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## **REVISING THE UNITARY VS. FEDERATION CLASSIFICATIONS**

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### **ABSTRACT**

Over the last four decades, the distinction between unitary and federation systems has become increasingly blurred, as regionalisation and decentralisation have emerged as significant global trends. Regionalisation and decentralisation are responsible for redistribution of power across borders and for strengthening broader society's subnational capacity and function. Both have indirectly facilitated the expansion of "federalisation processes" within unitary states. As a result, distinguishing between unitary and federated territorial management and power-sharing arrangements is difficult. This "intermediate system" was an apparently novel form of territorial division of power that was never classified as an incomplete federation or an evolutionary type of unitary system. This indicates that the unitary vs. federation dichotomy is becoming incongruous and that the existing classification is no longer relevant. As a result, this article revised the unitary-federal classification based on developments in  $n = 70$  selected countries from 1970 to 2018, as measured by the Regional Authority Index, an annual data series. To classify countries into clusters, the data index was analysed using hybrid clustering

analysis while having k-means clustering as the primary analysis. Initially, inferential analysis performed suggested the establishment of four clusters ( $k = 4$ ). However, clustering together unitary and federated countries resulted in re-clustering, resulting in the formation of five new clusters.

**Keywords:** Unitary, federation, classification, regionalisation, decentralisation.

## INTRODUCTION

The government, under the modern nation-state, is compelled to occupy territory and determine the most effective means of governance. It must decide whether to govern undividedly through a single central authority or to dissolve it and govern through a combination of central and local authorities, and whether to expand or contract the region of undivided rule at any time (Finer, 1970). As a result, the uniquely modern nation-state eventually divides its geographical authority into two distinct forms of governance: unitary and federation. Traditionally, the concepts of unitary and federation have been classified and explained in a dichotomous way. The unitary system is dominated by a specific central government and local governments as administrative units, whereas the federated system is distinguished by numerous layers of government.

## PROBLEM STATEMENT

Both unitary and federated terms are accepted as universal terms of “division of powers” (Finer, 1970; Lijphart, 1999; Livingston, 1952; Riker, 1964) or “territorial governance” (Loughlin, 2014; Swenden, 2006). Since the eighteenth century, the unitary and the federation have been adopted as the conventional classification of the governmental system and are commonly explained in a dichotomous manner. Until the twentieth century, regionalisation and decentralisation had taken place and brought with them a new concept of power division in particular unitary states. Both trends are responsible for shifting the territorial distribution of power and strengthening subnational capacity and the function of broader society. Indirectly, both have paved the way for the enlargement of federalisation processes within

unitary states (Loughlin, 2014; Bickerton & Gagnon, 2014). Finally, for unitary versus federated states, it is more difficult to clearly distinguish the patterns of territorial management and power-sharing arrangements between both (Baldi, 1999).

These settings have resulted in a new form as mentioned by Loughlin (2014), i.e., an “intermediate system”, which is a so-called quasi-federation (Anderson, 2007b, 2010; Bagchi, 2003; Elazar, 1982; Loughlin, 2014; Watts, 1998), semi-federal (Elaigwu, 2010; Visser, 2010), regionalised state or regional system (Schrijver, 2006; Swenden, 2006), regio-federal system (Baldi, 1999), or (de)-centralised unitary and federation (Braun, 2000). This new intermediate system has caused the territorial division of power to never be clearly classified either as an incomplete type of federation system or an evolutionary type of unitary system. The circumstances may be best illustrated by a continuum figure. As illustrated in Figure1, some federalising states may be placed within the class of unitary and federated states. Unfortunately, it is extremely difficult to draw clear boundaries between and among the categories. This means that the dichotomy of unitary federation is incongruous, irrelevant, and has been significantly challenged during the federalisation process.

**Figure 1**

*A Continuum of Unitary-Federation Countries*

Unitary					Federation				
Luxembourg	Portugal	France	UK	Malaysia	Austria	Canada	USA	Germany	
Iceland	Netherlands	Italy	Russia	Australia		Belgium		Finland	
Japan				Switzerland					

*Note.* Modified from Loughlin (2014) and Rodden (2004).

Based on Figure 1, Luxembourg and Iceland stand out as unitary states, whereas the United States (US) and Germany are recognised as federations. France, Italy, and the United Kingdom (UK), which follow regionalisation and decentralisation (also known as devolution), have some federal features, but in other respects, they remain unitary. Malaysia’s governmental system also does not operate as it should. Even though it is stated as a federation in the Federal Constitution, Malaysia is deemed a centralised-federation or quasi-federalism (Taghavi-Dinani, 1982) like some unitary states. It

is difficult to analyse, and without a meticulous classification, it fails to acknowledge its very existence. Indeed, Bailey (1994) asserted that no further conceptualisation or reasoning for further investigation is possible.

## **LITERATURE REVIEW**

Since the eighteenth century, governmental systems have been divided into two types: unitary and federation. Unitary had begun in France since the first prototype was configured under Napoleon, who established the state par excellence characterised by “unity and indivisibility” (Loughlin, 2014). This system developed into a dominant paradigm in the nineteenth century, with Greece (1821) and Italy falling into line later (1860). Indeed, the system’s influence was overwhelming, as most of the world’s countries were either ruled solely by central governments (such as Singapore and Monaco), or by multitiered units (such as the UK, Japan, Indonesia, Thailand, Denmark, Korea, New Zealand, Norway, the Netherlands, the Philippines, Portugal, and Sweden). Conversely, the federation that was first invented by the United States (the Philadelphia Convention in 1787) has been followed by fewer than 30 countries (out of 193 countries in the United Nations). Formed by political leaders and the greater historical forces of political instability, economic pressure, and military security, the federation system has evolved over time (Burgess, 2006; Taghavi-Dinani, 1982; Volden, 2004).

### **Unitary vs. Federation: The Classic Dichotomy**

A unitary is often referred to as a sovereign, with divisions and decision-makers at the top of the government. Power is assured to be centralised, with weak regional and local authorities. According to the idea of centralisation, political authority may be distributed to constituent polities by legislation, but the central government retains supremacy and may void or restrict delegated governments’ actions for national unity. That is, the central government may establish or abolish component entities. A unitary constitution avoids duplication of employees, time, and resources, as well as undue influence from local interests. Unicameral legislatures are more common under unitary systems, when all legislative functions are concentrated in a single chamber (Kreppel, 2008). As long as regional and local governments exist solely as political, economic, cultural, and administrative units, citizens will remain inextricably linked to the central government.

Therefore, component entities can only execute central government-granted powers (Baldi, 1999; Bowman & Kearney, 1996). However, insufficient government attention to local needs and ambitions may occur.

