Responsiveness entails also policy integration, e.g., policies that actually merge professional practices and interventions of the two sectors (6 et al., 2002, 33–34), which is different from institutional unification which entails only structural preconditions for the integration of policies. An example for political coordination is when medical associations publicly support tobacco control policies. Instances of policy integration are integrated care measures or health strategies that aim at particular diseases. The other forms of coupling follow this logic. Loose coupling combines distinctiveness with the presence of responsiveness. Decoupling includes distinctiveness and the absence of responsiveness and noncoupling refers to the combination of no distinctiveness and the absence of responsiveness (Trein, 2017c).

These four forms of coupling are ideal-typical. To make them applicable to empirical analysis, this book proposes a two-dimensional continuous space with two axes. The vertical axis runs from no responsiveness at the bottom end to full responsiveness at the top end, and the horizontal axis spans from distinctiveness on the left side to no distinctiveness on the right side. The four forms of coupling are placed in the corners of this two-dimensional analytical space: loose coupling is in the upper left corner, tight coupling in the upper right corner, noncoupling in the lower right corner, and decoupling in the lower left corner. In between these extreme points, there are a number of intermediate forms mixing the different forms of coupling (cf. Figures 1.2 and 2.1). I will use this analytical space to map the coupling of health care and public sectors in different countries at different points in time. This strategy allows me to examine the coevolution of the health care and the public health sectors from a comparative perspective (see Chapter 2).

1.1.2 Theoretical Priors and Research Design

This book not only aims to describe the relations of health care and public health over time, but also attempts to explain why the two sectors (potentially) coevolve differently in different countries. Therefore,

I start the analysis with three hypotheses. My first hypothesis holds that there is no distinctiveness (unification) of health care and public health if government is unified. Unified government means that the national government has a relatively large discretion in changing policies and parts of the formal institutional structure without having to consider the position of many veto players, such as a second parliamentary chamber, subnational governments, or find solutions among several parties in government. Examples of a unified government are centralized federations (Hueglin and Fenna, 2006), countries with few veto points (Tsebelis, 2002), majoritarian democracies (Lijphart, 2012), and strong states (Crouch, 1993; Nathanson, 2007). Countries whose political system resembles these qualities are likely to have institutional unification of the health care and public health policy sectors.

The second hypothesis states that there is responsiveness of health care and public health if professionalism in that country is high (Macdonald, 1995). High professionalism means that professional organizations – for example, the medical and legal associations – are strong and politically independent from the state; in other words, they are "free professions" (Rodwin, 2011, 321). In this instance, professional actors are active political pressure groups who defend their special interests and, in addition, lobby for problems that do not directly concern their own interests but are beneficial for the public good. For example, doctors should be interested in public health matters that concern nonmedical health policies from a professional point of view but not because public health touches on their special interests as a profession. Additionally, in the context of strong professionalism, medical organizations would advocate public health issues because they need political legitimacy clout to attract policymakers' attention. The reason for this is that strong professionalism comes along with interest group pluralism (Macdonald, 1995; Siaroff, 1999), i.e., a situation, in which not all interest groups are included automatically in the political process but need to compete with other interest groups for the access to politicians. Thus, health care actors have an incentive to demonstrate that they care about public health matters and work together with health care actors. Consequently, I expect to find responsiveness between the two sectors. To the contrary, weak (or low) professionalism (Macdonald, 1995) implies that health professions are "professions of office" (Rodwin, 2011, 321). In this case, professional organizations do not consider themselves as pressure groups that need to voice societal problems to

policymakers. Obviously, professions of office are politically active, but mostly regarding their special interests as they operate in contexts where they do not need to do more, as corporatist structures of interest inclusion guarantee their political participation (Macdonald, 1995; Siaroff, 1999). Therefore, in countries with weak professionalism there should be no responsiveness between the two sectors.

The third hypothesis accounts for contextual elements. I hypothesize that the relation of the health care and public health sectors (coupling) should remain stable over time, as long as the context (most problematic illness, technology) does not change either. However, changes in the context might alter the demand for the coupling of the health care and the public health sectors. My analysis covers the time period from 1880 until 2010. Across this time span, the socioeconomic context has changed considerably and the demands for health policy along with it. In order to consider the mentioned contextual changes, this book focuses on four time periods, each of which has different contextual conditions and therefore varies in its expectations regarding sectorial coupling. The first time period (t1) covers the period from 1880 to 1918. During this period, infectious diseases were the most pressing health problem and medical capacities were limited. This context created high incentives for more responsiveness between professional organizations and policies during that time period. The second period (t2) comprises the time from 1918 to 1945. During this period, infections were still a problem, but less so than before, and medical technology had been improving. Therefore, incentives for responsiveness and policy integration remained present, but should have been weaker than in the previous time period. The third time span (t3) entails the time from 1945 until 1980. During this period, contextual incentives for responsiveness and policy integration were not present because most infections could be cured. Incentives for and unification of policy sectors have returned since the 1980s (t4) because disease patterns have changed as well. Notably, prevalences of noncommunicable diseases have increased and new infections have become a problem, for example, HIV (Baum, 2008; Tulchinsky and Varavikova, 2009).

