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## Conceptualising, Measuring, and Theorising Dynamic De/Centralisation in Federations

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### Abstract

The paper develops a conceptual, methodological and theoretical framework for analysing dynamic de/centralisation in federations. Although de/centralisation trends are crucial to understanding how federal systems evolve, no systematic comparative investigation of the phenomenon over the full lives of federal systems or multiple policy fields has been conducted so far. The paper seeks to address this gap by proposing a framework for doing so. The paper first briefly reviews the literature and outlines the research design and the methods we have adopted. It then conceptualises static de/centralisation as the distribution of power between the constituent governments and the general government of a federation at any one point in time and describes the seven-point coding scheme we have employed to measure such distribution across 22 policy areas and five fiscal categories at 10-year intervals since the establishment of a federation. The subsequent section conceptualises dynamic de/centralisation as a process marked by changes in the distribution of power between the two orders of government in at least one policy or fiscal category and discusses its five main properties: instrument, direction, form, magnitude, and timing. Drawing from several strands of the literature, in the last substantive section the paper builds a 'funnel of causality' theoretical framework that identifies seven categories of causal determinants of dynamic de/centralisation, from which we derive a set of hypotheses for testing.

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## 1 Introduction

At its heart, federalism is a constitutional device to share power between at least two orders of government. The division of responsibilities and resources between the general and constituent governments is thus crucial to the way federal systems operate. Such division, however, is never static. The original settlement, as embodied in the federation's founding constitution, is subject to multiple pressures for change over time. Comparisons of how this division is put into practice across federations thus need to be complemented by cross-temporal analyses to beget a deeper understanding of the nature of federalism (e.g. Friedrich, 1968: 7, 54; Hicks, 1978: 9; Krane, [1982] 1988: 44; Benz, 1985). In broad terms, change can take two forms: a shift of power 'upwards' to the general government or a shift of power 'downwards' to the constituent units.<sup>7</sup> The first case constitutes *centralisation*, as more power accrues to the centre; the opposite case is *decentralisation*. De/centralisation trends matter because they alter the 'federal balance' and can have far-reaching consequences on the quality of government and democracy in federations. How and why do some federal polities become more centralised over time while others become more decentralised? Is de/centralisation a uniform process, or does it vary across policy fields and time periods? Despite the fact that the "vertical distribution of power is of fundamental importance to the study of federalism" (Bowman and Krause, 2003: 302), the above questions have not been answered satisfactorily. No longitudinal, systematic comparative study measuring de/centralisation has been carried out. As noted by Watts (2008: 176): "Much of this research has yet to be undertaken by comparative scholars" (also Bowman and Krause, 2003: 320n4; Gerber and Kollman, 2004: 397). Our project seeks to fill this gap.

The rest of the paper is organised as follows. Section 2 briefly reviews the literature and shows how the questions we are addressing have frequently been touched upon since the late eighteenth century but have not hitherto been objects of a systematic comparative investigation. Section 3 describes the research design and the methods we have employed to measure dynamic de/centralisation cross-temporally and cross-sectionally. In sections 4 and 5 we develop our conceptualisation of, respectively, static and dynamic de/centralisation. Section 6 then presents a theorisation of dynamic de/centralisation based on a 'funnel of causality' approach and derives a set of testable hypotheses. The final section summarises the contributions the paper seeks to make.

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<sup>7</sup> By using 'upwards' and 'downwards', we do not mean to imply that any or all federal systems are necessarily organized hierarchically.

## 2 A brief review of the literature

Given their central importance for federations, de/centralisation dynamics have always featured prominently in the federalism literature. According to Bryce ([1887] 1995b: 1535-7), fears of rampant centralisation were widespread among the opponents of ratification of the U.S. Constitution, whereas Hamilton feared the opposite, namely, that the largest states might overpower the general government. In *Federalist* 45, Madison argued that the states would preserve a great deal of their autonomy and that the balance between the two orders of government was more likely to be threatened by them than by the general government (Madison, [1788] 2000: esp. 236).

In his study of US democracy in the 1830s, Tocqueville ([1835] 2010: 582-627) also predicted a progressive weakening of the general government vis-à-vis the states. Reviewing the evolution of US federalism over the first century of its existence, however, Bryce ([1887] 1995: 1541, 1565) argued that the general government had clearly grown in power, although not as much as the Anti-Federalists had forecast at the time of the Constitution's ratification. He predicted, nonetheless, that "the importance of the states will decline as the majesty and authority of the national government increase" (Bryce, [1888] 1995b: 1500). In his *Studies in History and Jurisprudence*, Bryce (1901: 216-62) was also among the first to think systematically and comparatively about the forces leading to centralisation and decentralisation over time, which he labeled 'centripetal' and 'centrifugal' forces, and on the constitutional devices countries, federations included, can adopt to contain them.

From a comparative perspective, Corry (1941) was among the first to detect a generalised pattern of growing centralisation, which, if left unchecked, would threaten the essence of federalism. In his seminal study *Federal Government*, the book that inaugurated the modern comparative study of federalism, Wheare (1946: 252-3) also noted federations' general tendency to become more centralised over time and identified some factors accounting for it, such as war and economic crises, and certain processes through which it manifested itself, such as fiscal centralisation. Livingston (1956) considered the evolution of federations from the perspective of formal constitutional change and concluded that social forces are the primary factors shaping de/centralisation.

The first analytical attempt to theorise and explain de/centralisation was Riker's *Federalism – Origins, Operation, Significance* (1964). Riker developed a theoretical and methodological framework for studying the question and applied it to a detailed examination of the evolution

of the United States. He also briefly considered other cases in the light of his framework (Riker, 1964: 124-36). In his later review of the field, Riker observed that some federations experience substantial centralization over time while others do not and argued that developing an index of centralisation “would make possible a truly comparative study of federalism for the first time” (Riker, 1975: 131-140, quotation at 140). To that effect he proposed to employ an index of party centralisation, on the grounds that “one can measure federalism by measuring parties” (Riker, 1975: 137). Writing from a more legalistic perspective, Sawyer (1969: esp. 64-105, 179-87) also devoted considerable attention to longitudinal dynamics. He argued that centralisation was the dominant trend, although not without exceptions, and posited a sequence hypothesis whereby federations tend to transition over time between co-ordinate, co-operative, and ‘organic’ forms of federalism (Sawyer, 1969: 117-30). In a similar vein, Duchacek (1970: 348) highlighted the propensity of modern federations to become more and more centralised and argued that it has “complicated our task of differentiating with any degree of precision a federal from a unitary system.”

Approaching the question from an economics perspective and focusing on fiscal aspects, Oates (1972: 221-41) identified several factors that could lead to centralisation or decentralisation. He argued that the “weight of the arguments, particularly the crucial phenomenon of growing interdependency over time, creates, I think, a presumption in favor of centralizing tendencies” (Oates, 1972: 229). Following Philip (1954), he also hypothesised a sequential process whereby centralisation is likely to occur in the fiscal sphere first and later spill over into the legislative sphere and, possibly, the administrative sphere too (Oates, 1972: 226-7). Reviewing the historical trend across several federations in the twentieth century, he remarked that centralisation increased in the first half of the century but declined in the post-WWII period, in the context of a general increase of shared inter-governmental responsibility in the provision of public services (Oates, 1972: 230-7). From a similar perspective, Blankart (2000) explained fiscal centralisation, notably in Germany, as being the result of a collusion between the constituent units and the general government to eliminate tax competition.

The question of de/centralisation remained at the heart of the mainstream political science literature on federalism. In his *Exploring Federalism*, Elazar (1987: 198-222) noted the contrast between the centralisation of power that had occurred in the United States and the decentralisation experienced by Canada, although he did not explore the question further. Watts (2008: 171-8) put forward a more developed conceptual framework, notably distinguishing three different dimensions of de/centralisation: legislative, administrative, and

financial. In her analysis of what makes a federation 'robust' in the long run, Bednar (2008) argues that centralisation, in the form of encroachment by the general government on the competences of the constituent units, is the most serious threat to the 'federal balance' and sees, like Elazar (1987), a vibrant 'federal culture' as the most effective safeguard against it.

Despite the prominence of the question, dynamic de/centralisation has been studied empirically to a limited extent only, in terms of both depth and coverage. A number of authors have explored dynamic de/centralisation in broad qualitative terms in one or two federations (e.g., Grodzins, 1961, Bowman and Krause, 2003, and Kincaid, 2013 on the U.S.; Knapp, 1986 on Switzerland; Klatt, 1999 on Germany; Fenna, 2012 on Australia; Döring and Schnellenbach, 2011 on Germany and the U.S.). Others have covered a larger number of cases with quantitative methods but have relied on fiscal data only (e.g. Pommerehne, 1977; Krane, [1982] 1988; Erk and Koning, 2010). No attempt to measure dynamic de/centralisation in the main federations across policy areas and the federation's entire life span has, to our knowledge, been undertaken.