By contrast, federation is generally described as a system of political relations between the central and constituent governments based on the principle of shared sovereignty that is not subordinate but coordinated (Akindele & Olaopa, 2003; Wheare, 1963). To be precise, each government is controlled and empowered by a written federal constitution, which is supreme, for the jurisdictions' members to use such powers and authority. In other words, federation is a form of "self-rule plus shared rule" (Elazar, 1987), which means that regardless of the extent to which certain powers are shared between the central and constituent governments at any given time, the authority that exercises them cannot be taken away from either without mutual consent. Baldi (1999), Burgess (1993), Elazar (1997), and Lijphart (1999) mentioned that each level of government will be able to control the same people in the same area through guaranteed autonomous domains of power. Both will be completely independent of each other. Additionally, Burgess (1993; 2006), King (1982; 1993), Taghavi-Dinani (1982), Verney (1995), Watts (1998; 1999), and Wheare (1963) described the following structural features of a federation:

- i. Geopolitical divisions* - The territory of the polity is divided into mutually exclusive states, provinces, Länder, and cantons. Each state's existence is guaranteed by its constitution and cannot be arbitrarily revoked.
- ii. Independence* - The states and the federal (or central) government are autonomous. In general, this independence is legally attained through electoral independence, in which each government is held accountable to its voters. However, non-democratic forms of independence may exist.
- iii. Direct Governance* - The state and central governments share authority, each of which governs its citizens directly, so that everyone is ruled by two authorities. Each level of government has sovereign authority over at least one area of policy. This policy of sovereignty is enshrined in the constitution.

In terms of legislation, the federation constitution is not unilateral, yet rigid to amendment. It is significant in terms of power allocation, which can be functionally defined as: (a) distribution of legislative competences, (b) residual powers, (c) criteria for competence allocation (jurisdictional/functional), and (d) territorial diffusion (symmetry/asymmetry) (Baldi, 1999). This style of government is characterised by the practice of having two legislative or parliamentary chambers. Therefore, a bicameral parliament or legislature represents the Second Chamber, which can operate as: (a) the extension of the territorial representation within the Chamber (exclusive or partial), (b) the policy scope (in relation to the First Chamber), (c) the degree of over representation (number of representatives in relation to the size of the sub-units), and (d) the method of selection of representatives (direct or indirect election by citizens; appointment by subnational executives) (Baldi, 1999).

The constituent entities (states, regions, provinces, Länder, or cantons) are supreme in the powers delegated to them; they have the capacity to act directly on citizens within their jurisdiction without the consent of any other authority. Each jurisdictional member is legally enshrined and completely guaranteed as decentralised. By establishing at least two levels of government on a territorial basis, the federation system must attempt to deal with diversities, either by vesting the state with authority over some of these pervasive diversities or by endowing local government units with a permanent voice or function to promote decentralised decision-making. As a result, it promotes more freedom of choice, political involvement, innovation, and accountability, as well as making individuals aware of the subnational government's effect or presence. However, under this structure, the federation is vulnerable to regional disputes, duplication, and misunderstanding, and may not be able to keep the country together.

Having discussed both systems above, Table 1 summarises the dichotomy of both models. There is no consensus on a universal and scientific classification in their practical implementation.

**Table 1**

*The Unitary and Federation System Dichotomy*

	System of Government	
	Unitary	Federation
Distribution of power	Centralised	Non-centralised
Nature of constitution	Flexible	Rigid
Nature of legislature	Unicameral	Bicameral
Nature of citizen relationship	Central government	Central and Subnational

*Note.* Modified from Akindele and Olaopa (2003), Baldi (1999), Bowman and Kearney (1996), Kavalski and Zolkos (2008), and Rodden (2003).

**Towards Regionalisation and Decentralisation**

Regionalisation became popular in much of the European Union (EU) in the 1970s, while decentralisation became a global megatrend in the 1980s. Both processes are responsible for the strengthening of the meso-level in unitary countries, as power has been diverted from the central government and their capacities and functions have grown at the larger community level. This dynamic resulted in new modern institutional arrangements and a diverse range of provincial administrations emerging in unitary states. As a result, the distinction between unitary and federation grew blurry.

***Regionalisation***

The region, in terms of the concept of operation, is understood as a geographical space located within a country, i.e., a subnational entity (below the central level) or identified as the meso-level. Typically, these regions are smaller than states and larger than localities. Territories can be organised and differentiated by language, religion, or custom into political territories, which usually have some form of selected regional government; an administrative territory, i.e., a geographical entity created for the purpose of governing. Similar to the distinction between federal and federalism, the concepts of regionalism and regionalisation must be constructed. Regionalism is an ideology and political movement that seeks to politicise the difficulties of its territory with the aim of realising, protecting, or advancing the interests of the territory. Rather, regionalisation is the process of

transfer from top to bottom from the centre to the region in various forms of administrative, economic, and political responsibilities.

There are several arguments about the wave of regionalisation. According to Schrijver (2006), in the 1970s and early 1980s, the process of regionalisation was primarily inspired by considerations of European integration. Since the mid-1980s, it has emphasised the use of regional governments in European and central contexts. Meanwhile, Loughlin (2014) considered the wave in the 1970s as a period of economic expansion and regional policy, which is part of the macroeconomic planning and regional dimensions of the welfare state. Between 1973 and the early 1980s, regionalisation was included as an effort to increase efficiency and address the economic downturn. There are many reasons given in favour of the implementation of territorialisation. In a nutshell, here are some of the reasons why a regional government came to be:

- i. *Rational Functional*: Regional groups were formed to execute the tasks effectively and efficiently in public service provision. Due to the continuous process of urbanisation and growth of metropolitan areas during the twentieth century, the expansion activities and responsibilities increased, resulting in insufficient local government. Furthermore, the existing fragmented local structure made it hard.
- ii. *Ideological Motivations*: Regionalisation is viewed as a form of decentralisation that serves to protect democracy against fascist or totalitarian centralisation. A strong sub-state government can help protect the rights of people who live in rural and remote areas as well as people who live in cities.
- iii. *Sectional Interest*: Regionalisation creation is supported by politicians and political parties, as well as public bureaucrats, as it may benefit from the enlargement of regional levels.
- iv. *Centre Advantages*: There are advantages for central government budget cuts when responsibilities and taxation capacities are transferred to the regional level.



On the other hand, less money is spent at the central level because they are no longer directly in charge of previous tasks.