Starting from these hypotheses, this book analyzes the coevolution of the health care and the public health sectors in five countries, namely Australia, Germany, Switzerland, United Kingdom, and the United States. I selected these countries according to their differences in professionalism and unified government (Table 1.1); other elements,

Table 1.1. ***Case studies and empirical implications.***

	Strong professionalism	Weak professionalism
Fragmented government	US → *loose coupling*	Switzerland → *decoupling*
Unified government	Australia, UK → *tight coupling*	Germany → *noncoupling*

such as the nations' economic development and levels of democracy, are fairly stable. The only particularity is the United Kingdom, which is not a federal state. It serves as a control case to and allows for testing my hypotheses beyond the realm of classical federations.

My empirical analysis is a historical account of the development of coupling between the health care and the public health sectors from the mid-nineteenth century until 2010. I chose this long time span because it allowed me to trace the relationship between the two sectors from the origins of the modern state until today. I base my analysis on secondary literature, official documents (including Internet sources), and interviews. Based on a review of these sources, I record instances of institutional reforms, responsiveness between the actors, and policies of the health care and the public health sectors. An example of institutional unification is the creation of a national health service. Responsiveness entails a common advocacy between health care and public health actors, such as when the medical profession and health foundations share support for tobacco control policy or health promotion. Conflicts between the professions would also count the absence of responsiveness. An example of policy integration is a policy that combines prevention and cures regarding a certain policy challenge, such as cancer.

1.2 Main Results

The results of my analysis demonstrate that health care and public health coevolved differently between the five countries. In short, health care and public health coevolved from loose to tight coupling in Australia. In the United States, the development was similar, but the institutional distinctiveness between both fields was more pronounced. In the United Kingdom, the two sectors coevolved from noncoupling

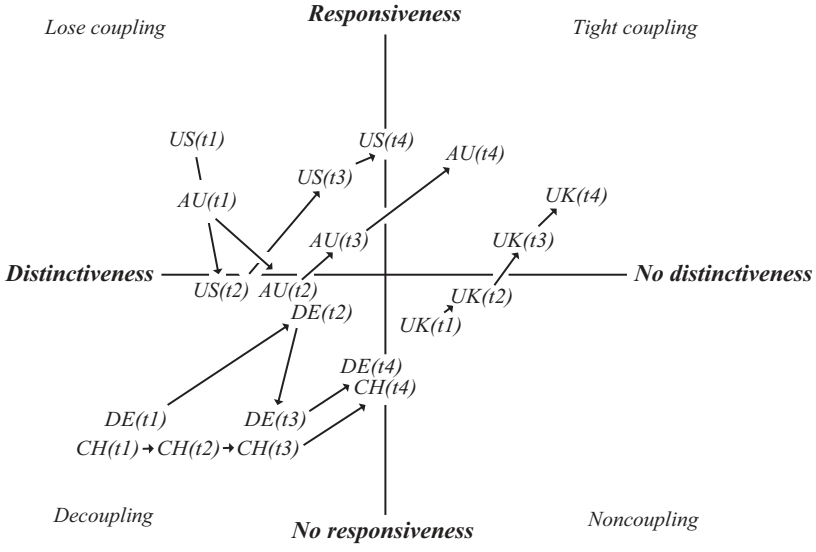

Figure 1.2 Coevolution of health care and public health.

to tight coupling. In Germany and Switzerland, health care and public health coevolved from decoupling to some degree of noncoupling, i.e., both sectors remained relatively distinct institutionally and did not enter a full relationship of noncoupling. An intriguing finding is that the two sectors coevolved toward more responsiveness in all countries in the sample (Figure 1.2).

Concerning the hypotheses that guided the analysis, my results are particularly interesting. The findings of my analysis confirm my hypothesis regarding the effect of professionalism on policy sectors' responsiveness. In countries where professions were more politically active, the medical profession tended to advocate for public health issues, such as health promotion services, immunization, and tobacco control policy, taking the role of an important pressure group in these matters. This was especially the case if the issue did not concern the group's original interests, for example, in the case of the merger of universal health care with a public health service. Responsiveness changed according to the context. In the United States, and partly in Australia, responsiveness was strong, but only at times when the most prevalent diseases demanded policy integration of the two sectors. If this was not the case, political conflicts and absence of