The recent surveys of the field by Beramendi (2007: 758-9) and Hueglin and Fenna's (2015: 238-9) highlight the changes federations have experienced over time but conclude that our knowledge of dynamic de/centralisation is still limited.

The literature has thus made considerable progress in conceptualising and theorising dynamic de/centralisation in federal systems and in empirically exploring some aspects of the phenomenon. What is missing is a systematic comparative study able to map de/centralisation trends across time and space and to test competing explanations for their occurrence.

There have been several attempts to develop indices of static de/centralisation (e.g., Lane and Ersson, 1999: 187; Arzaghi and Henderson, 2005; Brancati, 2006; Hooghe et al., 2008a) but such indices are either too narrow or not fine-grained enough to capture the dynamics of interest here.

On one hand, there has been over-reliance on fiscal indicators, such as the share of total public expenditure carried out by sub-central governments, that measure *capacity* rather than *autonomy* and therefore are not good indicators of de/centralisation. As Blöchliger (2013: 16) remarked: "The most frequently used indicator is the ratio of SCG [sub-central governments] to total tax revenue or spending, which is a poor measure for assessing the true autonomy SCGs enjoy". This is because, as Musgrave (1969: 342) noted long ago:

“Local governments which act as central expenditure agents do not reflect expenditure decentralisation in a meaningful sense”. The share of total government revenues raised by sub-central government, as used, among others, by Lijphart (1984: 177-9), is arguably a better measure but still does not satisfactorily capture the nature of the fiscal relations between the general government and the constituent units.

On the other hand, the Regional Authority Index (RAI) developed by Hooghe et al. (2008a), the most elaborate and comprehensive index available, is heavily weighted towards institutional aspects and does not capture the relatively subtle dynamics of de/centralisation in federations, which typically occur in the policy sphere. Its score for the constituent units’ self-rule – which matches our conceptualisation of autonomy – does not vary between 1950 and 2006 for Australia, Canada, Switzerland, and the United States, and only drops from 14 to 12 for Germany (Hooghe et al., 2008c) while the literature shows that all these cases have experienced significant dynamic de/centralisation.

To overcome these limitations, we have developed, as outlined below, a more elaborate conceptualisation of de/centralisation and a more fine-grained scheme to measure it.

### **3 Design and methods**

Our methodology consists of seven steps. First, we selected six long-established and continuously democratic<sup>8</sup> federations that lend themselves to a comparative longitudinal analysis: Australia (1901-), Canada (1867-), Germany (1949-), India (1950-), Switzerland (1848-), and the United States (1789-).

In the second step, we conceptualised static and dynamic de/centralisation and devised a scheme to measure them. Refining an approach pioneered by Riker (1964: 83), the scheme measures static de/centralisation across 22 policy areas and five fiscal categories – detailed below – at 10-year intervals since the inception of the federation and assigns a code to each data point. These data points are structured by three elements: the federation under examination; the time point; and the category of de/centralisation of interest. Each code is accompanied by a three-star ‘confidence rating’ (\*=low, \*\*=medium, \*\*\*=high) to indicate the coder’s confidence in the measurement. This is intended to take into account the reality that information availability and quality will inevitably vary across time and/or policy areas.

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<sup>8</sup> By ‘continuously democratic’ we mean not having experienced periods of authoritarian rule, rather than being fully democratic from a contemporary perspective (e.g. having full universal suffrage etc.).

In the third step, we drew from several strands of the literature to build a theoretical framework for the occurrence of dynamic de/centralisation and we derived a set of testable hypotheses. The framework rests on a ‘funnel of causality’ approach (Campbell et al., 1960: 24-32) that conceives of causation as a process combining more remote ‘structural’ factors and more proximate ‘agency’ ones.

The fourth step was devoted to collecting data on static de/centralisation across the various categories and sub-categories for each data point in the six federations. We coded de/centralisation on the basis of constitutional and non-constitutional developments (see below, section 5) increasing or decreasing the legislative, administrative, and fiscal autonomy of the constituent units that occurred decade by decade. Our principal sources were government publications such as official journals and statistics and the scholarly literature on each policy and fiscal category in each country.

The subsequent step consisted of validating our coding. Following Bowman et al. (2005: 964) we opted for a ‘content validation’ (Miller, 2007: 89-91) approach through a three-level expert survey of: (1) experts on each policy and fiscal category in each federation; (2) experts on public administration and intergovernmental relations in each federation; and (3) experts on comparative federalism. Once so validated, we assembled the data in ‘country’ files – both thematic and chronological – and in a master dataset, which will be made available online.

In a sixth step, we mapped these data for each federation and comparatively, with the aim of identifying the most important patterns emerging. We discuss the trajectory of dynamic de/centralisation in each federation in the respective country study paper and address the cross-sectional patterns from a comparative perspective in the concluding paper. To aid this exercise, we computed the following statistics and mapped them longitudinally: a) the modal and mean policy and fiscal scores, and the standard deviation among them, by time point; b) the deviation between the legislative and administrative policy scores by category and in aggregate, by time point (L-A deviation);<sup>9</sup> c) the total, modal, and mean frequency of score change by policy and fiscal category and in aggregate; d) the patterns of direction and magnitude of score changes; e) the cumulative direction and magnitude of score change by policy and fiscal category and in aggregate; f) the mean rate of score change/year by different periods.

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<sup>9</sup> This statistic can be considered a measure of the degree of ‘duality’ of the federation.

In the final step we seek to explain the patterns observed in the light of the hypotheses developed in the theoretical framework. The hypotheses susceptible to testing in a single case are addressed in each of the case study papers. Drawing on these individual accounts, in the concluding paper we offer a synoptic assessment of dynamic de/centralisation from a comparative perspective, show the extent to which it confirms or disconfirms the extant literature, and highlight the main ‘take away’ points for our understanding of federalism emerging from this study.

#### **4 Conceptualising and measuring static de/centralisation**

Like most social science concepts, centralisation and decentralisation have been employed by different authors in different ways. Among the issues raised by this diverse usage, three are particularly relevant to our project. First, the term ‘decentralisation’ – and, though less often, centralisation – is used both from a static and a dynamic perspective and applied to a wide variety of situations and processes. Second, ‘decentralisation’ is frequently loaded with normative undertones as to its presumed preferability to ‘centralisation’. Third, when ‘decentralisation’ is contrasted to ‘centralisation’, the two terms are often explicitly or implicitly understood as describing a conceptual dichotomy rather than a continuum.<sup>10</sup> To overcome these problems, our conceptualisation and terminological usage are based on the following: first, we conceptualise de/centralisation as a continuum rather than a dichotomy, and take no normative position regarding the desirability of either end of the continuum; for this reason, we employ the term ‘de/centralisation’ – or centralisation and decentralisation – rather than ‘decentralisation’; second, as elaborated in this and the following section, we distinguish between static and dynamic de/centralisation.

We define static de/centralisation as the distribution of power between the institutions of the general government and the institutions of the constituent units of a federation at any given point in time. Power is understood here as the ability of a constituent unit to take binding decisions on public policy unconstrained by the general government or other constituent units.<sup>11</sup> Reflecting the prevailing constitutional practice in federations (e.g. Steytler, 2009), we treat local governments as sub-units of a constituent unit. We thus consider shifts of

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<sup>10</sup> Given space limitations, we cannot provide a full account of the debate in what is a rather vast literature; see, among others, Austin (1847), Fesler (1965), Hutchcroft (2001), Schneider (2003), and Dubois and Fattore (2009).

<sup>11</sup> For similar definitions, see Oates (1972: 19fn20, 196). This does not deny that in systems of ‘administrative federalism’ such as Germany, ‘shared rule’ within the institutions of the general government gives the constituent units collective co-decision powers over public policy enacted by the general government.

power between the general government and local governments as being shifts of power between the general government and the constituent units.

Building on Philip (1954), Riker (1964), U.S. ACIR (1981), Elazar (1987), Schneider (2003), and Watts (2008), among others, we conceptualise a constituent unit's autonomy as having two principal dimensions: *policy* autonomy and *fiscal* autonomy. Although we acknowledge that fiscal autonomy has a significant bearing on policy autonomy, we treat the two dimensions separately – on the grounds that, most often, fiscal autonomy cannot be encapsulated within individual policy fields. The first dimension relates to the constituent units' ability to shape public policy. The second one relates to their ability to obtain financial resources through their own tax and borrowing powers, and to allocate such resources as they please. It is fruitful to disaggregate these two main dimensions into sub-dimensions so as to better capture their complex nature and the variation across different components.

Policy autonomy can be divided into *legislative* autonomy and *administrative* autonomy across multiple policy areas. Legislative autonomy relates to the constituent units' control of primary legislative powers. This is understood as both the formal constitutional allocation of powers and the constituent units' *de facto* ability to exercise legislative powers unconstrained by another order of government. The latter aspect is important because the constitutional allocation can often be in the form of shared, or 'concurrent', powers, and a general government's 'framework legislation' can leave little margin for manoeuvre to the constituent units' ability to legislate. Administrative autonomy concerns the degree to which the constituent units implement the law of the general government as well as their own legislation (e.g., Blöchliger, 2013: 31). In systems of 'administrative federalism', the constituent governments carry out the bulk of implementation. This grants them a degree of discretion — hence of autonomy — that they can use to shape the final outcome of a policy, including, in some cases, the issuance of secondary legislation. Although this form of autonomy is arguably less consequential than legislative autonomy – which is the defining feature of federal systems — it can still be significant.