- v. *Resolve Ethno-Territorial Conflicts*: Regionalists think that a policy of regionalisation, which would give more power to the region's people, would be a good way to solve ethnic-territorial conflicts, reduce protests, and please the majority in the region.
- vi. *Driven by Economic Globalisation*: The role of the region emerged as the economic and social basis after production space could be made available on a large scale. Economic globalisation through transnational processes gives the region an advantage in economic integration, rapid industrialisation, and growth indicators.

(Evered, 2005; Loughlin, 1996; Schrijver, 2006).

The formation of this regional government is also supported by federation countries such as Canada, the US, Germany, Australia, Belgium, and Switzerland. In these federated states, the regional government becomes an autonomous political entity with powers protected by the constitution and the right to participate in national politics through a second legislature at the national level or through institutionalised intergovernmental cooperation mechanisms. In the union state, the issue of this territory remains unclear.

In a unitary state, a territory is basically an administrative institution without the powers conferred by the centre. However, it differs from Italy, Spain, France, and the UK in that regionals have framed various types of arrangements in an orderly meso space. In Italy, provincial governments (established under the 1948 Constitution) were formed in an approach of asymmetry and political diversity because their regional entities were divided into "special provinces" and "common provinces". Five "special provinces" (Valle d'Aosta, Trentino Alto Adige, Friuli-Venezia Giulia, Sicily, and Sardinia) have been granted legislative autonomy over major revenue sources, and the wider expenditure assignment also determines their own additional functions through constitutional law, not like 15 other regions (Emiliani et al., 1997). Spain was also influenced by the Italian model, with the 1978

Constitution providing special territories, namely, the three “historic nations” (Catalonia, Galicia, and the Basque Country), a “fast track” process different from other regions that had to follow a specific set of requirements. The process is deliberately intended to be asymmetrical (Loughlin, 1996; 2014). In France, the region was established in 1972 after the economic disparity gap between the regions and the international economic recession impacted the country. Nevertheless, the provinces were established even with limited powers, and even the central government was reluctant to transfer some political and administrative power to the provinces. Until 1982, the province had been reformed through decentralisation, and the law had changed the nature of the provincial council in three main ways. First, the province was no longer administratively and financially dependent on the state. Second, executive power was transferred from both provincial and departmental superintendents to an elected department chair and a provincial council. Third, the region became a fully local authority, with a corresponding increase in its legal and political status. Eventually, the strength and legitimacy of the new provincial council were enhanced (Douce, 1995).

In the UK, territories are formed from a diversity of administrations and asymmetrical political backgrounds. Territories have been established in Scotland, Northern Ireland, and Wales. In 1998, certain areas of central government were devolved to democratically responsible governments in Scotland, Wales, and Northern Ireland. On the other hand, England was left undeveloped because no territory was formed. The diversity of regional governance that exists widely does not coincide with each other. In government systems, centrifugal and centripetal pressures work together to make the relationship between provinces and the central government complicated. In short, although France and Italy established asymmetric territories (with special autonomy in certain territories), overall, territories were given limited powers, without substantial autonomy, created through a process of deconcentration and coexisted with more traditional administrative units. In contrast, the UK and Spain prefer power sharing over territories through a devolution of power that has a semi-federal appearance. Therefore, these changes have made it more difficult to tell the difference between some union-versus-federal systems when it comes to territorial management and power-sharing arrangements.

## ***Decentralisation***

Throughout the last four decades, decentralisation settings have been hastily built to accommodate changing government functions and activities. Decentralisation has become more popular because of ineffective and inefficient governance, insufficient social and economic growth, and macroeconomic instability (Bird & Vaillancourt, 1999; Cheema & Rondinelli, 2007) and the weakness of central authorities in the civil service (Ebel & Yilmaz, 2001). Decentralisation is believed to be a very promising method of addressing issues and maximising economic potential. It appears to improve accessibility, local responsibility, accountability, and the efficacy of government service delivery, making it less costly and likely to promote welfare gains and equality. Given the benefits and drawbacks of decentralisation, practically all countries accept this.

Decentralisation is often referred as the process of devolving functions or activities to the lowest level of social order capable of fulfilling them. From an individual perspective, decentralisation empowers individuals through the empowerment of their local governments (Bahl, 2006), granting them decision-making authority over issues affecting their daily lives (Ebel & Yilmaz, 2001). From an organisational standpoint, it is the allocation of power and governance from central to regional and local levels through subsidiary principles, with the goal of improving the overall quality and effectiveness of the system of governance (United Nations Development Programme, 2000). There are three dimensions of decentralisation in the scopes and functions of multi-layered governments: administrative, political, and fiscal. Generally, administrative decentralisation is often simultaneous with civil service reform. It refers to the extent of autonomy of non-central government units relative to central control. Administrative decentralisation seeks to redistribute authority, transferring decision-making, and providing financial resources and responsibility for the delivery of a select number of public services among different levels of government. In short, administrative decentralisation is the transfer of responsibility for the planning, financing, and management of certain public functions. This responsibility is transferred from the central government and its agencies to other units of government agencies, levels of government, semi-autonomous public authorities, or corporations, or area-wide, regional, or functional authorities (Regmi et al., 2010; Work, 2002).

Political decentralisation seeks to provide political power to subnational governments to implement certain political functions as they are better able to serve the local citizens. In the diversity of society's preferences and interests, state and regional governments are presumed to be more efficient in the decision-making process since they have better access to information than national political authorities. By analogy, political decentralisation promotes democratisation by giving citizens, or their representatives, more influence in the formulation and implementation of policies. The concept also implies that the selection of representatives from local electoral jurisdictions allows citizens to know their political representatives better and allows elected officials to improve their knowledge of the needs and desires of their constituents. Political decentralisation, to a greater extent, frequently requires a combination of statutory reforms, the development of pluralistic political parties, the strengthening of legislatures, and the encouragement of effective public interest groups. Because the description of political decentralisation covers a wide range, other forms of decentralisation often entail a degree of political decentralisation as well. Simultaneously, political decentralisation necessitates universal participation and new approaches to community institutions and social capital (Regmi et al., 2010; Work, 2002).

There is an overlapping between administrative and political decentralisation in which political decentralisation implicitly assumes an extensive form of administrative decentralisation. However, it is not necessary that weak forms of administrative decentralisation imply political decentralisation. Both dimensions of administrative and political consist of three major forms, i.e., devolution, deconcentration, and delegation. Devolution is considered a form of political decentralisation, while deconcentration and delegation are two major forms of administrative decentralisation. Devolution refers to the full transfer of responsibility, decision-making, resources, and revenue generation to a local level public authority that is autonomous and fully independent of the devolving authority. Units that are devolved are usually recognised as independent legal entities and are ideally elected (although not necessarily). Deconcentration, however, is often considered the weakest form of decentralisation since it does not involve any transfer of real power to local governments. Delegation is perceived as a broader form of decentralisation, whereas devolution represents an administrative decentralisation that underpins most political decentralisation (Regmi et al., 2010).

