Dynamic De/Centralization in Switzerland, 1848–2010

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Part of the project *Why Centralization and Decentralization in Federations?*, this article studies dynamic de/centralization in Switzerland since 1848 and seeks to account for the patterns observed. It shows that, overall, there has been a wide-ranging process of legislative centralization, whereas the cantons have retained considerable administrative and, especially, fiscal autonomy. The principal instrument of dynamic centralization has been constitutional change, followed by the enactment of framework legislation by the federal government. The process has unfolded primarily through frequent steps of a small magnitude and occurred throughout the 160-year life of the federation. Modernization, market integration, changing patterns of collective identification, and expectations concerning the role of government appear to have played a particularly important causal role. The multilingual and bi-confessional nature of the country has not presented a major obstacle to this centralization dynamic, particularly since World War II, with the French-speaking minority becoming increasingly pro-centralization.

This article seeks to contribute to a deeper understanding of the evolution of Switzerland's federal system by offering a novel conceptualization and detailed measurement of dynamic de/centralization since 1848 as well as an analysis of the patterns observed. The evolution of the Swiss federation has been addressed by several scholars, comparativists, and students of Switzerland alike, with most of them arguing that the country has undergone an extensive process of centralization. However, no systematic study across different policy and fiscal areas and over the entire life span of the federation had hitherto, to our knowledge, been conducted. Our article reports the findings of such a study, part of a wider comparative analysis of dynamic de/centralization in six federations.

Among comparativists, as early as the mid-1940s, Wheare (1946, 252–253) emphasized that many new powers had been conferred on the central government. Twenty years later, Sawer (1969, 97–979) also noted a centralizing trend but pointed out that the cantons had retained considerable administrative and fiscal autonomy. Among Swiss-politics specialists, Rappard (1948, 380) remarked on the

considerable extension in the powers of the federation and Aubert (1967, 53) argued that centralization was one of the three fundamental trends of Switzerland's political development, while Knapp (1986, 49–50) summarized the transformation of Swiss federalism in the following way:

In 1848, the cantons were quasi-sovereign. Their margin for maneuver was limited only very slightly by the federal government . . . the cantons have been transformed into more or less autonomous entities tasked with implementing federal decisions in co-operation with the federal government and the other cantonal governments. We can thus say that the cantons have become agents in the context of a so-called co-operative federalism.¹

A detailed empirical analysis conducted by Nüssli (1983, 54–63; [1982] 1985, esp. 348–360), confirmed this assessment, concluding that a centralizing trend was evident in the legislative sphere but not in the organizational and fiscal spheres. More recently, Fagagnini (1991, esp. 48–49), Wälti (1996, 8, 16), Serdült and Schenkel (2006, 556–564), Vatter (2007b, 216; 2014, 431–432), Kriesi and Trechsel (2008, 35), and Dardanelli (2013, 253) all characterize the development in very similar terms, acknowledging the process of legislative centralization but also pointing out that the cantons have retained significant administrative and fiscal autonomy.²

The detailed measures (see Supplemental Online file for the coding decisions) we present in this article allow us to substantiate and qualify these claims as well as compare Switzerland's evolution with that of five other major federations. The rest of this article proceeds as follows. After briefly setting out our theoretical expectations, we outline the methodology we employed to collect and code the data, present a brief overview of the key features of the Swiss federation at its birth, and describe the initial pattern of static de/centralization. We then outline the 160-year long process of dynamic de/centralization and the pattern of static de/centralization it led to by 2010. The last two sections offer an interpretation of the patterns we observe and reflect on their wider significance.

Summarizing the main findings from this article, three particular insights stand out. First, the Swiss federation has developed gradually from a highly decentralized to a rather centralized federation, in line with most of the other "classic" federations. However, our second finding nuances this conclusion in that dynamic centralization has above all been present in the legislative dimension, but less so in the administrative and fiscal dimensions. In other words, while primary legislation is more and more set at the central level, the cantons continue to enjoy significant implementing powers and fiscal autonomy. Third, major differences exist across policy areas, both as regards static and dynamic de/centralization. While some areas such as defense and currency were centralized early on and have remained so, most have only gradually been centralized, whereas a third, much smaller group of

areas (culture, education, language, and law enforcement) have remained largely decentralized.

These findings lend tentative support to a "sociological" explanation of dynamic de/centralization in Switzerland compared to approaches that emphasize the role of institutions or political parties. By doing so, they speak to the broader debate on the forces shaping the evolution of federations and the territorial division of powers over time.

Theoretical Expectations

As developed in more detail in the theoretical framework underpinning the entire project (see the introductory article to this special issue), we expect dynamic de/centralization to be shaped by a broad range of factors operating at different levels and different points in time, in a manner reminiscent of a series of "funnels of causality" (Campbell et al. 1960, 24–32).

The most remote factors pertain to *antecedent conditions* that shaped static de/centralization at the outset, i.e., the "starting point" for the process of dynamic de/centralization. Given that the scope of government was much more limited in the nineteenth century compared to contemporary welfare states, we expect federations created before World War I to be less centralized than those established after World War II. Also, federations born out of a "federal bargain" (Riker 1964, 12–16) should be less centralized at birth than those created through a different process. Given that the Swiss federation was established in the mid-nineteenth century out of a federal bargain, we thus expect it to have been very decentralized at the outset and, consequently, to have experienced considerable dynamic centralization.

Regarding *dynamic de/centralization*, several socio-economic and socio-cultural trends can be regarded as key drivers. In the socio-economic sphere, technological change, increased mobility, and market integration—often placed under the umbrella term of "modernization"—would seem to fuel centralization (e.g., Beer 1973). After World War II, globalization and regional integration might have further contributed to centralization, given the scope for the federal government to encroach upon cantonal autonomy through international agreements (e.g., Lazar et al. 2003, 4). In the socio-cultural sphere, growing citizen identification with the federation as a whole and rising demands for uniform welfare services throughout the territory are also likely to have fueled dynamic centralization (e.g., Birch 1955). In line with a widespread consensus in the literature, we anticipate these relatively slow-moving trends to have been reinforced by short-term shocks such as wars and economic crises (e.g., Wheare 1946, 254).