Building on Riker (1964: 49-84), Oates (1972: 19), and Watts (2008: 194-8), as well as on the UN (2015) and OECD (2015: 194-5) classifications of the functions of government, we divide the scope of public policy into the following 22 main areas: agriculture (P1); citizenship and immigration (P2); culture (P3); currency and monetary supply (P4); defence (P5); economic activity (P6); education – pre-school to secondary (P7); education — tertiary (P8); elections and voting (P9); employment relations (P10); environmental protection (P11); external affairs (P12); finance and securities (P13); health care (P14); language (P15); law

— civil (P16); law — criminal (P17); law enforcement (P18); media (P19); natural resources (P20); social welfare (P21); and transport (P22). These fields do not constitute the entire universe of policy areas, and some are broader than others, but they include the most important spheres of government action.

We measure legislative and administrative autonomy in each of the above policy areas on the basis of the following seven-point scale, where 1 is the lowest degree of autonomy and 7 is the highest:

- 1 = exclusively general government
- 2 = almost exclusively general government
- 3 = predominantly general government
- 4 = equally general government and constituent units
- 5 = predominantly constituent units
- 6 = almost exclusively constituent units
- 7 = exclusively constituent units.

Table 1 in the Appendix summarises our conceptualisation of policy autonomy. For these measurements, we rely mainly on general government legislation, executive orders, and judicial rulings, along with relevant secondary literature on each policy field. This measurement system relies, of course, on individual judgement and hence and is to a degree subjective; however, we are reasonably confident that the seven-point gradation combined with measurements taken at ten-year intervals in the above 22 specific policy areas, as well as validation by external experts, minimises the problem.<sup>12</sup>

Fiscal autonomy can be divided into five sub-dimensions.<sup>13</sup> The first is the degree to which the constituent units have direct control of their own revenues, which can be defined as the proportion of own-source revenues out of the total combined constituent unit and local government revenues (F1). The greater the proportion of own-source revenues, the more fiscally autonomous a constituent unit is (e.g., Watts, 2008: 104). We measure it on the basis of the following seven-point scale: 1 = 0-14%; 2 = 15-29%; 3 = 30-44%; 4 = 45-59%; 5 = 60-74%; 6 = 75-89%; and 7 = 90-100%.

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<sup>12</sup> If at a given point in time there was no government action in a particular policy area we code this as a non-applicable (N/A) entry.

<sup>13</sup> Following, among others, Watts (2008: 100), we focus on the revenue side of fiscal autonomy because autonomy on the expenditure side is best captured by the distribution of legislative and administrative powers across policy fields.

The second sub-dimension relates to the restrictions the constituent units face in raising own-source revenues (F2). This includes both restrictions applied to a source of revenues the constituent units otherwise control (e.g., the restrictions applying to the cantonal income tax in Switzerland) and outright exclusion from a particular type of revenue source (e.g., the U.S. Internet Tax Freedom Act). We measure these on the following seven-point qualitative scale: 1 = very high; 2 = high; 3 = quite high; 4 = medium; 5 = quite low; 6 = low; and 7 = very low.

The third sub-dimension is the degree to which the fiscal transfers from the general government to the constituent units come with strings attached (Oates, 1972: 65; Watts, 2008: 106-8; Blöchliger, 2013: 25). This can be defined as the proportion of conditional grants out of the total combined constituent unit and local government revenues (F3). The fiscal autonomy of the constituent units is higher, the lower their degree of dependence on general government conditional grants. We measure this sub-dimension on a reverse scale to F1: 1 = 86-100%; 2 = 71-85%; 3 = 56-70%; 4 = 41-55%; 5 = 26-40%; 6 = 11-25%; and 7 = 0-10%.

The fourth sub-dimension concerns the scope and stringency of the conditions attached to the general government's grants. Wide-ranging or highly stringent conditions naturally constrain more than limited or loose ones. Hence, the more limited their scope and/or the lower their stringency, the more autonomous a constituent unit is in allocating the funds it receives from the general government. We call this sub-dimension 'degree of conditionality' (F4), and we measure it on the basis of the same seven-point qualitative scale as F2: 1 = very high; 2 = high; 3 = quite high; 4 = medium; 5 = quite low; 6 = low; and 7 = very low, where very high means the most stringent conditions.

The fifth sub-dimension of fiscal autonomy relates to the freedom constituent units have in raising revenue through borrowing, or their public sector borrowing autonomy (F5).<sup>14</sup> As a higher freedom to borrow denotes a higher degree of fiscal autonomy, we measure this sub-dimension on a reverse seven-point qualitative scale: 1 = very low; 2 = low; 3 = quite low; 4 = medium; 5 = quite high; 6 = high; and 7 = very high. Table 2 in the Appendix summarises our conceptualisation of fiscal autonomy.

## **5 Conceptualising dynamic de/centralisation**

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<sup>14</sup> For ease of tractability, we refer to formal freedom here but we do recognise that constituent units can sometimes circumvent formal restrictions.

In light of the above, we can conceptualise dynamic de/centralisation at its most generic level as a change in at least one sub-dimension of policy or fiscal autonomy significant enough to be captured by our measuring scheme. Mirroring Riker's (1975: 132) distinction between 'technological' and 'political' centralisation, we distinguish between dynamic de/centralisation and what we have elsewhere (Dardanelli et al., 2015: 14-5) called 'relative growth': the former entails an expansion/reduction in the autonomy of the constituent units vis-à-vis the general government whereas the latter does not.<sup>15</sup> We have identified five main properties of dynamic de/centralisation as a 'dependent variable'.

### ***Direction***

The first property is the *direction* of change (Yd). Changes shifting the measure from a higher to a lower value on our measures signal a reduction in the autonomy of the constituent units and thus constitute instances of *centralisation* (YdA).<sup>16</sup> Conversely, changes entailing a shift from a lower to a higher value indicate an increase in the autonomy of the constituent units and should therefore be treated as instances of *decentralisation* (YdB).

### ***Magnitude***

The second property of dynamic de/centralisation we consider is its *magnitude* (Ym). This can be thought of as a continuous variable, ranging from the theoretical minimum of no change at all (Ym0) to the theoretical maximum of the largest change across all categories (Ym162).

### ***Tempo***

We are also interested in the *tempo* of de/centralisation (Yt). Tempo, in turn, can be divided into *frequency*, *pace*, *timing*, and *sequence*. Frequency (YtA) is the number of instances through which change occurs, ranging from a theoretical minimum of zero to a theoretical maximum of 567. Pace (YtB) can be thought of as a combination of frequency and magnitude and takes three forms: 'micro-changes' (YtB1), incremental changes (YtB2), and 'critical junctures' (YtB3). Micro-changes are changes of small magnitude, large enough to be captured by our coding but not coalescing into a trend leading to significant long-term

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<sup>15</sup> There are also other forms of longitudinal dynamics that share some similarities with dynamic de/centralisation but cannot fully subsumed within it. We discuss them briefly in Dardanelli et al. (2015: 13-15), under the heading of 'cognate phenomena' of dynamic de/centralisation.

<sup>16</sup> This corresponds to the category of 'encroachment' in Bednar's (2008: 66-72) typology of 'authority migration'.

change. Incremental changes, by contrast, do amount to significant trends but occur through small steps over long periods of time. Critical junctures can be defined as time points witnessing high-magnitude change, with significant long-term consequences (e.g., Lipset and Rokkan, 1967: 37-41; Capoccia and Keleman, 2007). *Timing* relates to the point in the life of a federation when change occurs, and can be measured both in absolute (YtA1790<sup>17</sup>-YtA2010) and in relative terms, i.e. as a percentage of the federation's life span (YtB0-YtB100). *Sequence* can be defined as the temporal order in which change occurs and can be thought of as a particular combination of *timing* and *form* and/or *instrument* (YtD(Yt\*Yf/Yi)).

### ***Form***

The third property is the *form* change takes (Yf). In light of the conceptualisation of autonomy introduced above, change can take place in one or more *policy* or *fiscal* areas, and in either the *legislative* or the *administrative* dimension, or both, where policy is concerned. We thus have 44 possible forms of change in policy autonomy (YfP1L-YfP22L and YfP1A-YfP22A) and five possible forms of change in fiscal autonomy (YfF1-YfF5).