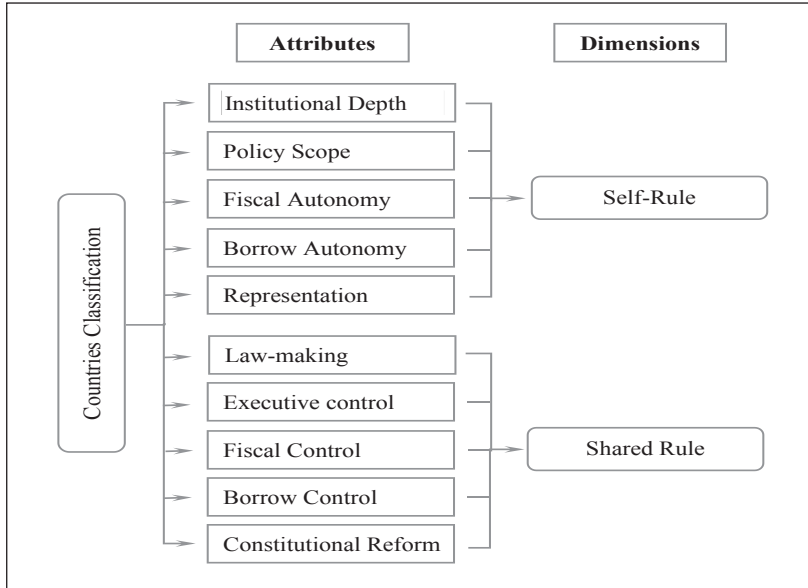
Fiscal decentralisation represents the best work by the government when it is closer to the people (Stigler, 1957) and enables it to pursue the agenda mandated by the voters. Fiscal decentralisation is the most comprehensive and possibly traceable degree since it refers to the resource allocation to subnational governments and is directly linked to budgetary practices. Currently, the Government Finance Statistics (GFS) by the International Monetary Fund (IMF) have consistent definitions over time and are the only existing source of data for worldwide cross-country analysis of fiscal decentralisation and public finance. The measurement of decentralisation most used in the literature is the decentralisation ratios calculated for government expenditure and revenues, respectively (Lijphart, 1984; Yao, 2006). Therefore, on the expenditure indicator, decentralisation is measured as a ratio of state-local government spending to total government spending and a ratio of state-local government revenue to total government revenue (Ebel & Yilmaz, 2001; Oates, 2006; Yao, 2006).

## **METHODOLOGY**

Prior to classifying cases of countries ( $n = 70$ ) into distinct groups, it is necessary to identify the number of clusters first. Initially, the number of clusters ( $k$ ) was determined using a hybrid methodology that included hierarchical cluster analysis, two-step cluster analysis, and k-means cluster analysis. Hierarchical clustering is accomplished in two ways: (1) agglomerative and (2) dendrogram. In the agglomerative method, the elbow point assists in determining the number of clusters. These elbows appear on a line graph constructed using coefficient values. Contrarily, a dendrogram assigns the cluster number to a scaled distance of 5 (Shobha, 2020a; Gaskin, 2015). The next method employs a two-step cluster test to ascertain the quality of the cluster. The Model Summary displays information about the inputs and clusters, while the cluster quality chart reflects the model's overall quality as poor, fair, or good. After having the number of clusters ( $k$ ) in the preceding procedures, the k-mean cluster analysis proceeds to clustering the  $n = 70$  sample countries. Hair et al. (2010) stated that k-means cluster analysis is effective at discovering internal homogeneity (within clusters) and external heterogeneity (between clusters). In this study, clustering was done using data from the Regional Authority Index (RAI), which covered ten attributes from 1970 to 2018 (see Figure 2)

**Figure 2**

*Countries Classification over Self-Rule and Shared Rule Dimensions, 1970–2018*



*Note.* Illustrated from Hooghe et al. (2016).

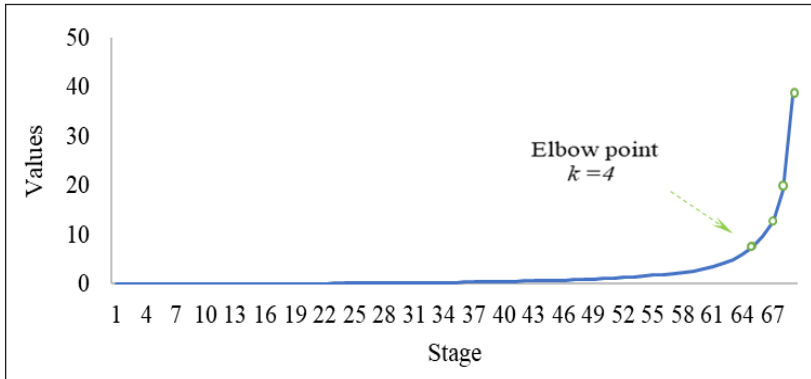
As shown in Figure 2, five attribute scores were examined as self-rule, while the remaining five attribute scores were checked as shared rules.

## RESULTS

This study determined  $k = 4$  as shown in all hybrid clustering procedure. Based on the hierarchical clustering test, the agglomeration schedule's coefficient value best illustrates the elbow point. Figure 3 depicts the 66<sup>th</sup> stage agglomeration coefficient elbow point. That is,  $k = 4$  for 70 countries. In a dendrogram, Figure 4 showed that the cluster number was 4 as counted at five scale distances.

**Figure 3**

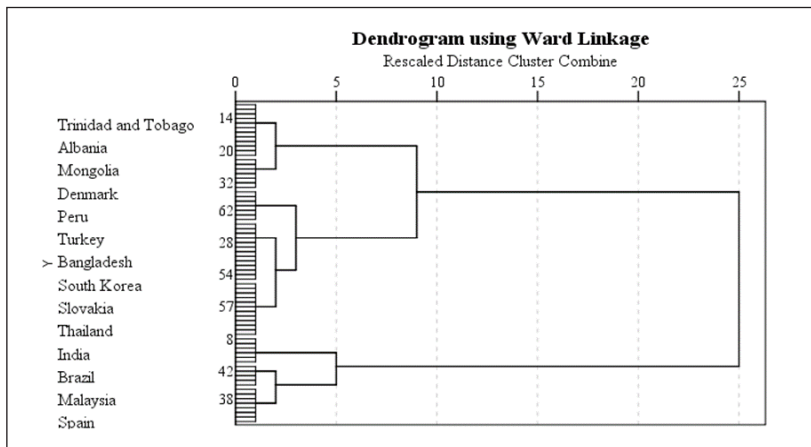
*Agglomeration Schedule Coefficients, 1978–2018*



*Note.* A hierarchical clustering test over the RAI, 1970–2018 data index. Own work.