We expect these trends and shocks to have led to changes in attitudes toward the vertical distribution of powers in the federation, principally among the mass public, organized interests, and the media, broadly favoring an accretion of powers at the center. At the same time, though, pressures toward centralization are mediated by political and institutional variables, reinforcing or weakening them. Several such variables lend themselves to theorizing. The first political variable is the degree of nationalization of the party system (Riker 1964, 91-101), where Switzerland's relatively low value should have acted as a brake on centralization. A second variable in this category is the political orientation of the federal executive, whereby left-of-center parties are generally seen to favor centralization but right-ofcenter parties to resist it (e.g., Döring and Schnellenbach 2011, 92-94). Given the (left-wing, at the time) Radicals' dominance up to 1918 but the prevalence of center-right majorities in the subsequent period (e.g., Church 2004, 117-118; Klöti 2007, 149-152; Kriesi and Trechsel 2008, 75-81), centralization in Switzerland should have been facilitated in the early period but restrained in the second. Turning to institutional factors, the "administrative" nature of the Swiss federation (e.g., Döring and Schnellenbach 2011, 85-90) and the relatively high number of constituent units (e.g., Watts 2008, 71-72) should have facilitated centralization; but cantons' residual powers, direct democracy (e.g., Blankart 2000, 32), and the autonomy of the Parliament vis-à-vis the Federal Council (e.g., Bednar et al. 2001, esp. 264) should have acted as constraints.

Finally, the fact that Swiss society is composed of different linguistic—as well as religious—groups, all of them entrenched territorially (see below), allows us to assess the claim put forward by Erk and Koning (2010), according to whom monolingual federations tend to centralize over time whereas multilingual federations tend to decentralize. Applied to our case, this would mean either no or, at least, much less dynamic centralization than in monolingual federations such as the United States or Australia. It would also imply that the linguistic minority groups resisted centralization whereas the majority embraced it.

Data and Methods

As stated in the introduction to this article, our main purpose is to present a detailed measurement and mapping of dynamic de/centralization in the Swiss federation rather than engage in hypothesis-testing causal analysis. Accordingly, our data and methods are focused on such measurement and mapping, supplemented by a qualitative interpretation of our findings.

The data we present measure static de/centralization in Switzerland at ten-year intervals from 1850 to 2010 in twenty-two policy and five fiscal categories (tables 1 and 2). Each policy area is assessed as to its legislative and administrative de/centralization, understood as the degree of autonomy that individual cantons possess vis-à-vis the federation. *Legislative* autonomy relates to the constituent units' control of primary legislative powers. *Administrative* autonomy concerns

Table 1 Static policy de/centralization, 1850 and 2010

		1850	2010		
Policy category	Legislative	Administrative	Legislative	Administrative	
P1 Agriculture	7**	7*	2**	6*	
P2 Citizenship and immigration	5**	6**	2**	5**	
P3 Culture	7**	7**	5**	6**	
P4 Currency and money supply	2**	N/A*	1**	1**	
P5 Defense	3**	5**	1**	2**	
P6 Economic activity	6**	7*	2**	5*	
P7 Education—pre-tertiary	7***	7***	6***	7***	
P8 Education—tertiary	6***	7***	5***	5***	
P9 Elections and voting	6**	6**	4**	5**	
P10 Employment relations	7**	7*	3**	6*	
P11 Environmental protection	7**	7**	3***	5***	
P12 External affairs	2***	2***	2**	2**	
P13 Finance and securities	7**	7**	2**	3*	
P14 Health care	7**	7**	4**	6**	
P15 Language	6**	6**	5**	6**	
P16 Law – civil	7***	6**	2**	6**	
P17 Law—criminal	6***	6**	2**	5**	
P18 Law enforcement	6**	6**	5**	6**	
P19 Media	6**	7**	1**	1**	
P20 Natural resources	7**	7**	3**	6*	
P21 Social welfare	7***	7***	2**	6*	
P22 Transport	6**	7**	2**	4**	
Total	130	134†	64	104	
Mode	7	7	2	6	
Mean	5.91	6.38	2.91	4.73	
Standard deviation	1.57	1.16	1.51	1.78	
L-A mean deviation	-0.47	0.47	-1.82	1.82	

Note: 1 = exclusively federal government; 2 = almost exclusively federal government; 3 = predominantly federal government; 4 = equally federal government and the cantons; 5 = predominantly the cantons; 6 = almost exclusively the cantons; 7 = exclusively the cantons. †21 categories only.

cantons' control over the implementation of public policy in execution of federal as well as their own legislation. This yields data for seventeen time points and, at each time point, forty-four policy scores and five fiscal scores, for a total of 833

Fiscal category	1850	2010
F1 Proportion of own-source revenues out of total cantonal revenues*	6*	5 (4–6)**
F2 Restrictions on own-source cantonal resources**	7**	4**
F3 Proportion of conditional grants out of total cantonal revenues***	7*	6 (5-7)**
F4 Degree of conditionality (for conditional grants only)**	6*	2*
F5 Cantonal public sector borrowing autonomy****	7**	7**
Total	33	24
Mean	6.6	4.8
Weighted mean [‡]	6.67	5.17
Core mean [‡]	6.5	5.5
Standard deviation	0.55	1.92

Table 2 Static fiscal de/centralization, 1850 and 2010

Notes: *1 = 0-14; 2 = 15-29; 3 = 30-44; 4 = 45-59; 5 = 60-74; 6 = 75-89; 7 = 90-100; **1 = very high; 2 = high; 3 = quite high; 4 = medium; 5 = quite low; 6 = low; 7 = very low; ***1 = 86-100; 2 = 71-85; 3 = 56-70; 4 = 41-55; 5 = 26-40; 6 = 11-25; 7 = 0-10; ****1 = very low; 2 = low; 3 = quite low; 4 = medium; 5 = quite high; 6 = high; 7 = very high; $^{\ddagger}F1 + F2 + (F3 + F3 + F4/3) + F5/4$; $^{\ddagger}F1 + F3/2$.

observations. Each data point is intended to capture the situation at the end of the respective decade and year.

We measured the degree of cantonal legislative and administrative control in policy matters on a 7-point scale where 1 indicates no control and 7 exclusive control, as follows: 1 = exclusively the federal government; 2 = almost exclusively the federal government; 3 = predominantly the federal government; 4 = equally the federal government and the cantons; 5 = predominantly the cantons; 6 = almost exclusively the cantons; and 7 = exclusively the cantons. As detailed in the Supplemental Online file, we measured cantonal autonomy in the fiscal sphere on 7-point scales based either on numerical indicators, where available, or on qualitative assessment.