### ***Instrument***

The final property is the *instrument* through which change occurs (Yi). We have identified seven such instruments. The first is *constitutional change* (YiA). As the distribution of powers or competences between the general and the constituent orders of government is typically enshrined in the federal constitution, particularly so as regards primary law-making powers, a constitutional amendment shifting the allocation of such competences from one order to the other represents the most straightforward form of de/centralisation. Often, though, de/centralisation takes place in the absence of amendments to the federal constitution, through non-constitutional instruments of change (YiB), of which we can distinguish five types. The first is the use of *framework legislation* by the general government (YiB1), particularly in policy fields that are constitutionally shared between the general and constituent governments. The extent to which the general government makes use of framework legislation and the constraints such legislation places on the constituent governments' ability to exercise their own law-making competences can significantly affect the distribution of powers between the two orders of government. Greater use of detailed framework legislation, which largely pre-empts the legislative autonomy of the constituent units and may also reduce their administrative autonomy, leads to higher centralisation in the

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<sup>17</sup> Applicable to the United States. For the other federations, the applicable date is the first time point after the federation's foundation date.

system. Conversely, a reduction in the use of such legislation and/or a shift to 'lighter' forms of it would give greater autonomy to the constituent governments and make the system more decentralised.

The second non-constitutional instrument is the use of *fiscal instruments* such as conditional grants (YiB2). As constituent units in all federations rely to a greater or lesser extent on fiscal transfers from the general government to meet their spending obligations, a change in the composition of such transfers from general revenue sharing or unconditional grants to conditional grants or vice versa can affect autonomy significantly. By imposing conditions on how the funds are to be used, conditional grants reduce the autonomy of the constituent units compared to unconditional grants or general revenue sharing; hence, an increase in their use over time constitutes dynamic centralisation. A shift in the opposite direction, away from conditional grants towards unconditional grants and general revenue sharing, represents a decentralisation step.

The third such instrument is *court rulings* (YiB3). In federations in which the judicial branch plays an important role in regulating the distribution of power between the general and the constituent orders of government and resolving disputes between them, judicial rulings can have major implications for such a distribution (Aroney and Kincaid, 2016). A ruling or order by a federal court, especially a supreme or constitutional court, significantly restricting the policy and/or the fiscal autonomy of the constituent units represents an instance of centralisation. Conversely, a court ruling expanding the constituent units' autonomy is a form of decentralisation.

The fourth non-constitutional instrument of change is *horizontal joint action* (YiB4).<sup>18</sup> This refers to joint action among the constituent units through, for instance, co-ordination of legislation, common provision of services, or sharing of facilities. In some cases, such horizontal joint action is instigated by the general government and may include an element of compulsion.<sup>19</sup> A shift from the autonomous control of a given policy area — or specific

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<sup>18</sup> Following its widespread use in the literature, we employ the term 'horizontal' to refer to mechanisms operating from one or more constituent unit/s to the others rather than from the constituent units to the general government and vice versa, which we refer to as 'vertical'. The latter term should not be taken to imply that the general government is always 'senior' to the constituent governments, as in most situations the two orders of government are independent and co-ordinated rather than hierarchically linked.

<sup>19</sup> A U.S. example is the *Gramm-Leach-Bliley Financial Modernisation Act* (1999) stipulating that the federal government would impose a national licensing system for insurance agents if at least 26 states did not adopt a uniform licensing system by November 2002. Thirty-five states did so by September 2002.

functions within it — by each constituent unit to a situation of horizontal joint action induced by the general government reduces the autonomy of each unit as the latter becomes dependent on the preferences of the other units to reach an agreement. It can thus be conceptualised as a form of centralisation. A shift from a situation in which a given policy area is under the control of the general government to a situation in which it is collectively controlled by the constituent units through horizontal joint action, by contrast, increases the autonomy of each unit – as its agreement becomes necessary for joint action to take place – and can thus be considered a form of decentralisation.

A fifth non-constitutional instrument of de/centralisation occurs when the constituent units fail to act in a policy or financial area constitutionally shared with the general government, opening the way for the latter to enact its own legislation or regulation in that area. On the widespread principle that general-government law prevails over law enacted by the constituent units, failure to act on the part of the latter leads to such an area becoming *de facto* controlled by the general government, even if constitutionally it remains shared between the two orders of government. We name this instrument *failure to act* (YiB5). Failure to act typically takes the form just described; hence, it is a form of centralisation dynamic. Theoretically, though, it could also take the form of failure to act by the general government leading to the ‘appropriation’ of a particular policy or fiscal area by the constituent units.

The last non-constitutional instrument is the general government’s use of its *international treaty powers* (YiB6). Through such powers, the general government may reduce the policy autonomy of the constituent units by signing international agreements in policy areas within the latter’s competences. A recent U.S. example of such an issue was the Supreme Court case, *Bond v. United States* (2011). If so, such agreements are instruments of centralisation.

Table 3 in the Appendix summarises our conceptualisation of dynamic de/centralisation.

One question that presents itself when measuring dynamic de/centralisation is the potential asymmetric nature of the process. In some cases, de/centralisation affects all the constituent units of a federation; in others, it may affect only a few – or even only one — of them. When mapping de/centralisation dynamics, we thus need to take into account their territorial extent. We deal with this issue by specifying the proportion of the constituent units as well as the proportion of the overall population of the federation affected by dynamic change.

## **6 Theorising dynamic de/centralisation**

As noted in section 2, the central theoretical expectation in the literature is that federations become progressively more centralised over time. While a number of factors have been identified as likely causes of centralisation, they have not been brought together into a coherent theoretical framework. Moreover, as discussed in the previous section, dynamic de/centralisation has multiple properties. In theorising it, we thus need to account for this multiplicity.

Our theoretical framework is based on a 'funnel of causality' approach. First proposed by Campbell et al. (1960: 24-32), the approach seeks to account for the complexity of social causation by integrating different categories of 'structural' and 'agency' factors (see also Gerber and Kollman, 2004: 398). Drawing on the existing literature, we have identified seven categories of such causal factors.

The most remote factors (labelled Xa) pertain to key conditions at the time of the federation's birth. The next set of factors (Xb) comprises the main institutional properties of the federation, which can be expected to remain broadly stable over time. The third set of factors (Xc) are broad trends in the socio-economic sphere which alter some of the 'background' conditions that shaped the federation's original distribution of powers. They are accompanied by processes of change of a socio-cultural nature (Xd) such as in identity patterns and in expectations concerning the role of government in society. Against the backdrop of these trends, major shocks (Xe), such as economic and security threats, also contribute to altering conditions over time. These trends and shocks can be expected to lead to changes in attitudes towards the vertical distribution of powers in the federation (Xf), principally among the mass public, organised interests, and the media. The latter, in turn, create incentives and opportunities for political actors (Xg) who, operating within the structural setting of each federation's properties, are able to enact change.

### ***Conditions at the birth of the federation (Xa)***

Under this heading, we consider five conditions divided into two sub-groups. In the first sub-group are two conditions that can be expected to shape the initial 'vertical' distribution of power: the historical period in which the federation came into being (XaA) and whether the federation was a product of a 'federal bargain' (XaB). The second sub-group is made up of initial conditions that have an effect over the long-terms dynamics of de/centralisation: the initial distribution of power itself (XaC), together with the number of constituent units (XaD), and whether the federation was monolingual or multilingual (XaE).

Because expectations about the role of government were much more limited in the eighteenth and nineteenth centuries compared with the twentieth century, especially after World War II, the federations established before World War I are likely to have been more decentralised at the outset than those established after it. This has implications for the *magnitude* and the *timing* of dynamic de/centralisation: a) the older federations can be expected to have experienced more centralisation than the younger ones, and b) the bulk of that centralisation can be expected to have occurred after World War I.

The theoretical construct of the ‘federal bargain’ introduced by Riker (1964: 12-6) sees independent states<sup>20</sup> uniting to form a federation while also seeking to retain as much autonomy as possible. Hence, federations born out of a ‘federal bargain’ can be expected to be less centralised at the outset than federations born out of a different process. Among our cases, the United States, Switzerland, Canada, and Australia were both established before World War I and were the product of a ‘federal bargain.’ The German and Indian federations were (re-)created after World War II in different circumstances, thus compounding the causal effects of the two conditions. Hence:

H1a: other things being equal, the United States, Switzerland, Canada, and Australia will have been less centralised at birth than Germany and India.

H1b: given their lower centralisation at the outset, other things being equal, the United States, Switzerland, Canada, and Australia will have experienced greater centralisation than Germany and India.

H1c: the older federations will have experienced the bulk of their centralisation after 1920.

A federation with fewer and therefore larger constituent units can be expected to be in a stronger position to withstand pressures for centralisation than a comparable federation with a larger number of smaller units (e.g. Simeon, 1972: 38-9; Watts, 2008: 71-2). If the number of units increases over time, their ability to resist centralisation will correspondingly decrease. The number and size of constituent units thus affect the *direction* and *magnitude* of dynamic de/centralisation. Among our cases, Australia and Canada are at one end of the spectrum, with fewer units, and the United States is at the other end, with the largest number, with Germany closer to former, and Switzerland and India closer to the latter. Hence:

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<sup>20</sup> Or units enjoying a high degree of autonomy, such as self-governing colonies.