**Figure 4**

*Dendrogram Clustering, 1970–2018*

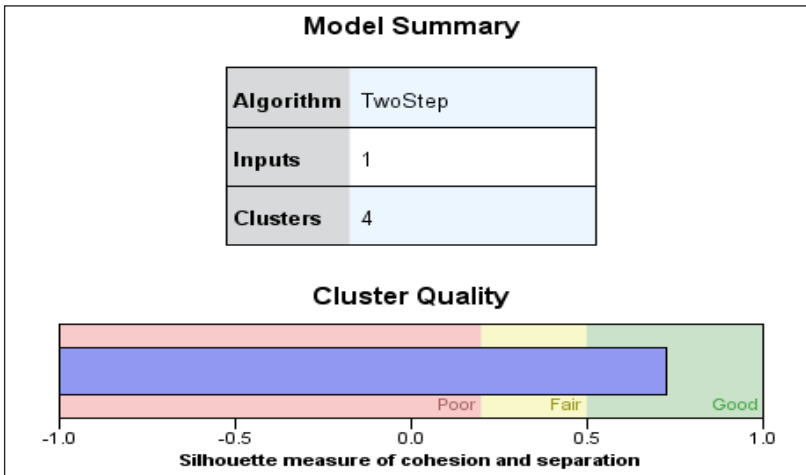


*Note.* A hierarchical clustering test over the RAI, 1970–2018 data index. Own work.

In Figure 5, the two-step cluster analysis showed that the model summary 1970–2018 in four clusters was “good” cluster quality.

**Figure 5**

*Model Summary Review, 1970–2018*



*Note.* A two-step test over the RAI, 1970–2018 data index. Own work.

Using the  $k = 4$  value, k-means clustering was further used to categorise  $n = 70$  countries based on similarities (within groups) and differences (between groups). The k-means tests provided scores for attributes and determined the following:

- Cluster 1:* Absence of both self-rule and shared rule by regional governments.
- Cluster 2:* Regional governments exercise self-rule but not shared rule.
- Cluster 3:* Regional governments enjoy self-rule and shared rule, except for borrowing control.
- Cluster 4:* Regional governments exercise complete self-rule and shared rule.

Based on their score, these  $n = 70$  countries were clustered. Throughout these five decades, some countries remained static, while others developed new self-rule and shared rules assigned to regional authorities. According to Figure 6, most unitary countries were grouped into Cluster 1, which resulted in significantly smaller radar images than those generated in Figure 7, which were substantially larger due to the vast majority of federation countries being categorised into Clusters 3 and 4.



**Figure 6**

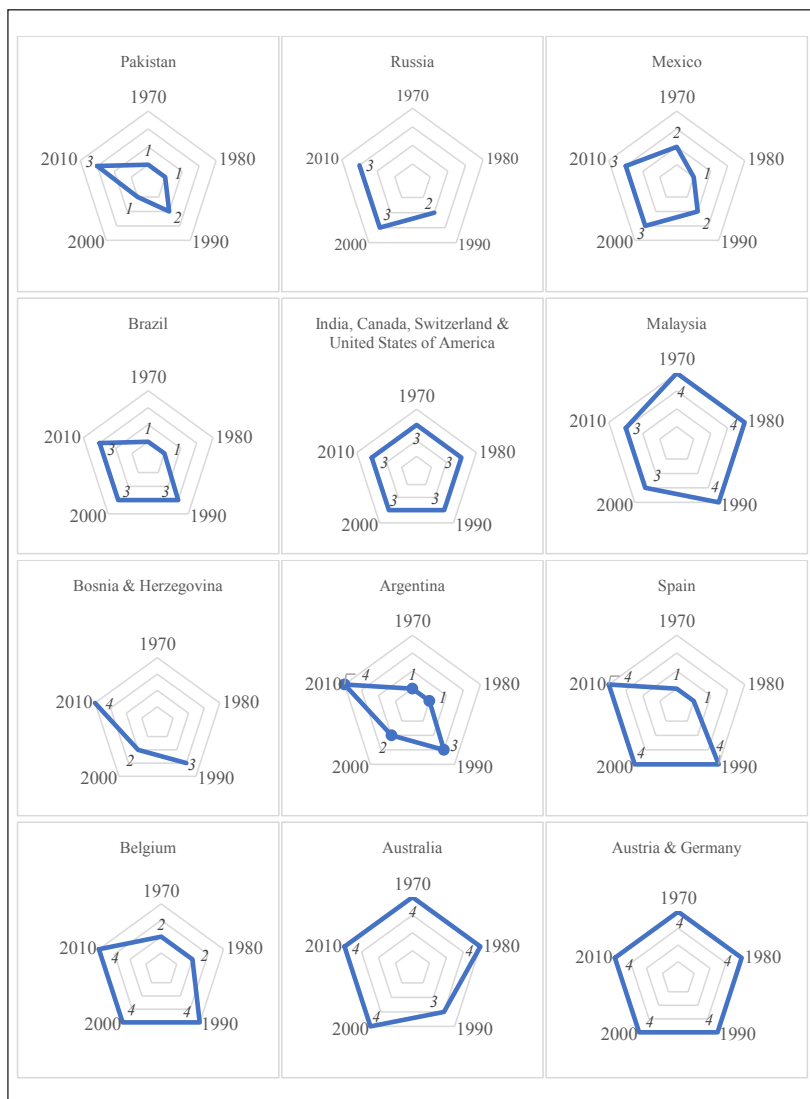
*Four Clusters based on Z-score of Ten Attributes in Unitary State*



*Note.* 1: Absence of self-rule and shared rule. 2: Exercise self-rule but not shared rule. 3: Enjoy self-rule and shared rule, except for borrowing control. 4: Exercise complete self-rule and shared rule. Own work.

**Figure 7**

*Four Clusters based on Z-score of Ten Attributes in Federation Countries*



*Note.* 1: Absence of self-rule and shared rule. 2: Exercise self-rule but not shared rule. 3: Enjoy self-rule and shared rule, with the exception of borrowing control. 4: Exercise complete self-rule and shared rule. Own work.