We coded the degree of autonomy in each policy and fiscal area on the basis of constitutional and non-constitutional developments—such as the enactment of legislation and changes in fiscal transfers—occurring over the previous decade that increased or decreased the legislative, administrative, and fiscal autonomy of the cantons. Our principal sources were the systematic compilation of federal law, various editions of the Statistical Yearbook, the Historical Dictionary of Switzerland, and scholarly studies of each policy and fiscal category (see Supplemental Online file for a full list of sources).

Each code underwent several rounds of internal and external validation. Codes were first assigned by one author of this article and discussed with the other. They were then subjected to a three-step external validation process by: (i) experts on each policy and fiscal category; (ii) experts on public administration and intergovernmental relations; and (iii) experts on Swiss and comparative federalism. All the feedback received was again discussed by the two authors and informed their revisions. To maximize transparency, the Supplemental Online file details the codes for each category, indicates the sources they are based upon, and outlines the justification for each coding decision.

To measure dynamic de/centralization, we have computed the following statistics and mapped them longitudinally: (i) the modal and mean policy and fiscal scores, and the standard deviation among them, by time point; (ii) the deviation between the legislative and administrative policy scores by category and in the aggregate, by time point (L–A deviation), which can be considered a measure of the duality of a federation: the lower the difference, the higher duality; (iii) the total, modal, and mean frequency of score change by policy and fiscal category and in the aggregate; (iv) the patterns of direction and magnitude of score changes; (v) the cumulative direction and magnitude of score change by policy and fiscal category and in the aggregate; and (vi) the mean rate of score change/year by different periods. Before presenting our results, some background on the Swiss case is in order.

The Swiss Federation at its Birth

Switzerland became a federal state in 1848, making it the world's second oldest federation after the United States. It had previously been for a long time a confederation of states (e.g., Church and Head 2013), leading some authors (e.g., Hicks 1978, 156; Elazar 1994, 246) to consider it the country that most successfully embodies the federal idea. The Swiss federation was established in the wake of a brief civil war, out of a "federal bargain" between the cantons—as the constituent units are called (Kley 2012)—that emerged victorious from the war and those on the losing side of it, under the terms of the 1848 federal constitution (e.g., Rappard 1948, esp. 94–105; Humair 2009, 71–90).

At its birth, the Swiss federation was composed of twenty-five cantons all having equal status and retaining residual powers.³ The 1848 constitution established a bicameral parliament inspired by the US model, with a lower house—the National Council—representing the Swiss people as a whole and an upper house—the Council of States—representing the cantons. Members of the lower house were to be directly elected every three years, whereas members of the upper house would be elected following canton-specific procedures.⁴ The two houses were given equal powers, thus establishing a system of perfect bicameralism (Vatter 2014, 314–315).

The cantons were allocated a number of seats in the lower house proportional to their population and two seats each in the upper house (where the six "half cantons" have one seat only). The executive, the Federal Council, was, and still is, a collegial body of seven ministers, one of them assuming the role of president on an annually rotating basis. The seven ministers were to be elected individually every three years by the two houses of parliament sitting jointly about two months after the parliamentary elections. Once elected, the ministers would not be politically responsible to parliament and could not be dismissed either individually or collectively by the latter until the next election. The absence of parliamentary confidence thus created a form of executive-legislature relations intermediate between the classic parliamentary and presidential systems (Shugart and Carey 1992, 26, 78; Klöti 2007, 148). A Federal Tribunal was also established but was not granted—and still lacks—the power of judicial review over federal laws (Humair 2009, 88–90; Vatter 2014, 497–498). To protect cantonal autonomy, transferring or conferring new policy-making competences to the federal level was permitted only on the basis of a constitutional amendment endorsed by a double majority, of the people and of the cantons, in a popular referendum.⁵

Modern Switzerland inherited both religious and linguistic divisions. Since the Reformation, the country had been split between a Protestant majority, economically and politically dominant, and a sizeable Catholic minority. In the first half of the nineteenth century, Protestantism came to be associated with industrialization and support for liberalism and federalism while Catholics were mostly concentrated in rural areas and were generally, though not invariably, conservative and confederalist, i.e., defenders of the status quo. The clash between the two sides culminated in the 1847 civil war that preceded the transition to federation. The first federal census in 1850 recorded 59 percent of Protestants and 41 percent of Catholics (BfS 1891, 14), though territorial concentration meant that most cantons had a large majority of one confession or the other (since then, Protestants have experienced a relative decline, numbering 25 percent, against 37 percent of Catholics, in 2015; BfS 2017a).

Linguistically, the country was, and has remained, divided between four language communities, German, French, Italian and Romansch, spoken as a mother tongue by 71 percent, 21 percent, 6 percent, and 1 percent, respectively, in 1880 (BfS 1891, 18). The 1848 constitution gave German, French, and Italian the status of national languages; but no attempt was made to introduce multilingualism in the cantons—where it did not already exist—and all but four of them have remained monolingual. Although multilingual, Switzerland was, and is, not multinational—meaning that it is not composed of more than one community self-identifying as a nation (Dardanelli 2011). As we discuss below, this has played a crucial role in the evolution of Swiss federalism. Despite frequent constitutional

change, these fundamental characteristics of the Swiss federation have remained highly stable since 1848.

Static De/Centralization at the Outset

As expected, the Swiss federation was highly decentralized at its birth (table 1). The modal score across the twenty-two policy categories for both legislation and administration was 7, meaning most policy areas were exclusively in the hands of the cantons. The mean score was 5.91 for legislation and 6.38 for administration. As shown by standard deviation figures, the extent of variation across policy areas was higher on the legislative than on the administrative side. The mean scores and standard deviations all point to the fact that the policy role of the central government was more pronounced in relation to legislation than administration, though the gap between the two dimensions was rather small. Looking at the disaggregated scores (table 1), we can see that in 1850 the central government had a dominant role in only three policy areas, which are all typical central state domains: currency and money supply (P4), defense (P5), and external affairs (P12). Even within these areas, however, banknote issuing, for example, was left to non-governmental actors while the cantons retained a prominent administrative role in the defense field, too.