H1d: other things being equal, Australia, Canada and, to a lesser extent, Germany will have experienced less centralisation than Switzerland, India, and, especially, the United States.

We take the presence of territorially concentrated language communities to be an indicator that the federation in question was multi-cultural and potentially even multi-national. Minority cultural – and, even more so, national – communities, particularly when they constitute the majority in one or more constituent units, can be expected to want as much self-government for their constituent units as possible and thus resist centralisation (e.g., Fenna, 2012: 588; Kincaid, 2013: 158-9). In a study of the post-1970 period, Erk and Koning (2010) argue that monolingual federations tend to centralise while multilingual federations tend to decentralise. Our expectation is that the linguistic nature of the federation would interact with the evolution of collective identities, discussed below, to shape attitudes towards de/centralisation, and have an impact on the *magnitude* of centralisation. Among our cases, Canada, India, and Switzerland are multilingual while Australia, Germany, and the United States are monolingual. Hence:

H1e: other things being equal, Canada, India, and Switzerland will have experienced less centralisation than Australia, Germany, and the United States, due to their multilingualism.

### ***Institutional properties of the federation (Xb)***

Here we discuss three factors: 1) whether the constituent units have residual powers (XbA); 2) whether the ‘division of labour’ between the general government and the constituent units has primarily a ‘dual’ rather than administrative nature (XbB); and 3) whether the federation has a parliamentary or non-parliamentary system of government (XbC).

In some federations, the constituent units possess general residual powers (e.g., Kincaid and Tarr, 2005; Majeed et al., 2006). If so, new areas of potential government action fall within their competences and can only be taken over by the general government either through constitutional change or other means involving constitutional re-interpretation. This creates a presumption in favour of the constituent units and can be expected to affect the *magnitude* of centralisation. Of our six cases, the constituent units possess residual powers in Australia, Germany, Switzerland, and the United States but not in Canada and India. Hence:

H2a: other things being equal, Australia, Germany, Switzerland, and the United States will have experienced less centralisation than Canada and India, because their constituent units possess residual powers.

The constitutional set up of federations also differs on whether the division of powers conforms to the 'dual' or the 'administrative' model. In dual federations, the general government implements its own policies via its own administrative apparatus; in systems of administrative federalism, the general government generally delegates policy implementation to the constituent units (e.g., Hueglin and Fenna, 2015: 53-5). There are contrasting expectations in the literature as to the effects this distinction is likely to have on dynamic de/centralisation. On the one hand, the more rigid division of law-making powers in dual systems restricts the general government's ability to use framework legislation to shape policy in the constituent units and should thus protect the latter's autonomy more effectively (e.g., Döring and Schnellbach, 2011: 85-90). On the other hand, direct policy implementation requires the building of a large general government administration and this may create a "strong centralizing force" (Friedrich, 1968: 72).

The differences between the two can be expected to bear on three properties of de/centralisation: *magnitude*, *instrument*, and *form*. If the first perspective is correct, dual federations should experience less centralisation than 'administrative' federations but if the second perspective is the correct one, we should expect the opposite. We hypothesise that the former is correct. To the extent that centralisation takes place in dual federations, it should take the form of constitutional change and/or the use of fiscal instruments rather than framework legislation. Where *form* is concerned, centralisation in administrative federations should largely be confined to the legislative dimension whereas in dual systems it is likely to affect the administrative sphere too. Australia, Canada, and the United States can be placed on the dual end of the spectrum while, though in different ways, Germany, India, and Switzerland come closer to the administrative model. Our expectation is thus that:

H2b: other things being equal, Germany, India, and Switzerland, as more 'administrative' federations, will have experienced higher centralisation than the dual federations of Australia, Canada, and the United States.

H2c: In Germany, India, and Switzerland centralisation will have largely been confined to the legislative sphere and primarily through the instrument of framework legislation.

Parliamentary systems tend to concentrate power in the hands of fewer actors than presidential systems (e.g., Lijphart, 1999: 116-42); by so doing, they can be expected to

make it easier to enact centralising reforms (Bednar et al., 2001), thus having an effect on the *direction* and the *magnitude* of de/centralisation. Among our cases, Switzerland and the United States are the only non-parliamentary systems, hence:

H2d: other things being equal, Switzerland and the United States will have experienced lower centralisation than Australia, Canada, Germany, and India, given their non-parliamentarism.

### **Socio-economic trends (Xc)**

Four broad trends – of which the first three are closely interrelated – are widely discussed in the literature as likely engines of dynamic de/centralisation in federal systems: 1) technological progress (XcA); 2) increasing mobility (XcB); 3) market integration (XcC); 4) globalisation (XcD); and regional integration (XcE). Technological progress is seen as centralising because it increases the ‘scale of action’ for social actors across the constituent units of a federation (e.g., Bryce, [1888] 1995b: 1498; Popitz, 1927; Birch, 1955: 3). Hand in hand with technological progress, we can expect the cross-unit mobility of citizens and businesses to increase over time. This will raise the volume and saliency of externalities across the constituent units and create pressure for policy harmonisation (e.g., Bryce, [1888] 1995b: 1498-9; Oates, 1972: esp. 222-4; Pommerehne, 1977: 306), either through horizontal co-ordination among the constituent units or action by the general government. Technological progress and rising mobility can, among other things, be expected to integrate regional markets into a federation-wide market over time, thus generating a presumption in favour of centralised economic regulation (e.g. Bryce, 1901: 222; Corry, 1941: 216-7; Wheare, 1946: 254; Riker, 1964: 71-5; Fenna, 2012: 585). In addition to their main effect on the *direction* of dynamic de/centralisation – fuelling centralisation – these trends can also be expected to influence the *form* centralisation takes. Technological progress and market integration are likely to create incentives for centralisation particularly in the areas of defence, economic regulation, environmental protection, media, and transport, while increasing mobility is also likely to put constituent units’ autonomy under pressure in the fields of education and the law. In sum:

H3a: other things being equal, all federations are likely to become more centralised over time as a result of these economic and social trends. Centralisation is particularly likely to be observed in the fields of defence, economic regulation, education, environmental protection, law, media, and transport.

In the post-World War II period, these trends have been joined by a drive towards globalisation and regional integration. Globalisation has seen, among other things, a dramatic growth in the number and scope of international organisations, and in the volume of international trade, leading to a substantial degree of global market integration. Additionally, many areas of the world have witnessed the development of regional integration organisations, most notably the European Union. Given that external relations in federations typically fall within the purview of the general government, even in policy areas that at the domestic level are in the hands of the constituent units, the growth of international activity and policy-making is likely to lead to an expansion of the general government's role via greater use of its international treaty powers (e.g. Lazar et al., 2003: 4; Fenna, 2012: 586), thus having an effect both on the *direction* and the *instrument* of dynamic de/centralisation. This effect can be expected to be stronger in federations exposed to regional integration. In multi-national federations, though, globalisation and regional integration may temper centralisation or even favour decentralisation by increasing the threat of secession of nationally distinct units (e.g. Meadwell and Martin, 1996; Lazar et al., 2003: 20). Hence:

H3b: other things being equal, all federations are likely to have experienced more centralisation since World War II as a result of globalisation. The principal instrument through which such centralisation will have occurred is the general government's use of its international treaty powers.

H3c: as regional integration has been most advanced in Western Europe, much less so in North America and largely absent in South Asia and Oceania, other things being equal, Germany and Switzerland will have experienced the strongest effect of this factor, India and Australia the weakest, and Canada and the United States a medium-strength effect.

H3d: other things being equal, Canada – as the only multinational federation in our set of cases – will have experienced less centralisation and possibly even decentralisation as a result of regional integration compared to the other five federations.

### ***Socio-cultural trends (Xd)***

In parallel to these economic and social changes, two broad trends in the realm of collective identities, beliefs, and values – labelled 'socio-cultural' here – are highlighted in the literature. The first is the evolution of the patterns of identification with the federation as a whole vis-à-vis identification with a constituent unit (XdA). In monolingual federations, citizens' primary identification with the constituent units can be expected to decline over time and their primary identification with the federation to rise. Greater identification with the federation will lead to a preference for decision-making by the general government, hence

for centralisation (e.g., Bryce, [1888] 1995a: 318; Riker, 1964: 104; Kincaid, 2013: 158-9; Bednar, 2008: 219; Fenna, 2012: 588-90). Multilingual federations that are successful in forging a common national identity – such as India and Switzerland (Stepan et al., 2011; Dardanelli, 2011) – can be expected to follow a similar pattern to that of the monolingual federations. In other multilingual federations, though, centralisation might reach a critical threshold at which it triggers a ‘backlash mobilisation’ of one or more minority cultures to protect their distinctiveness. This might lead to the emergence of a separate national identity, thus making the federation multinational – such as in Canada’s case. If so, such a backlash will likely restrain centralisation or even reverse it in various ways (e.g. Elazar, 1987: 202; McKay, 2004: 181-2; Watts, 2007: 235). The evolution of collective identities can thus be expected to have an impact on the *direction*, the *magnitude*, and the *timing* of dynamic de/centralisation. Hence:

H4a: other things being equal, Australia, Germany, India, Switzerland, and the United States will have experienced centralisation as a result of citizens’ identifications shifting towards the federation as a whole, while Canada will have experienced the least extent of centralisation, or even decentralisation, particularly since 1950.