As seen in Figure 6 and Figure 7, the federalisation process began in the 1980s and 1990s in a few unitary and federation countries. Numerous countries have had an expansion in autonomy and control, leading to changes in regional authority from one to two (Italy, France) and even one to four (Spain), one to three (Argentina, Brazil), or two to four (Spain, Belgium). Consequently, the position of a particular state would fluctuate across clusters. To simplify the state classification procedure, all ten attributes of self-rule and shared rule were summed up into a single significant index known as the Regional Authority Index (RAI). As a result, the RAI time series data from 1970 to 2018 was utilised to establish the same clustering approach. Figure 8 and Table 2 show the standings of countries according to their cluster and governmental system (unitary or federation).

**Figure 8**

*Regional Authority Index (Z-score) and System of Government by Cluster*



*Note.* K-means clustering result over RAI time series data from 1970 to 2018. Own work.

According to Figure 8, the RAI's z-score position was low in Cluster 1 and increased as it entered the fourth cluster (Cluster 4). Additionally, this chart demonstrated clearly that RAI z-scores were low in unitary systems yet high in federation systems.

Next, Table 2 is summarised in the following points:

**Cluster 1:**

- all  $n = 22$  unitary countries, had the lowest clusters' mean RAI, with a range of  $M = .00$  (*min*) to  $5.42$  (*max*), had all negative

z-scores with a range of  $z = -1.1935$  (*min*) to  $-0.6032$  (*max*), and the distance of case from the classification cluster centre was in the range of  $DC = .238$  (*min*) to  $.352$  (*max*).

- regional levels did not have authority at all areas.

**Cluster 2:**

- all  $n = 29$  unitary countries, with ranges of  $M = 5.88$  (*min*) to  $13.79$  (*max*),  $z = -.5531$  (*min*) to  $.3084$  (*max*), and  $DC = .344$  (*min*) to  $.518$  (*max*).
- regional levels had limited authority (self-rule and shared rule).

**Cluster 3:**

- $n = 12$  countries recorded as unitary ( $n=3$ ) and federation ( $n=9$ ), with ranges of  $M = 17.13$  (*min*) to  $25.05$  (*max*),  $z = .6722$  (*min*) to  $1.5348$  (*max*), and  $DC = .357$  (*min*) to  $.505$  (*max*).
- regional levels were granted a substantial authority, except for borrowing control.

**Cluster 4:**

- all  $n = 7$  federation countries had the highest clusters' mean RAI, with ranges of  $M = 27.02$  (*min*) to  $36.20$  (*max*), had all positive z-scores with a range of  $z = 1.7494$  (*min*) to  $2.7492$  (*max*), and a range of  $DC = .354$  (*min*) to  $.645$  (*max*).
- regional levels were granted complete authority at all areas.

Table 2

Z-score RAI Mean and Cluster Number of Case by Countries Crosstabulation, 1970–2018

CLUSTER 1				CLUSTER 2				CLUSTER 3				CLUSTER 4			
Countries	Z-score	Mean	DC*	Countries	Mean	DC*	Countries	Z-score	Mean	DC*	Countries	Z-score	Mean	DC*	
Estonia	-1.1935	0.00	0.238	Greece	-0.5531	0.344	Mexico	0.6722	17.13	0.357	Spain	1.7494	27.02	0.354	
Iceland	-1.1935	0.00	0.238	Myanmar	-0.5444	0.335	Netherlands	0.7016	17.40	0.328	Canada	1.8866	28.28	0.217	
Luxembourg	-1.1935	0.00	0.238	Portugal	-0.5411	0.332	France	0.7681	18.01	0.262	India	1.9661	29.01	0.138	
Trinidad and Tobago	-1.1608	0.30	0.206	Slovakia	-0.4649	0.256	Pakistan	0.7898	18.21	0.240	United States of America	2.0369	29.66	0.067	
Costa Rica	-1.1293	0.59	0.174	South Korea	-0.4355	0.226	Brazil	0.8051	18.35	0.225	Bosnia and Herzegovina	2.0838	30.09	0.020	
Guatemala	-1.0846	1.00	0.130	Sri Lanka	-0.4289	0.220	Argentina	0.9935	20.08	0.036	Belgium	2.2548	31.66	0.151	
Honduras	-1.0846	1.00	0.130	Ukraine	-0.4202	0.211	Russia	1.0905	20.97	0.061	Germany	2.7492	36.20	0.645	
El Salvador	-1.0530	1.29	0.098	Serbia	-0.4082	0.199	Malaysia	1.1307	21.34	0.101					
Bulgaria	-1.0454	1.36	0.090	Bolivia	-0.3865	0.177	Italy	1.1809	21.80	0.151					
Latvia	-1.0432	1.38	0.088	Czech Republic	-0.2884	0.079	Austria	1.2451	22.39	0.215					
Albania	-1.0399	1.41	0.085	Papua New Guinea	-0.2873	0.078	Australia	1.4433	24.21	0.414					
Slovenia	-1.0193	1.60	0.064	Ecuador	-0.2721	0.063	Switzerland	1.5348	25.05	0.505					
Lithuania	-0.9397	2.33	0.015	Turkey	-0.2612	0.052									
Ireland	-0.9201	2.51	0.035	Bangladesh	-0.2460	0.037									
Chile	-0.8886	2.80	0.067	Poland	-0.2372	0.028									
Nicaragua	-0.8733	2.94	0.082	Croatia	-0.2307	0.021									
Mongolia	-0.7938	3.67	0.161	United Kingdom	-0.2176	0.008									
Dominican Republic	-0.7481	4.09	0.207	Romania	-0.2089	0.000									
Paraguay	-0.7176	4.37	0.238	Philippines	-0.2046	0.005									
Panama	-0.6620	4.88	0.293	Uruguay	-0.2002	0.009									
Finland	-0.6250	5.22	0.330	Hungary	-0.1708	0.039									
Thailand	-0.6032	5.42	0.352	New Zealand	-0.1359	0.073									
				Norway	-0.0009	0.208									
				Indonesia	0.0939	0.303									
				Denmark	0.1048	0.314									
				Peru	0.1647	0.374									
				Sweden	0.2006	0.410									
				Colombia	0.2017	0.411									
				Japan	0.3084	0.518									

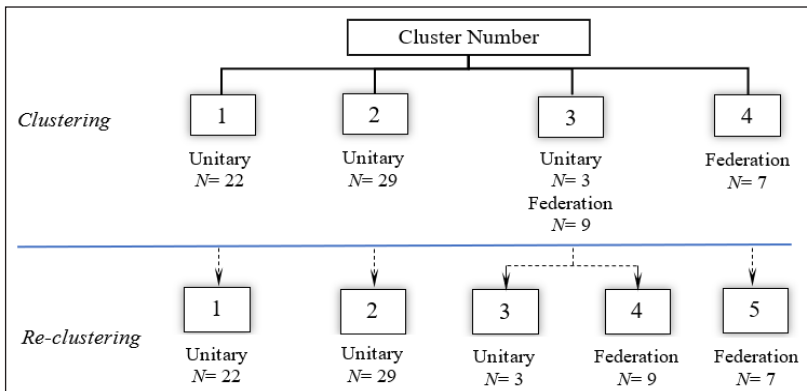
Note: Unitary, Federation. DC\* = Distance of case (from its classification cluster centre). Own work.