The cantons also had high fiscal autonomy, with all five categories scoring 6 or 7 (table 2). They were thus essentially self-financing. The only significant fiscal transfers they received consisted of compensations for lost income from customs duties and postal services, which had been centralized in 1848 (e.g., Humair 2009, 98–105). The central government derived the bulk of its revenues from tariffs and placed no significant restrictions on cantonal taxation power. The cantons also had unrestricted freedom to borrow. This pattern of static de/centralization at the outset mirrored closely that of the United States, the world's first modern federation, the main difference being the higher centralization in Switzerland in the field of currency and money supply (P4).

Overview of Dynamic De/Centralization

Frequency⁷

Across seventeen time points (1850–2010), we have recorded a total of eighty-one score changes in the policy sphere and thirteen changes in the fiscal sphere (table 3). The mean frequency of policy score changes per decade is 5.06 but frequency has varied considerably over time (figure A1). The frequency of dynamic policy centralization (no decentralizing changes have been recorded, see below) has been almost twice as high in the legislative dimension than in the administrative dimension (table 3 and figure A1). Adjusting for the much lower number of fiscal

Table 3 Frequency, direction, and magnitude of dynamic de/centralization by policy and fiscal category

	Total P	Total L	L-1	L – 2	L – 4	L cD&M	Total A	A – 1	A – 2	A cD&M
P1	5	4	3	1	0	-5	1	1	0	-1
P2	3	2	1	1	0	-3	1	1	0	-1
P3	3	2	2	0	0	-2	1	1	0	-1
P4	1	1	1	0	0	-1	0	0	0	0
P5	5	2	2	0	0	-2	3	3	0	-3
P6	5	3	2	1	0	-4	2	2	0	-2
P7	1	1	1	0	0	-1	0	0	0	0
P8	3	1	1	0	0	-1	2	2	0	-2
P9	3	2	2	0	0	-2	1	1	0	-1
P10	4	3	2	1	0	-4	1	1	0	-1
P11	6	4	4	0	0	-4	2	2	0	-2
P12	0	0	0	0	0	0	0	0	0	0
P13	8	4	3	1	0	-5	4	4	0	-4
P14	4	3	3	0	0	-3	1	1	0	-1
P15	1	1	1	0	0	-1	0	0	0	0
P16	2	2	1	0	1	-5	0	0	0	0
P17	2	1	0	0	1	-4	1	1	0	-1
P18	1	1	1	0	0	-1	0	0	0	0
P19	9	4	3	1	0	-5	5	4	1	-6
P20	5	4	4	0	0	-4	1	1	0	-1
P21	5	4	3	1	0	-5	1	1	0	-1
P22	5	3	2	1	0	-4	2	1	1	-3
Total	81	52	42	8	2	-66	29	27	2	-31
Mode	5	2					1			
Mean	3.68	2.36					1.32			
	Total F	+1	-1	-2		F cD&M				
F1	4	2	1	1	-	-1				
F2	3	0	3	0	-	-3				
F3	1	0	1	0	_	-1				
F4	5	1	3	1	-	-4				
F5	0	0	0	0	_	0				
Total	13	3	8	2	_	-9				
Mode	_									
Mean	2.6									

Note: L=legislative, A=administrative; +1, -1, -2, -4: direction and magnitude of score changes; cD&M: cumulative direction and magnitude.

categories, dynamic de/centralization has proportionally been slightly more frequent in the fiscal sphere (figure A2).

Dynamic centralization has affected all policy areas bar one, equal to an average of 3.68 score changes per policy category. Change has been most frequent in the fields of media (P19), finance and securities (P13), and environmental protection (P11). It has been least frequent in currency and money supply (P4), pre-tertiary education (P7), language (P15), and law enforcement (P18) and absent altogether in external affairs (P12).

The higher frequency of change in the legislative sphere at the aggregate level is, by and large, replicated in the individual policy categories, with the exceptions, though, of defense (P5), tertiary education (P8), and media (P19), in which administrative changes have been more frequent than legislative ones.

In the fiscal sphere, finally, change has been most frequent in the degree of conditionality (F4) and in the proportion of own-source revenues (F1), and absent in the cantons' borrowing autonomy (F5).

Direction

The dynamic of change has been overwhelmingly in the direction of centralization. All eighty-one policy changes have been centralizing, along with ten of the thirteen fiscal changes. All policy areas, with one exception only, have experienced cumulative centralization, and so have four of the five fiscal categories. The sole exceptions are external affairs (P12) and borrowing autonomy (F5), where there has been no change.

Magnitude

The magnitude of centralization has been considerable in the legislative sphere but less so in the administrative and fiscal spheres. Between 1850 and 2010, the modal legislative score dropped from 7 to 2, while the modal administrative score only dropped from 7 to 6. Mean static de/centralization dropped by 3 for legislation but by only 1.65 for administration (table 1). Mean static fiscal de/centralization dropped by between 1 and 1.8, depending on the measure used (table 2).

Cumulative legislative centralization has been highest in agriculture (P1), finance and securities (P13), civil law (P16), media (P19), and social welfare (P21), and lowest in currency and money supply (P4), education (P7 and P8), and language (P15), while there has been no change in the field of external affairs (P12), as already noted. On the administrative side, centralization has been highest in the fields of media (P19) and finance and securities (P13), while several categories have recorded no change (tables 1 and 3).

In the fiscal sphere, centralization has been highest in the degree of conditionality of federal transfers (F4) and in the restrictions placed on the

cantons' own-source revenues (F2), while there has been no change in their freedom to borrow (F5). The core categories, i.e. the proportion of own-source revenues (F1) and of conditional transfers (F3), have witnessed only modest centralization (tables 2 and 3). It is important to note, however, that the "headline" scores for these two categories at most time points mask high variation across the cantons: as detailed in the Supplemental Online file, while wealthy urban cantons such as Basle City and Geneva consistently score highly on autonomy, relatively deprived rural cantons such as Uri or (after its creation in 1979) Jura consistently record a high level of dependence on federal transfers.