The second main socio-cultural trend regards citizens’ expectations concerning the role of government in the economy and society (XdB). As mentioned above, these have changed profoundly since the nineteenth century, particularly with regard to economic stabilisation and regulation, provision of welfare services, wealth redistribution, and environmental protection. The general government is usually in a stronger position to provide these services effectively and efficiently because it both possesses superior macro-economic tools and is better able to ensure equality of provision across the country (e.g. Oates, 1972: 31-53; Pommerehne, 1977: 285-6, 292-4; Ahmad and Brosio, 2006: 16, 23). A standard axiom of fiscal federalism theory, for instance, is that the redistributive function should be entrusted to the general government (Musgrave, 1959: 179-83). On these grounds, changing expectations about the role of government are likely to lead to centralisation over time (e.g. Wheare, 1946: 254-5; Birch, 1955: 4-6; Oates, 1972: esp. 183-95; Pommerehne, 1977: 306; Dalmazzone, 2006; Fenna, 2012: 586). Hence:

H4b: other things being equal, all federations are likely to experience centralisation as a result of citizens’ changing expectations of the role of government.

### ***Economic and security shocks (Xe)***

Economic (XeA) and security (XeB) shocks such as depressions and wars also have been identified as being associated with centralisation dynamics in federations, mainly through the use of fiscal instruments (e.g., Popitz, 1927; Wheare, 1946: 254; Oates, 1972: 184, 226). The central mechanism being discussed is that during times of crisis, citizens make greater demands on the political system and, given the superior resources of the general government, they expect the latter to expand its activities to meet those demands. In times of crisis, citizens and political actors will be more willing to tolerate encroachments on the autonomy of the constituent units for the sake of overcoming a national emergency (e.g., Higgs, 1987; Vaubel, 1994: 154). These shocks can thus be expected to have an effect on the *direction*, the *instrument*, and the *timing* of dynamic de/centralisation. Therefore:

H5: other things being equal, federations are more likely to experience centralisation during economic or security shocks, and such centralisation will manifest itself particularly through fiscal instruments.

### ***Collective attitudes (Xf)***

The trends and shocks outlined above are likely to have an impact on collective attitudes towards the distribution of powers between the general and constituent governments. Three sets of attitudes are particularly consequential. The first are citizens' attitudes at the mass level (XfA). Mass attitudes matter in federal democracies because they create demands that political actors, parties in particular, seek to satisfy in order to secure and retain electoral support. In addition to mass attitudes, the preferences of organised interest groups (XfB) and media outlets (XfC) can also be influential through lobbying, media campaigns, and other strategies. Given the trend towards the integration of markets, business groups in particular tend to favour homogenous policies enacted at the centre over heterogeneous policies enacted by the constituent units. These collective attitudes can thus be conceived as intervening variables acting as transmission belts between structural change in the economic, social, and cultural spheres and political agency in relation to de/centralisation. Hence:

H6: collective attitudes towards de/centralisation will have changed as a result of economic, social, and cultural trends and created conditions for political actors' agency.

### ***Political agency (Xg)***

At the 'coalface' of de/centralisation dynamics, political actors can be expected to respond to the evolution of collective attitudes towards the 'federal balance' by enacting change. Five main variables affecting their agency have been discussed in the literature: 1) whether parties are primarily regional or national<sup>21</sup> (XgA); 2) the ideological complexion of the main parties (XgB); 3) the preferences of judicial bodies (XgC); 4) the role of direct democracy (XgD); and 5) incentives to reduce horizontal and vertical competition (XgE). In monolingual federations, parties are likely to become more 'nationalised' over time, thus leading to the prevalence of federation-wide parties and to greater congruence between the parties in office in the general government and in the constituent units. In turn, federation-wide parties can generally be expected to favour centralisation more than regional parties (e.g., Riker, 1964: 91-101). In multilingual but mononational federations, regional parties can be expected to be more resilient over time and therefore be better able to defend the autonomy of their constituent units vis-à-vis encroachments by the general government. In multilingual and multinational federations, regional parties are likely to emerge and/or grow stronger as a result of the 'backlash mobilisation' mentioned above and hence to present the strongest resistance to centralisation or even engender decentralisation. This has a bearing on the *direction* and the *magnitude* of de/centralisation. Hence:

H7a: other things being equal, Australia, Germany, and the United States will have experienced highest centralisation, India and Switzerland a medium level, and Canada the least centralisation, or even decentralisation, as a result of the varying degree of 'nationalisation' of their party system.

Besides the scope of their operation, parties also differ in ideology. Broadly, parties of the left tend to prioritise equality and uniformity whereas right-of-centre parties emphasise autonomy and freedom. This has implications for their attitudes towards de/centralisation. For instance, equality and uniformity of public services almost always require centralised provision whereas policy autonomy for constituent units leads to spatial inequalities. Therefore, parties of the left can be expected to favour centralisation whereas those of the opposite persuasion are likely to favour decentralisation (e.g., Bowman and Krause, 2003: 310; Döring and Schnellenbach, 2011: 92-4), with consequences for the *direction* and the *timing* of change. Hence:

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<sup>21</sup> Employed here as a synonym for 'federation-wide'. On party system nationalisation in federal states, see, among others, Golosov (2016).

H7b: other things being equal, centralisation is more likely to occur when left-of-centre parties control the general government, whereas decentralisation is more likely to occur under right-of-centre parties.

In federations in which the judicial power (e.g., a constitutional or a supreme court) plays an important role, de/centralisation dynamics will be affected by judicial preferences. A centralist-minded court can be expected to accelerate centralisation while a decentralist-minded one will facilitate decentralisation or at least restrain centralisation (e.g., Livingston, 1956: 12; Vaubel, 1994: 153; Döring and Schnellenbach, 2011: 91-2; Aroney and Kincaid, 2016). The preferences of a constitutional or supreme court are likely to move cyclically, with consequences for the *direction* and *timing* of de/centralisation:

H7c: other things being equal, centralisation is more likely to occur under the watch of a centralist constitutional/supreme court.

In countries in which direct democracy plays an important role in overseeing the 'federal balance' (e.g., Australia and Switzerland), citizens have the ability to enact, or block, change directly. The general expectation in the literature is that ordinary citizens are more resistant to change than elite political actors. The presence of direct democracy instruments acts as a brake on the latter's agency (e.g., Blankart, 1990: 32), with an impact on the *magnitude* of centralisation. Hence:

H7d: other things being equal, Australia and Switzerland will have experienced less centralisation than Canada, Germany, India, and the United States, because of their provision for direct democracy.

Lastly, political actors may face incentives to reduce competition both horizontally among the constituent units and vertically between the latter and the general government, particularly as regards taxation (Blankart, 2000; Döring and Schnellenbach, 2011: 95-6), and would thus see fiscal centralisation – specifically the replacement of own-source revenues with tax-sharing – favourably. Relatedly, some authors have postulated that centralisation will occur first in the fiscal sphere and only later in the spheres of legislation and administration (e.g., Sawyer, 1969: 117-30; Oates, 1972: 226-7). This has consequences for the *direction* and the *timing* – specifically the *sequence* – of dynamic de/centralisation:

H7e: other things being equal, all federations will have experienced centralisation as a result of political actors' incentives to reduce tax competition.

H7f: other things being equal, centralisation will have occurred in the fiscal sphere first.

Although, for the sake of clarity of exposition, we have analysed the probable effect of these factors in isolation (*other things being equal*), in line with our ‘funnel of causality’ approach, we expect them to interact in complex ways. Some can be seen to have a largely independent effect, others to have an effect only in conjunction with other factors. Still others play as ‘intervening variables’ that is largely confined to transmitting causal effects rather than having an independent impact. Different factors with similar causal effects will be in operation at the same time, thus reinforcing each other. Factors with contradictory effects will also be at work simultaneously, in which case the outcome will be a product of their interaction, whereby for instance the effect of a stronger factor is tempered by that of a weaker, but still significant, factor pulling the other way. We attempt to explore these complex interactions in the concluding paper.

## **7 Conclusions**

De/centralisation dynamics are inevitable in all federal systems and they can greatly affect the operation and nature of such systems. Scholars have long noticed the tendency of many federations to become more centralized over time, and studies of individual cases have contributed significantly to our knowledge. Recent efforts aimed at reversing the trend in a number of federal countries have also attracted scholarly attention. However, no longitudinal comparative study of dynamic de/centralisation in more than two cases has been conducted; hence, our understanding of the extent, forms, and determinants of the phenomenon is still limited. The conceptual, methodological, and theoretical framework outlined in this paper lays out the basis for conducting such a study. It conceptualises static de/centralisation as being bi-dimensional — policy and fiscal — and dynamic de/centralisation as taking both constitutional and non-constitutional forms, with the latter ranging from the use of framework legislation to governments’ failure to act, and proposes a coding scheme intended to be sufficiently fine-grained to capture the various manifestations of de/centralisation. A ‘funnel of causality’ theoretical framework identifies seven sets of causal factors likely to have a causal bearing on dynamic de/centralisation. The framework outlined in this paper has underpinned the data and the analysis we present in the case study papers and in the concluding comparative paper.