## Re-Clustering Number

Figure 8 and Table 2 revealed the existence of two government systems in Cluster 3. Since the unitary and federation governmental systems were distinct, therefore, both were separated into another cluster as shown in Figure 9.

**Figure 9**

*Re-clustering the Number of Clusters*



*Note.* Own work.

## DISCUSSION

Spurred by the global trend of decentralisation and regionalisation, this study found the cluster constructed parallelly with those trends. As shown in Figure 9, five clusters of government systems were simplified in a new classification, which consisted of centralised unitary, decentralised unitary, regionalised, centralised federation, and decentralised federation (see Table 3).

**Table 3**

*The Typology of New Classification Unitary-Federation Systems*

	<b>Unitary</b>	<b>Regionalisation</b>	<b>Federation</b>
<b>Centralisation</b>	Centralised Unitary		Centralised Federation
<b>Decentralisation</b>	Decentralised Unitary	Regionalised	Decentralised Federation

*Note.* Own work.

In a continuum, it presented a degree of federalism that went from centralised unitary countries to decentralised federation (Figure 10). Based on the results of a clustering conducted on RAI data (1970–2018), each of the five clusters was identified and described. Moving along the continuum, the structure of government became increasingly federalism, whereby regional governments exercised complete self-rule and shared rule over all spheres of government. In other words, two or more units of jurisdiction established and united separate polities as a set of institutions within a more comprehensive political system with certain powers distributed. Meaning that, the higher the degree of federalism, the more power is allocated to the constituent units. The characteristics of the five clusters were discovered and distinguished based on the findings of a clustering research using RAI data (1970–2018).

**Figure 10**

*The Systems of Governments in a Continuum*

Unitary -----> Federation				
Centralised Unitary	Decentralised Unitary	Regionalised	Centralised Federation	Decentralised Federation
Estonia, Iceland, Luxembourg, Trinidad and Tobago, Costa Rica, Guatemala, Honduras, El Salvador, Bulgaria, Latvia, Albania, Slovenia, Lithuania, Ireland, Chile, Nicaragua, Mongolia, Dominican Republic, Panama, Paraguay, Finland, Thailand.	Greece, Myanmar, Portugal, Slovakia, South Korea, Sri Lanka, Ukraine, Serbia, Bolivia, Czech Republic, Papua New Guinea, Ecuador, Turkey, Bangladesh, Poland, Croatia, United Kingdom, Romania, Philippines, Uruguay, Hungary, New Zealand, Norway, Indonesia, Denmark, Peru, Sweden, Colombia, Japan.	Netherlands, France, Italy	Mexico, Pakistan, Brazil, Argentina, Russia, Malaysia, Austria, Australia, Switzerland	Spain, Canada, India, United States of America, Bosnia and Herzegovina, Belgium, Germany

*Note.* Own work.

In the first continuum, centralised unitary states had a multilayer structure, but the central government retained absolute control. This cluster comprised regions whose existence was not predetermined by the constitution and whose powers were not constitutionally established. This cluster had the least amount of decentralisation, which was defined as deconcentration, as it did not entail the transfer of real authority to lower layer units. In other words, neither self-rule nor shared rule had been granted at the regional level.

Within this cluster, Luxembourg, for example, has subnational jurisdiction at three levels: districts, cantons, and municipalities. The districts are not given any general-purpose jurisdictions; instead, they



are deconcentrated offices tasked with supervising municipalities. In comparison, Ireland had no regional governance structure until 1987. In the next seven years, Ireland established eight development regions and later granted them regional authority status. Nonetheless, neither the development region nor the regional authorities have taxing authority; they may only charge for their services. There is no direct or indirect representation of development regions, and each regional authority lacks the capacity to implement specific policies (Hooghe et al., 2016). Thailand, on the other hand, has *changwat* (provinces) and special regions (Bangkok and Pattaya). Unfortunately, *changwat*, Bangkok, and Pattaya have no fiscal autonomy. *Changwat* is deconcentrated over most of the twentieth century. Similar to Bangkok and Pattaya, their fiscal positions over resource collection and revenue sharing were determined by the central government (Hooghe et al., 2016).

In the second continuum, the cluster of unitary countries featured regional delegation types that were more flexible and decentralised. Delegation was somewhat perceived as a more extensive form of decentralisation (Regmi et al., 2010). For example, in Japan, *todofuken* (prefectures at the intermediate level) have lacked authority over their own institutions, local governments, police, residual powers, and thus are powerless to act. On the other hand, the central government established the level of subnational jurisdiction to ensure that the entire country always adhered to the same rules. Subnational powers were technically called “*agency-delegated functions*”, which meant that governors were acting as agents of the central government and were directly accountable to the relevant central ministry when they did their jobs (Hooghe et al., 2016).

South Korea, which has historically been heavily centralised and ruled by the central government, experienced a power change in 1987. The 1987 Constitution eliminated unification prerequisites in favour of subnational autonomy and established a framework for subnational decentralisation, although the implementation was slow. Likewise, in Indonesia, the 1945 Constitution designed this centralised unitary republic into four subnational territorial layers: *provinsi* (provinces), *kabupaten* (districts), *kota* (towns/subdistricts), and villages. In August 1950, a provisional constitution was approved to establish a decentralised unitary state. Throughout history, decentralisation occurred, and subnational governments arose in several parts of the

islands. Sukarno, however, annulled the provisional constitution in 1957, and two years later, the 1945 Constitution was reinstated. In 1974, a new law created a parallel structure of decentralised administration to correspond to independent governance. *Provinsi* may potentially create regional taxes under the New Order, but only on behalf of the central government. When it comes to taxation, debt, or borrowing, the central government is not compelled to consult with the *provinsi* (Hooghe et al., 2016).