Pace, Timing, and Sequence

Dynamic de/centralization has proceeded at a very gradual and incremental pace, via fairly frequent changes of a generally small magnitude (table 3, figures A1, A2, A3, and A4). The only exceptions were the entry into force of single codes for civil and criminal law, which constituted steps of a large magnitude (table 3). In the policy sphere, change has followed a linear trajectory, i.e. without any changes in direction, whereas there has been a small degree of fluctuation in the fiscal sphere, specifically in the proportion of own-source revenues (F1) and in the degree of conditionality (F4) (table 3).

It is possible, nonetheless, to identify points in time when change has been more prominent in frequency, magnitude, and significance. In the legislative sphere, there have been frequency peaks in the 1870s, 1910s, and 1990s and magnitude peaks in the 1870s, 1910s, and 1940s. These peaks reflect the following developments: (i) the adoption of a new federal constitution in 1874; (ii) World War I, during which the central government was also granted its first significant powers of direct taxation; (iii) World War II and the accompanying strengthening of the central government's role in the fields of economic regulation and social welfare, enacted in 1947, as well as the entry into force of a unified criminal law code in 1942 (unrelated to the war); and (iv) the adoption of a new federal constitution in 1999 and further centralizing steps in fields such as economic regulation, tertiary education, health care, and the media. Of a lesser quantitative impact in the short term, but with far-reaching consequences in the longer term, was also the late nineteenth century, which witnessed the decision to adopt unified civil and criminal law codes as well as the nationalization of the railroads (on the significance of the latter, see Aubert 1967, 55).

Further on the timing of dynamic de/centralization, if we divide the life of the Swiss federation into two periods (1850–1920 and 1920–2010), we can see that, in the legislative sphere, the absolute cumulative direction and magnitude of change has been higher in the latter period, but only marginally so (table 4). If we divide it into three periods (1850–1910, 1910–1950, 1950–2010), so as to isolate the crisis

Two periods	1850-1920		1920-2010		
Absolute	-1.18		-1.82		
Adjusted (rate of change/year)	-0.017		-0.020		
Three periods	1850-1910	1910-1950	1950-2010		
Absolute	-0.82	-1.09	-1.09		
Adjusted (rate of change/year)	-0.014	-0.027	-0.018		

Table 4 Timing of dynamic legislative de/centralization^a

Note: ameasured by cumulative direction and magnitude of change.

years of the first half of the twentieth century, we observe that the middle period indeed witnessed significantly higher centralization whereas the other two experienced roughly similar magnitudes of change. No significant sequential pattern can be detected.

Form

It is clear from the preceding paragraphs that dynamic de/centralization in Switzerland has taken place primarily in the legislative sphere, but only to a limited extent in the administrative and fiscal spheres. As a result of this contrast, the deviation between the mean legislative and administrative scores at each time point, which is a measure of the "duality" of the system, has grown progressively larger (table 1 and figure A3). Put differently, Swiss federalism has acquired an increasingly "administrative" nature over time.

Perhaps surprisingly, the 2004/8 reform of the fiscal equalization system and the accompanying re-organization of the division of competences between the federation and the cantons (see e.g., Braun 2009) have not led to changes of a magnitude sufficient to have an impact on our de/centralization scores.⁸

Instruments

Dynamic de/centralization in Switzerland has taken a clearly identifiable "high road": constitutional change to empower the central government in new areas of competence followed, sometimes much later, by the enactment of broad framework legislation that leaves a degree of discretion to the cantons—both in "filling in the details" through cantonal "implementing legislation" (*Einführungsgesetz*) and in modes of administration. By the time it was replaced in 1999, the 1874 constitution had been amended 155 times (Schmitt 2005, 375), while the current constitution had already been amended seventeen times by 2010 (CH 2016).

In the context of Switzerland's "Europeanization" in the 1990s and 2000s, the federation's use of its international treaty power has been more prominent but its impact on de/centralization, as we argue below, has been limited. Coerced

horizontal joint action, i.e., instigated by the central government, has not played a role but could potentially do so in the near future in the important field of pretertiary education, following a 2006 constitutional amendment whose effects have not yet fully materialized (Fischer et al. 2010; Giudici 2017). As argued in the introduction to this special issue, we do not consider voluntary horizontal cooperation as constituting dynamic de/centralization.

Fiscal instruments and court rulings, in contrast, have been much less prominent. While the fiscal capacity of the central government has grown considerably over time, reflected in the increasing restrictions placed on the cantons' ability to raise revenues, this greater fiscal "firepower" has not, on the whole, been used to restrict cantonal policy autonomy. Transfer conditionality has also risen, but within the confines of a proportion of conditional transfers that has remained fairly low. The Federal Tribunal has been called upon to interpret the constitution on some occasions, and has generally done so in a centralizing direction (Knapp 1986, 46), but has played no significant role in the key steps through which dynamic de/centralization has unfolded.

Static De/Centralization Today

As a result of the de/centralization dynamics described above, the Swiss federation is today (i.e., in 2010, when our coding ends) highly centralized in the legislative sphere but still considerably decentralized in the administrative and, especially, the fiscal spheres. By and large, this is true both in comparison to static de/centralization at the outset (tables 1 and 2) and vis-à-vis other major federations today, as is shown in the other articles for this special issue. Legislatively, Switzerland is among the most centralized, and significantly more so than Canada. Administratively, on the other hand, Switzerland has, together with Germany, the most decentralized federal system of the federations examined in this special issue. The stark contrast between high legislative and low administrative centralization is further borne out by the figures on the "duality" of the system: Switzerland is now the least dual – i.e., the most "administrative"—of the six federations. Fiscally, the country is comparatively decentralized but less so than Canada and the United States.

Looking at the individual policy categories, only four out of twenty-two are still relatively decentralized (i.e., scored 5, 6, or 7) in the legislative dimension: culture (P3), education (P7 and P8), and language (P15) (table 1). Even in these areas, however, Switzerland is not the most decentralized, whereas in several others it is considerably more centralized than Canada, Germany, and the United States, notably in the fields of civil and criminal law (P16 and P17), media (P19), and natural resources (P20). In the administrative dimension, Switzerland is the most decentralized in the fields of citizenship and immigration (P2) and culture (P3),

while in the fiscal dimension it scores highest, jointly with Canada, in the borrowing autonomy of its constituent units (F5).⁹

Toward an Explanation of Dynamic De/Centralization in Switzerland

General Discussion

We are now in a position to assess Switzerland's experience in light of our initial expectations. In general, our findings are highly consistent with the hypotheses concerning static de/centralization at the outset and the magnitude of dynamic centralization, but only partially so as regards the latter's timing. As we have seen, Switzerland was highly decentralized at birth and has experienced considerable centralization. However, while the bulk of change has taken place after World War I, major instances of centralization occurred well before then.