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## References

- Ahmad, Ehtisham and Giorgio Brosio. 2006. Introduction: Fiscal Federalism – A Review of Developments in the Literature and Policy. In Idem (eds), *Handbook of Fiscal Federalism*. Cheltenham: Edward Elgar.
- Aroney, Nicholas and John Kincaid (eds). 2016. *Courts in Federal Countries: Federalists or Unitarists?* Toronto, ON, Canada: University of Toronto Press, forthcoming.
- Arzaghi, Mohammed and Vernon Henderson. 2005. Why Countries are Fiscally Decentralizing. *Journal of Public Economics* 89/7: 1157-89.
- Austin, John. 1847. Centralisation. *The Edinburgh Review* 85/1 (171): 221-58.
- Bednar, Jenna. 2008. *The Robust Federation – Principles of Design*. Cambridge, MA, USA: Cambridge University Press.
- Benz, Arthur. 1985. *Föderalismus als dynamisches System – Zentralisierung und Dezentralisierung im föderativen Staat*. Opladen: Westdeutscher Verlag.
- Beramendi, Pablo. 2007. Federalism. In Carles Boix and Susan Stokes (eds), *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press.
- Blankart, Charles. 2000. The Process of Government Centralisation: a Constitutional View. *Constitutional Political Economy* 11/1: 27-39.
- Blöchliger, Hansjörg. 2013. Measuring Decentralisation: the OECD Fiscal Decentralisation Database. In Junghun Kim, Jorgen Lotz and Hansjörg Blöchliger (eds). 2013. *Measuring Fiscal Decentralisation – Concepts and Policies*. Paris: OECD Publishing.
- Bowman, Ann O'M. and George A. Krause. 2003. Power Shift: Measuring Policy Centralization in U.S. Intergovernmental Relations, 1947-1998. *American Politics Research* 31/3: 301-325.
- Bowman, Kirk, Fabrice Lehoucq and James Mahoney. 2005. Measuring Political Democracy – Case Expertise, Data Adequacy, and Central America. *Comparative Political Studies* 38/8: 939-70.
- Brancati, Dawn. 2006. Decentralisation: Fueling the Fire or Dampening the Flames of Ethnic Conflict and Secessionism? *International Organisation* 60/3: 651-85.
- Bryce, James. 1901. *Studies in History and Jurisprudence – Vol. 1*. New York, NY, USA: Oxford University Press.
- Bryce, James. [1888] 1995a. *The American Commonwealth – Vol.1*. Indianapolis, IN, USA: Liberty Fund.
- Bryce, James. [1888] 1995b. *The American Commonwealth – Vol.2*. Indianapolis, IN, USA: Liberty Fund.
- Bryce, James. [1887] 1995b. The Predictions of Hamilton and Tocqueville. Appendix II to Idem, *The American Commonwealth – Vol. 2*. Indianapolis, IN, USA: Liberty Fund.
- Corry, J. A. 1941. The Federal Dilemma. *Canadian Journal of Economics and Political Science* 7/2: 215-228.
- Campbell, Angus, Philip Converse, Warren Miller and Donald Stokes. 1960. *The American Voter*. New York, NY, USA: John Wiley.
- Capoccia, Giovanni and Daniel Keleman. 2007. The Study of Critical Junctures – Theory, Narrative, and Counterfactuals in Historical Institutionalism. *World Politics* 59/3: 341-69.
- Dalmazzone, Silvana. 2006. Decentralisation and the Environment. In Ehtisham Ahmad and Giorgio Brosio (eds), *Handbook of Fiscal Federalism*. Cheltenham: Edward Elgar.

- Dardanelli, Paolo. 2011. Multi-lingual but Mono-national: Exploring and Explaining Switzerland's Exceptionalism. In Ferran Requejo and Miquel Caminal (eds), *Federalism, Plurinationality, and Democratic Constitutionalism – Theory and Cases*. Abingdon: Routledge.
- Dardanelli, Paolo, John Kincaid, Alan Fenna, André Kaiser, André Lecours and Ajay Kumar Singh. 2015. *Conceptualizing, Measuring, and Mapping Dynamic De/Centralization in Federations*. Paper presented at the 111<sup>th</sup> Annual Meeting of the American Political Science Association. San Francisco, CA, USA, 3-6 September.
- Döring, Thomas and Jan Schnellenbach. 2011. A Tale of Two Federalisms: Germany, the United States and the Ubiquity of Centralisation. *Constitutional Political Economy* 22/1: 83-102.
- Dubois, Hans and Giovanni Fattore. 2009. Definitions and Typologies in Public Administration Research: the Case of Decentralisation. *International Journal of Public Administration* 32/8: 704-27.
- Duchacek, Ivo. 1970. *Comparative Federalism – The Territorial Dimension of Politics*. New York, NY, USA: Holt, Rinehart and Winston.
- Elazar, Daniel J. 1987. *Exploring Federalism*. Tuscaloosa, AL, USA: University of Alabama Press.
- Erk, Jan and Edward Koning. 2010. New Structuralism and Institutional Change: Federalism Between Centralisation and Decentralisation. *Comparative Political Studies* 43/3: 353-78.
- Fenna, Alan. 2012. Centralising Dynamics in Australian Federalism. *Australian Journal of Politics and History* 58/4: 580-90.
- Fesler, James. 1965. Approaches to the Understanding of Decentralisation. *Journal of Politics* 27/3: 536-66.
- Friedrich, Carl J. 1968. *Trends of Federalism in Theory and Practice*. London: Pall Mall Press.
- Gerber, Elisabeth and Ken Kollman. 2004. Introduction – Authority Migration: Defining an Emerging Research Agenda. *PS: Political Science and Politics* 37/3: 397-401.
- Golosov, Grigorii. 2016. Party System Nationalization: the Problems of Measurement with an Application to Federal States. *Party Politics* 22/3: 278-88.
- Grodzins, Morton. 1961. Centralisation and Decentralisation in the American Federal System. In Robert Goldwin (ed.), *A Nation of States – Essays on the American Federal System*. Chicago, IL, USA: Rand McNally.
- Hicks, Ursula. 1978. *Federalism: Failure and Success – A Comparative Study*. London: Macmillan.
- Higgs, Robert. 1987. *Crisis and Leviathan: Critical Episodes in the Growth of American Government*. New York, NY, USA: Oxford University Press.
- Hooghe, Liesbet, Gary Marks and Arjan Schakel. 2008a. Operationalizing Regional Authority: a Coding Scheme for 42 Countries, 1950-2006. *Regional and Federal Studies* 18/2-3: 123-42.
- Hooghe, Liesbet, Arjan Schakel and Gary Marks. 2008b. Appendix B: Country and Regional Scores. *Regional and Federal Studies* 18/2-3: 259-74.
- Hueglin, Thomas and Alan Fenna. 2015. *Comparative Federalism – A Systematic Inquiry*. 2<sup>nd</sup> ed. Toronto, On, USA: University of Toronto Press.
- Hutchcroft, Paul. 2001. Centralisation and Decentralisation in Administration and Politics: Assessing Territorial Dimensions of Authority and Power. *Governance* 14/1: 23-53.
- Kincaid, John. 2013. The United States of America – From dualistic simplicity to centralized complexity. In John Loughlin, John Kincaid and Wilfried Swenden (eds), *The Routledge Handbook of Regionalism and Federalism*. Abingdon: Routledge.
- Kincaid, John. 1996. From Dual to Coercive Federalism in American Intergovernmental Relations. In John Jun and Deil Wright (eds), *Globalisation and Decentralisation*. Washington, DC, USA: Georgetown University Press.