In the UK, their intermediate governance is rather complex, consisting of Scotland, Wales, and Northern Ireland, and nine regions in England, as well as a diverse system of unitary authorities, counties, districts, and boroughs. Since 1999, Scotland, Wales, as well as Northern Ireland, have all had substantial policy responsibilities. Hooghe et al. (2016) classified Scotland, Wales, and Northern Ireland as autonomous (self-ruling) territories due to their varying degrees of devolution. In terms of self-rule, counties enjoyed autonomy over property tax rates between 1950 and 1983, but the central government capped the rate in 1984, and property taxes were phased out in 1990 in favour of community charges or a poll tax to fund the expense of community services. However, these community charges grew unpopular, and the poll tax was replaced with a council tax in 1994. At the regional level, England relied on central government grants, while the London Authority retained autonomy over the rate of minor regional taxes and the ability to impose fees and charges, such as the congestion charge. In comparison, Northern Ireland, Scotland, and Wales depend on the central government's unconditional block grants. In terms of shared rule, counties have no power sharing arrangements, whereas Scotland, Wales, Northern Ireland, London, and counties have no control over loans (Hooghe et al., 2016).

The third continuum comprised a cluster of three unitary countries with a regional government that was self-governing (autonomous) but had minimal shared rules, particularly over borrowing control. For instance, Italy has evolved into a *quasi-federal* state with two distinct regional governance levels: *province* (provinces) and *regioni* (regions). Until 1974, provinces had little autonomy (self-rule) over their budgets, even though the central government tightened control over revenue on equity grounds. In 1993, the province received greater revenue autonomy over registered vehicles, public land use, surcharges on electricity consumption, and additional fees on waste

disposal (Hooghe et al., 2016). The province is also free to borrow from financial institutions, but their budgets must be submitted to the regional board of auditors. However, neither the *regioni* nor the *province* are frequently consulted regarding borrowing constraints. In the Netherlands, *provincies* (provinces) have some authority over small taxes and collect fees for water pollution, groundwater taxes, surcharges on television and radio licencing fees, and motor vehicle taxes. *Provincies* also permitted borrowing to finance capital investment, and interest payments as well as depreciation must be accommodated within a balanced current budget. *Provincies*, on the other hand, still had no control over borrowing (Hooghe et al., 2016). France has two tiers of regional governance: *régions* (regions) and *départements* (departments), as well as an autonomous region, Corsica. *Départements* were both decentralised authorities and deconcentrated divisions. *Départements* might set the rates for self-employed tax, mining dues, town planning tax, electricity tax, gambling tax, and motor vehicle tax, whereas *régions* might determine self-employment and motor vehicle tax rates. Corsica, on the other hand, received special development grants, which were unilaterally determined by the central government. In terms of shared rules, *régions* and *départements* had no power sharing, whereas Corsica did with limited power. *Régions*, *départements*, and Corsica did not have fiscal control and borrowing control as well (Hooghe et al., 2016).

In this cluster, regional entities were constitutionally recognised but had no role in constitutional reform and no law-making power (France), or that power was not exclusive (Italy), and were without regional representation as is customary. Within constitutional guarantees, regional bodies with elected regional assemblies and governments were accountable for budget and policy decisions (France and Italy), and regions performed certain functions on behalf of the central government but not directly to elected assemblies and governments. To some extent, the system shifted towards federalism, with power devolved to lower levels, yet the central government remained supreme over central judicial, fiscal, and economic structures. In other words, this cluster was less centralised than a rigid unitary, but it was more centralised than a federation. These clusters were termed as “*regionalised*” or “*semi-federal*”.

In the fourth continuum, there was a cluster of centralised federations known as “*quasi-federations*” in which power was concentrated in

the central government and the constituent units were subordinate. Wheare (1980) claimed that quasi-federations should not be considered federations even though there has been disagreement about whether to label them as genuine federations or not, though some countries are so-called federations in a provision of the constitution. In such circumstances, disproportion of powers occurred when different constituent states possessed dissimilar powers (although they have the same constitutional status). That is, it resembled an asymmetric federation. The concept of asymmetry expressed the extent to which component states do not share the conditions and concerns common to the federation system. The ideal asymmetrical federation system would be one composed of political units corresponding to differences in interest, character, and makeup that exist within the whole society (Burgess, 2006, p. 213). An asymmetric, however, occurs in a federation system where everyone must have a federation constitution and all the constituent units have the same formal status (as a state) either *de facto* or *de jure*. Russia and Malaysia both have this quasi-federation feature, which contributes to their asymmetrical nature.

The final cluster at the end of the continuum was a decentralised federation. This was the case of the US federation established in Philadelphia (1787). As a prototype of a federation state, the US constitution did not prevent an enormous growth in the central government's power in later years. However, it is one thing to transfer certain powers from the states to the new central government, thus transforming the US from a confederacy into a federation. In the American Modern Federations of the United States (the classical model), central and sub-national governments were coordinated, not subordinate. Therefore, the US began as a genuine federation based on the concept of Wheare (1963), whereby power is shared equally between the central government and constituent units in coordinate practices. Conversely, Canada and India began as *quasi-federations* as they retained the British parliamentary tradition. In fact, the British parliamentary government was designed for a unitary state, not for a federation. For this reason, Canada took a federation (1867) and India (1950) called parliamentary federalism to mean the distribution of power through the constitution itself, which gave the central government powers for intervention, amendment, veto, and approval. Here, the country was a long way from the principle of equal treatment for its constituent units, which was not even coordinated with the central government.

## CONCLUSION

For the last two decades, the unitary-federation dichotomy has been severely contested by decentralisation and regionalisation factors (Baldi, 1999; Swenden, 2006). According to Lijphart (1999), separating decentralised and centralised states from federations or unitary constitutions is very impossible; given that federations can be both centralised and decentralised, and unitary countries can be both centralised and decentralised. Nevertheless, this study discovered five significant groups based on a clustering analysis performed on over half a century's worth of data using the Regional Authority Index (RAI). Lijphart's (1999) previous study of  $n = 36$  democracies (coverage period of 1945–1996) outlined five categories on an ordinal scale of 1–5: (1) unitary and centralised, i.e. France, Italy, Luxembourg, and Ireland; (2) unitary and decentralised, i.e. Denmark, Finland, Sweden, and Japan; (3) semi-federal states, i.e. the Netherlands, Spain, and Belgium (before 1993); (4) federal and centralised federations, i.e., Venezuela, Austria, and India; and (5) decentralised federations, i.e., the United States, Germany, Belgium (post-1993). In contrast to Lijphart, this cluster analysis determined that Italy and France were classified as regionalised or semi-federal (Lijphart, 1999) or intermediate clusters (Loughlin, 2014). Loughlin (2014) also noted that “the placement of France and Italy in the unitary centralised category was questionable, since it may reflect the fact that the initial research was conducted in the 1980s, excluding current developments and reforms in Italy and France”. Based on this finding, France and Italy experienced significant changes in the 2000s (see Figure 6). Notwithstanding, the placements of countries within the clusters may change as the regional's autonomy and control growing complex.

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