The country also provides a good illustration of the impact of economic and social trends. The effect of technological progress can be seen at work particularly in the fields of defense, media, and transport. As innovations were introduced, which either benefited from significant economies of scale or whose scope clearly transcended cantonal borders, the temptation to hand over control to the central government proved hard to resist. For instance, while a degree of cantonal control over infantry corps survived into the mid-twentieth century, tank units and the air force were developed under full central control from the very beginning. In a similar manner, federal licensing of radio and television was established early on, as was the central government's role in transport by rail, water, air, and highways (see also Rappard 1948, 379–380).

Inter-cantonal mobility has also risen greatly: the proportion of the population, both citizens and non-citizens, born in a different canton from that of residence grew from 7.3 percent in 1860 to 24 percent in 1960, and has remained roughly at that level since (BfS 1982, 30; BfS 2014). Also, on average, around 20 percent of the workforce are employed in another canton than their canton of residence (BfS 2017b). All this is likely to have weakened the resolve to defend cantonal autonomy (Aubert 1967, 63).

The drive to build a fully integrated national market has been particularly in evidence (Knapp 1986, 41). Economic motives had already been at the heart of the transition from confederation to federation in the 1830s and 1840s (Rappard 1948, esp. 102; Humair 2009, 13–33, 98) and have remained at the forefront of the centralization process after 1848. They played a prominent role in the unification of the legal codes approved in 1898 (e.g., Aubert 1967, 44–45) as well as, of course, in the wide-ranging powers of economic regulation granted to the central government in 1947 (Vatter 2014, 431).

After WWII, globalization and especially European integration have further contributed to the centralizing trend but less so than could have been expected. Despite remaining outside the European Union, Switzerland has undergone a significant process of "Europeanization" (e.g., Church 2006; Jenni 2015), which has had an effect particularly in the fields of economic activity and law enforcement, where centralization has occurred for the sake of making the country "EUcompatible". Switzerland's exposure to regional integration has made itself felt, however, at a time when the bulk of dynamic centralization had already taken place, so it has primarily affected the nature of the central government's *own* legislation and not so much the distribution of powers between the latter and the cantons. Its centralizing effect has mainly been produced by the fact that federal legislation in "Europeanized" fields tends to be much more prescriptive and detailed—since it effectively transposes EU law—than it was prior to Europeanization or than it typically is in non-Europeanized fields, thereby posing greater constraints on cantonal legislative and administrative autonomy.¹⁰

Switzerland also provides a good illustration of how the evolution in the patterns of collective identification and expectations concerning the role of government affect attitudes toward de/centralization. Although already subordinate to a sense of a common Swiss nationality, cantonal identities were very strong when Switzerland became a federation in the mid-nineteenth century, particularly in the former *Sonderbund* cantons (e.g., Zimmer 2003, 150; Dardanelli 2011, 302–303). By the end of the twentieth century, though still important (Mueller 2013), they came to be dwarfed by identification with the country as a whole, while identification with the language communities has never risen to significant levels (e.g., Kriesi et al. 1996, 55–57; Dardanelli 2011, 309–310). The fact that this evolution has taken place in spite of the country's multilingual character suggests that multilingualism *per se* does not represent an obstacle to dynamic centralization.

Expectations concerning the role of government in the economy and society have also changed greatly, particularly in areas such as environmental protection, health care, and welfare services. In these fields, as Knapp (1986, 41) argued, "Differences [across cantons] have come to be seen at a minimum as obstacles."

The Swiss experience is consistent with the hypothesis that instances of dynamic centralization are more likely to occur at times of economic or security shocks, but only up to a point. As detailed above, while the magnitude of dynamic centralization was indeed highest in the crisis period of 1910–1950, a great deal of centralization has occurred in the absence of significant economic and security shocks. When it comes to the fiscal sphere, furthermore, the shocks of the first half of the twentieth century led to an expansion of the fiscal capacity of the central government rather than to a significant reduction in the cantons' fiscal autonomy. Switzerland nonetheless offers at least one powerful example of how in times of crisis citizens and political actors are more willing to take bold steps.

As Hughes ([1954] 1970, 49) pointed out, when the central government's fiscal needs suddenly rose sharply as a consequence of Word War I, cantonal contributions to the federal budget could have risen in line with what the constitution provided for but, instead, the decision was to expand central government taxation: a "turning-point in modern Swiss financial history". An external shock such as the Franco-Prussian War of 1870–1871 also played a role in fostering centralization in the 1870s (Rappard 1948, 280–282).

Switzerland also provides a good example of the way in which attitudes of organized interest groups can act as important intervening variables. The unification of the civil and criminal law codes, approved by referendum in 1898, was preceded by strong lobbying efforts on the part of the legal profession: in 1868–1869, the Swiss Bar Association voted resolutions to petition the parliament in favor of unification (Aubert 1967, 44–45). "Peak" associations often adopted a centralized structure early on and were thus less likely to defend cantonal autonomy (e.g., Aubert 1967, 64; Criblez 2008, 18).

The expected effect of political variables, by contrast, is only partially supported. The Swiss party system is still not fully "nationalized". While most parties operate federation-wide, their organization, financial, and programmatic structure is still in many cases that of a con/federation of cantonal parties rather than a fully unified "national" actor (e.g., Church 2004, 60–70; Ladner 2007, 310–311; Kriesi and Trechsel 2008, 90–93; Bochsler et al. 2016). But this does not seem to have posed a major obstacle in the way of centralization, although it may have slowed it down and helped confine it to the legislative sphere. Likewise, the evidence is not fully consistent with the expectation concerning party ideology. If the centralist drive of the 1870s–1880s was heavily associated with the left-wing (at the time) Radicals (Rappard 1948, 375–376), centralization has continued apace post-1950, even though left-of-center parties have never had a majority in the federal executive in this period.

Finally, with regard to institutional factors, four points emerge from the Swiss experience. First, the relatively high number of rather small constituent units is likely to have facilitated the process of centralization, but there is no clear evidence that it has played, *per se*, a prominent role. Second, if Galligan (2006, 532) is correct in arguing that judicial review "provides an ongoing routine channel for constitutional adjustment that takes the pressure off formal amendment in most federations," its absence in Switzerland may have contributed to the high frequency of constitutional change.