- Kincaid, John and G. Alan Tarr (eds.). 2005. *Constitutional Origins, Structure, and Change in Federal Countries*. Montreal, QC, and Kingston, ON, Canada: McGill-Queen's University Press.
- Klatt, Hartmut. 1999. Centralizing Trends in Western German Federalism, 1949-1989. In Charlie Jeffery (ed.), *Recasting German Federalism*. London: Pinter.
- Knapp, Blaise. 1986. Etapes du fédéralisme suisse. In Raimund Germann and Ernest Weibel (eds), *Handbuch politisches System der Schweiz / Manuel système politique de la Suisse – vol. 3*. Berne: Haupt.
- Krane, Dale. [1982] 1988. The Evolutionary Patterns of Federal States. In C. Lloyd Brown-John (ed.), *Centralizing and Decentralizing Trends in Federal States*. Lanham, MD, USA: University Press of America.
- Lane, Jan-Erik and Svante Ersson. 1999. *Politics and Society in Western Europe*. 4<sup>th</sup> ed. London: Sage.
- Lazar, Harvey, Hamish Telford and Ronald L. Watts. 2003. Divergent Trajectories: the Impact of Global and Regional Integration on Federal Systems. In Idem (eds), *The Impact of Global and Regional Integration on Federal Systems – A Comparative Analysis*. Montreal, Qc, and Kingston, On, Canada: McGill-Queen's University Press.
- Lipset, Seymour Martin and Stein Rokkan. 1967. Cleavage Structures, Party Systems, and Voter Alignment: an Introduction. In Idem (eds), *Party Systems and Voter Alignments – Cross-national Perspectives*. New York, NY, USA: Free Press.
- Livingston, William. 1956. *Federalism and Constitutional Change*. Oxford: Clarendon Press.
- Lijphart, Arend. 1984. *Democracies – Patterns of Majoritarian and Consensus Government in Twenty-One Countries*. New Haven, CT, USA: Yale University Press.
- McKay, David. 2004. William Riker on Federalism: Sometimes Wrong but More Right than Anyone Else? *Regional and Federal Studies* 14/2: 167-86.
- Madison, James. [1788] 2000. The Federalist no. 45. In Alexander Hamilton, James Madison and John Jay, *The Federalist*. London: Phoenix Press.
- Majeed, Akhtar, Ronald Watts and Douglas Brown (eds). 2006. *Distribution of Powers and Responsibilities in Federal Countries*. Montreal, Qc, and Kingston, ON, Canada: McGill-Queen's University Press.
- Miller, Bernhard. 2007. Making Measures Capture Concepts: Tools for Securing Correspondence between Theoretical Ideas and Observations. In Thomas Gschwend and Frank Schimmelfennig (eds), *Research Design in Political Science*. Basingstoke: Palgrave.
- Musgrave, Richard. 1969. *Fiscal Systems*. New Haven, CT, USA: Yale University Press.
- Musgrave, Richard. 1959. *The Theory of Public Finance*. New York, NY, USA: McGraw-Hill.
- Oates, Wallace. 1972. *Fiscal Federalism*. New York, NY, USA: Harcourt Brace Jovanovich.
- OECD. 2015. *Government at a Glance*. Paris: OECD Publishing.
- Philip, Kjeld. 1954. *Intergovernmental Fiscal Relations*. Copenhagen: Ejnar Munksgaard.
- Pommerehne, Werner. 1977. Quantitative Aspects of Federalism: a Study of Six Countries. In William Oates (ed.), *The Political Economy of Fiscal Federalism*. Lexington, MA, USA: Heath.
- Popitz, Johannes. 1927. Finanzwirtschaft der öffentlichen Körperschaften. In Wilhelm Gerloff and Franz Meisel (eds), *Handbuch der Finanzwissenschaft*. Vol. 2. Tübingen: Mohr.
- Riker, William. 1975. Federalism. In Fred Greenstein and Nelson Polsby (eds), *Handbook of Political Science vol. 5 – Governmental Institutions and Processes*. Reading, Ma, USA: Addison-Wesley.
- Riker, William. 1964. *Federalism – Origins, Operation, Significance*. Boston, MA, USA: Little, Brown.
- Sawyer, Geoffrey. 1969. *Modern Federalism*. London: Watts & Co.
- Schneider, Aaron. 2003. Decentralisation: Conceptualisation and Measurement. *Studies in Comparative International Development* 38/3: 32-56.
- Simeon, Richard. 1972. *Federal-Provincial Diplomacy – The Making of Recent Policy in Canada*. Toronto, On, Canada: University of Toronto Press.

- Stepan, Alfred, Juan Linz and Yogendra Yadav. 2011. *Crafting State-Nations – India and Other Multinational Democracies*. Baltimore, MD, USA: Johns Hopkins University Press.
- Steytler, Nico (ed.). 2009. *Local Government and Metropolitan Regions in Federal Systems*. Montreal, QC and Kingston, ON, Canada: McGill-Queen's University Press.
- Tocqueville, Alexis de. [1835] 2010. *Democracy in America*. Vol. 2. Indianapolis, IN, USA: Liberty Fund.
- UN. 2015. *Classification of the Functions of Government*. Statistics Division. New York, NY: United Nations, <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4> [last accessed 17 July 2015].
- U.S. ACIR. 1981. *Measuring Local Discretionary Authority*. Advisory Commission on Intergovernmental Relations. Washington, DC, USA: U.S. Government Printing Office.
- Vaubel, Roland. 1994. The Political Economy of Centralisation and the European Community. *Public Choice* 81/1: 151–90.
- Watts, Ronald L. 2008. *Comparing Federal Systems*. 3<sup>rd</sup> ed. Montreal, QC and Kingston, ON, Canada: McGill-Queen's University Press.
- Watts, Ronald L. 2007. Multinational Federations in Comparative Perspective. In Michael Burgess and John Pinder (eds), *Multinational Federations*. Abingdon: Routledge.
- Wheare, K. C. 1946. *Federal Government*. London: Oxford University Press.

## Tables

**Table 1 – Policy autonomy by sub-dimension and category**

	<i>Legislative</i>	<i>Administrative</i>
P1 Agriculture	1-7	1-7
P2 Citizenship and immigration	“	“
P3 Culture	“	“
P4 Currency and monetary supply	“	“
P5 Defence	“	“
P6 Economic activity	“	“
P7 Education – pre-school to secondary	“	“
P8 Education – tertiary	“	“
P9 Elections and voting	“	“
P10 Employment relations	“	“
P11 Environmental protection	“	“
P12 External affairs	“	“
P13 Finance and securities	“	“
P14 Health care	“	“
P15 Language	“	“
P16 Law – civil	“	“
P17 Law – criminal	“	“
P18 Law enforcement	“	“
P19 Media	“	“
P20 Natural resources	“	“
P21 Social welfare	“	“
P22 Transport	“	“

Note: 1=exclusively general government; 2=almost exclusively general government; 3=predominantly general government; 4=equally general government and constituent units; 5=predominantly constituent units; 6=almost exclusively constituent units; 7=exclusively constituent units.

**Table 2 – Fiscal autonomy by sub-dimension**

F1 Proportion of own-source revenues out of total CU&local govt revenues	1-7*
F2 Restrictions on own-source resources	1-7**
F3 Proportion of conditional grants out of total CU&local govt revenues	1-7***
F4 Degree of conditionality (for conditional grants only)	1-7**
F5 CU public sector borrowing autonomy	1-7****

Note: \*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.

**Table 3 – Properties of dynamic de/centralisation**

<i>1 Direction</i>	<i>Yd</i>
Centralisation	YdA
Decentralisation	YdB
<i>2 Magnitude</i>	<i>Ym</i>
No change to maximum change	Ym0-Ym162
<i>3 Tempo</i>	<i>Yt</i>
Frequency	YtA0-YtA567
Pace	YtB1-YtB3
Timing – absolute	YtC1790-YtC2010
Timing – relative	YtD0-YtD100
Sequence	YtE(Yt*Yf/Yi)
<i>4 Form</i>	<i>Yf</i>
Policy – Legislative	YfP1L-YfP22L
Policy – Administrative	YfP1A-YfP22A
Fiscal	YfF1-YfF5
<i>5 Instrument</i>	<i>Yi</i>
Constitutional change	YiA
Non-constitutional change – framework legislation	YiB1
Non-constitutional change – fiscal instruments	YiB2
Non-constitutional change – court rulings	YiB3
Non-constitutional change – horizontal joint action	YiB4
Non-constitutional change – failure to act	YiB5
Non-constitutional change – international treaty powers	YiB6

**Table 4 – Determinants of dynamic de/centralisation**

<i>1 Conditions</i>	<i>Xa</i>
Historical period	XaA0/XaA1
Federal bargain	XaB0/XaB1
Initial distribution of powers	XaC0/XaC1
Number of units	XaD6/XaD50
Monolingual vs multilingual	XaE0/XaE1
<i>2 Properties</i>	<i>Xb</i>
Residual powers	XbB0/XbB1
Dual vs administrative	XbC0/XbC1
Parliamentary vs non-parliamentary	XbD0/XbD1
<i>3 Trends I – Socio-economic</i>	<i>Xc</i>
Technical progress	XcA
Rising mobility	XcB
Market integration	XcC

Globalisation	XcD
Regional integration	XcE
<i>4 Trends II – Socio-cultural</i>	<i>Xd</i>
Collective identification	XdA
Role of government	XdB
<i>5 Shocks</i>	<i>Xe</i>
Economic shocks	XeA
Security shocks	XeB
<i>6 Attitudes</i>	<i>Xf</i>
Mass attitudes	XfA
Organised interests' attitudes	XfB
Media attitudes	XfC
<i>7 Agency</i>	<i>Xg</i>
Party type	XgA0/XgA1
Party ideology	XgB0/XgB1
Judicial preferences	XgC
Direct democracy	XgD
Incentives to reduce competition	XgE