Third, with the partial exception of direct democracy, the key institutional features of the Swiss federation—cantons' residual powers, the relatively high formal rigidity of the constitution, and parliament's autonomy from the executive—do not appear to have presented a major obstacle to centralization. Direct democracy is a partial exception because, if it has not ultimately prevented centralization, it has arguably slowed it down and made it less deep and extensive

than it could otherwise have been (see also Eschet-Schwarz 1989). As detailed in the Supplemental Online file (88–91), voters have turned down centralizing proposals on a number of occasions, though most major steps have been approved the first time they were presented to them. ¹² In the mid-1960s, Aubert (1967, 61) remarked: "A constitutional amendment whose objective is to confer a new power to the federation is nowadays almost guaranteed to succeed." ¹³ Fourth, where Switzerland's experience closely matches the theoretical expectation is in the fact that centralization has largely been confined to the legislative sphere, principally through the use of framework legislation.

Most of the time, thus, dynamic policy centralization in Switzerland seems to have been determined by the following "funnel of causality":

- (a) the *socio-economic* and *socio-cultural trends* of technical progress, rising mobility, market integration, growing identification with the federation as a whole, the lessening of Catholic alienation (see below), and rising expectations about the role of government have been the key drivers, occasionally reinforced by economic and security shocks;
- (b) as a result of these trends, *collective attitudes* have become more favorable to central versus cantonal policy-making over time; and
- (c) when political actors have taken centralizing steps in response to these demands, they have sometimes been frustrated by the need to obtain citizens' approval but have generally managed to secure it. The cantons' residual powers and the absence of judicial (re-)interpretation of the constitution have necessitated formal constitutional change but have not represented a major obstacle.

It is also important to stress that voluntary inter-cantonal co-operation has increased a great deal over time, especially since the 1960s (e.g., Bochsler and Sciarini 2006; Bochsler, 2009). Given that it is often seen as a way to avoid centralization (e.g., Auer 2016, 326), it is likely that in its absence centralization would have been even more extensive.

The Dog That Didn't Bark: Multilingualism and Centralization

To better assess Erk and Koning's (2010) hypothesis that linguistic diversity acts as a brake on centralization, we have analyzed the voting behavior of different linguistic and religious groups in all the sixty-seven direct democracy votes that have significantly affected the "federal balance" (see Supplemental Online file), divided into six periods. The results, displayed in figure A5, suggest the following three points.

First, throughout the life of the Swiss federation, although with one major exception (see below), religion has been a stronger determinant of voters' attitudes

to centralization than language. Second, Catholic opposition to centralization had already lost most of its strength by the turn of the twentieth century (see also Eschet-Schwarz 1989, 104). Third, since about 1950, French-speaking Protestants have actually been more supportive of centralization than German-speaking Protestants, who can be considered the traditional "hegemonic group". Once again, these data confirm that the religious cleavage (the only one to give rise to different political organizations such as parties and trade unions) has almost always been stronger than the linguistic divide in Swiss politics (Linder et al. 2008) and that multilingualism, in particular, is "the dog that didn't bark" in the centralization of Swiss federalism.

The strong opposition to centralization among Catholics in the nineteenth century was part of a broader pattern of Catholic alienation from the new federal state in a period of Radical hegemony, which started to fade away only after the first Catholic-Conservative was elected to the Federal Council in 1891 (Eschet-Schwarz 1989, 103; Kriesi and Trechsel 2008, 77). The major exception to the rule that language has not been a powerful determinant of voting behavior was the defeat of the 1872 constitutional revision. On that occasion, unusually, French-speaking Protestants sided with Catholics of all language regions in voting against it (Rappard 1948, 284). This has been attributed to the fact that the movement behind the constitutional revision, particularly in relation to the centralization of the army and the unification of the legal codes, had been heavily inspired by Germany and was thus seen by many French speakers as a form of Germanization (Rappard 1948, 280–282; Aubert 1967, 69; Humair 2009, 141; Kölz 2013, 560–563). Once these aspects had been removed or, at least, weakened, French-speaking Protestants overwhelmingly approved the 1874 constitutional revision.

After World War I, Germany ceased to be seen as a model in German-speaking Switzerland so French speakers no longer had reason to equate centralization with Germanization. Furthermore, especially after World War II, centralization has often been associated with "progressive" policies such as the building of a welfare state, enhanced protection of the environment, and so forth. Given the higher support for left-of-center ideas and parties in the *Suisse romande*, particularly among Protestants (Eschet-Schwarz 1989, 104), centralization has thus come to be seen by many French speakers as the price to pay for the development of progressive policies nationwide (Mueller 2015, 185-207; Mueller and Dardanelli 2014). This may explain why French-speaking Protestants have been those most supportive of centralization over the last few decades (figure A5).

Assessing Competing Explanations

How do our findings speak to the competing explanations put forward in the literature to account for the evolution of federations? Three main explanatory approaches can be identified.

The first, "sociological", approach, sees federalism as determined by societal patterns and thus explains longitudinal dynamics as a product of change at the societal level (e.g., Livingston 1956). The second approach stresses the role of political actors, in particular the nature of parties and party systems, and seeks to account for de/centralization on the basis of changes at that level (e.g., Riker 1964). The third approach focuses on institutional factors and attributes de/centralization trajectories to continuity and change in the institutional architecture of a federation (e.g., Bednar 2008). As seen above, several political and institutional factors highlighted in the latter two approaches have only partly operated as expected.

On balance, thus, the evidence tends to support a largely "sociological" explanation of dynamic centralization in Switzerland, whereby major trends at the societal level have been the key drivers, while partisan and institutional factors have only played a secondary role. Such a sociological explanation, however, needs to acknowledge that, contrary to the hypothesis put forward by Erk and Koning (2010), linguistic diversity *per se*, even if territorially entrenched, has not played a significant role in Switzerland's centralization dynamic.

Conclusions

In this article, we have presented the results of the first ever detailed measurement of dynamic de/centralization in Switzerland since 1848. They show that the Swiss federation was highly decentralized at the outset and has undergone an extensive process of centralization in the legislative sphere, but markedly less so in the administrative and, especially, fiscal spheres. Centralization has taken place mainly in an incremental fashion throughout the life of the federation.

Thus, despite its relative international isolation and societal diversity, Switzerland has largely shared the same broad socio-economic and socio-cultural trends that have fostered centralization in most other federations. With the partial exception of direct democracy, the institutional properties of the political system do not seem to have posed a major obstacle in the way of political agency responding to the above trends. Even the recent reform of the fiscal equalization system and the re-allocation of some powers, though certainly important for the functioning of Swiss federalism as a whole, have not had a significant impact on its degree of de/centralization.

These findings both substantiate and challenge the existing literature. On the one hand, they broadly confirm the prevailing assessments of how Swiss federalism has evolved over time and substantiate them with detailed quantitative indicators for twenty-two policy areas, two functional dimensions, and five fiscal categories. On the other hand, they lend support to a sociological account of de/centralization dynamics but show that linguistic diversity by itself does not play a major role in those dynamics.

Supplementary Data

Supplementary data are available at Publius: The Journal of Federalism online.

Appendix A

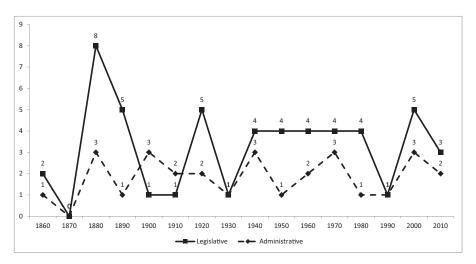


Figure A1 Frequency of dynamic policy de/centralization by time point.

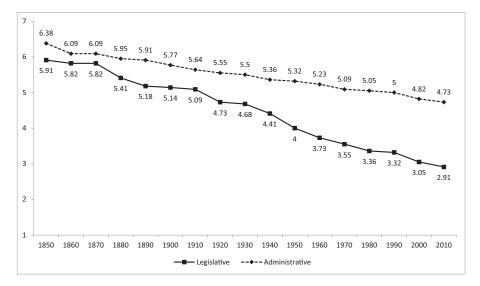


Figure A2 Mean static policy de/centralization, 1850–2010.

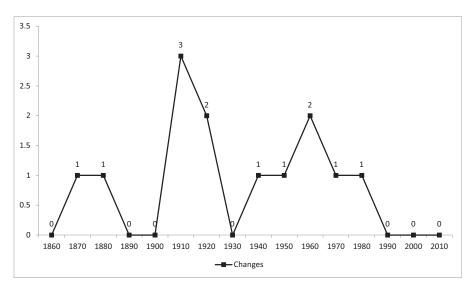


Figure A3 Frequency of dynamic fiscal de/centralization by time point.

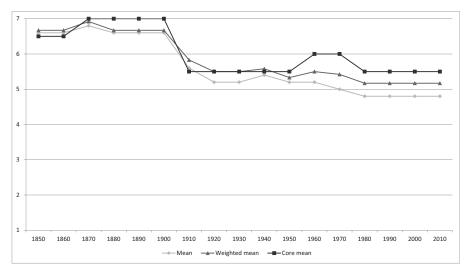


Figure A4 Mean static fiscal de/centralization, 1850-2010.

Note: Weighted mean = (F1+F2+(F3+F3+F4/3)+F5)/4; Core mean = (F1+F3)/2

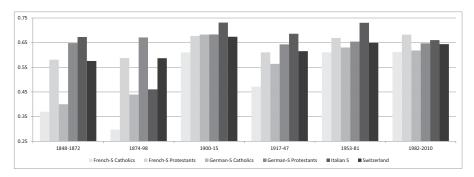


Figure A5 Mean support for centralization by linguistic and religious group, six periods.

Note: percentage of Yes votes in popular votes touching upon centralization in the given period. For a list of the 67 votes, see Supplemental Online file (pp. 88–91).

Notes

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- 1. This is a translation of the original text, which reads: "En 1848, les cantons étaient des entités quasi souveraines. Ils n'étaient que peu limités dans leur possibilité d'action par la Confédération ... ont transformé les cantons en des entités plus ou moins autonomes chargées d'exécuter les volontés fédérales en coopérant avec les autorités fédérales et les autres autorités cantonales. On pourrait donc dire que, pour l'essentiel, les cantons sont devenus des exécutants dans le cadre d'un fédéralisme dit coopératif." See also Aubert (1967, 65).
- For the latest version of the German/French edition of the Handbook of Swiss politics, see Knoepfel et al. (2017).
- Six cantons, so-called "half cantons," have a slightly different constitutional status (Grisel 1980). The cantons number twenty-six since 1979, when the northern part of the Jura territory separated from canton Berne to form the new canton of Jura (Siroky et al. 2017).
- 4. At the beginning, most cantons had their members of the upper house selected by the cantonal parliament but in time all came to embrace direct popular election (Vatter 2014, 314). A 1931 constitutional amendment extended parliament's term to four years (Rappard 1948, 360–362).
- 5. Until 1874, cantons were free in determining their own vote (e.g., via a separate referendum); since then, the popular majority in a canton defines the vote of that

- canton (Linder et al. 2010, 21).
- 6. In contrast to religious affiliations, patterns of language use have remained broadly stable: in 2000, the respective percentages were 72, 21, 4, and 0.6 (Lüdi and Werlen 2005, 7–9).
- 7. Although frequency is an aspect of *tempo*, for ease of presentation we discuss it first, separately from pace, timing, and sequence.
- 8. This may also be due to the fact that some instances of disentanglement have consisted in centralizing some powers (e.g., over highways) while decentralizing others (e.g., over airports) within the same broad policy area (transport, in this case).
- 9. Data for these and other comparisons between Switzerland and other federations are supplied in the other articles in this special issue, especially in the concluding article.
- 10. We are grateful to one of the reviewers for pointing this out to us.
- 11. This is a translation of the original text, which reads: "Les différences sont dorénavant ressenties au moins comme des entraves."
- 12. While constitutional revisions require a double majority, central government acts (if challenged by an optional referendum) only require a popular majority. Neither is subject to a minimum turnout quorum.
- 13. This is a translation of the original text, which reads: "Une révision qui a pour but de donner un nouveau pouvoir à la Confédération est, à l'époque actuelle, presque assurée du succès."

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