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Salim Brüggemann, Robin Gut, Uwe Serdült, Jonas Wüthrich

The World of Referendums

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Bezugsadresse:

Zentrum für Demokratie Aarau (ZDA) Villa Blumenhalde, Küttigerstrasse 21 CH-5000 Aarau Telefon +41 62 836 94 44 E-Mail info@zdaarau.ch www.zdaarau.ch

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Preface

We are pleased to present the World of Referendums - 2023 edition report. It is the second such report compiled by a team at the Centre for Democracy Studies Aarau (ZDA) at the University of Zurich, Switzerland. The report is based on data contained in the unique Referendum Database (RDB). We define referendums as instances of "(...) [a] popular vote on an issue of policy that is organized by the state or at least by a state-like entity, such as the authorities of a de facto state" (Mendez and Germann 2016, 144). So defined, the referendum includes both votes on government proposals as well as citizens' initiatives.

In this iteration of the *World of Referendums* report, our aim is to provide a graphical and descriptive assessment of institutional availability and referendum practice with a special focus on national and subnational referendums in Switzerland. As a word of caution, we would like to remind the reader that this is a largely atheoretical data report. The data presented may reveal many interesting patterns and further avenues for future analyses based on theories and concepts from democracy studies, institutionalism and comparative public policy.

This report has been thoroughly compiled and checked by the authors. Any mistakes that remain are our own. We are aware that the *Referendum Database* may contain inconsistencies or missing events. This is why we are grateful for your critical feedback via e-mail to feedback@rdb.vote.

Introduction to the RDB

The Referendum Database (RDB), formerly known as the c2d Referendum Database, is hosted by the University of Zurich's Centre for Democracy Studies Aarau (ZDA), an academic research centre dedicated to the study of democracy in Switzerland and around the world.

The RDB is committed to the documentation of referendum results at the national and partly at the subnational level on a global scale, and in particular at the cantonal level for Switzerland. As of 2024, the RDB contains information on 3,000 referendums at the national level and 15,000 referendums at the subnational level in over 200 countries and territories worldwide since 1791. For Switzerland alone, the *Referendum Database* contains data on around 700 national referendums since 1793, and around 7,000 cantonal referendums since 1970. For each of these referendums, we have recorded the institutional context and characteristics such as the trigger, the question put forward to the voters, the turnout, the outcome, etc. In total, we collect more than fifty data points for each referendum. The RDB can be accessed **here**. Alternatively, the R package **rdb** is offered to access the database's content directly.

History of the RDB

From 1994 to 2007, the Referendum Database was built up and developed at the *Centre for Research on Direct Democracy* (c2d) at the *Department of Constitutional Law* of the *University of Geneva*. The centre brought together researchers in law, political science and sociology studying direct democracy as institutions and political practice. The c2d promoted research on direct democracy from a pluridisciplinary perspective and also provided information, advice, and counselling on various aspects to public authorities (Auer and Bützer 2001).

The Referendum Database was originally funded by the Swiss National Science Foundation (SNSF) project Dynamique et actualité de la démocratie directe dans un Etat fédéral grant no 39348 at the University of Geneva, directed by professors Andreas Auer and Hanspeter Kriesi. It was further developed with funds from the SNSF project La démocratie communale en Suisse: vue générale, institutions et expériences dans les villes 1990-2000 grant no 59366, and other projects.

In fall 2007, the Centre for Research on Direct Democracy and the Referendum Database were migrated to the Centre for Democracy Studies Aarau. Maintenance and development of the RDB was defined as one of the founding purposes of the ZDA. In the following years, the database was further developed, extended, and improved; for example by closing gaps in the data on voting results in the Swiss cantons or by automating the coding of international voting results. In 2018, the database was completely redesigned and made available in a new format. Over the years, the RDB has served as the basis for more than fifty scientific publications on direct democracy in Switzerland and worldwide.

To support these research efforts, the RDB strives to become the most comprehensive empirical collection on referendums worldwide. This is why we continue to improve the database and add further data, especially from votes at the subnational (state and local) levels. At the same time, we are overhauling the RDB data structure to better encompass the historical and current legal foundations of referendums. The RDB is to provide accurate, up to date, and easily accessible data for referendum researchers worldwide. Concurrently, we valorize the existing data in the form of annual reports and academic publications. This is why we initiated this World of Referendums (WoR) report series. In addition, we strive to regularly publish cutting edge academic research on referendums around the world.

Acknowledgements

First and foremost, we would like to pay homage to the founders of the Referendum Database, namely professors Andreas Auer, Jean-Daniel Delley and Hanspeter Kriesi, who all worked at the Centre for Research on Direct Democracy (c2d) at the University of Geneva at the time. Over the years, many additional people were involved in the development, maintenance and expansion of the Referendum Database:

Collaborators at the *University of Geneva* from 1994 to 2007 were, in alphabetical order: Andreas Auer, Antje Beck, Marco Breitenmoser, Michael Bützer, Jean-Daniel Delley, Frédéric Esposito, Philippe Gerber, Sabine Haenni-Hildbrand, Guita Korvalian, Nicolas Kozuchowski, Reto Kreuzer, Hanspeter Kriesi, Claudio Mascotto, Jan Prince, Irène Renfer, Frank Schuler, Uwe Serdült, Bénédicte

Tornay, Alexander Trechsel, Nicolas von Arx, Valérie Vulliez-Boget, Tobias Zellweger, and Serge Zogg.

Collaborators at the Centre for Democracy Studies Aarau at the University of Zurich from 2007 until today in alphabetical order include: Mayowa Alaye, Corsin Bisaz, Salim Brüggemann, Lukas Christen, Magdalena Despotov, Juri Ezzaini, Norina Frehner, Louis Gebistorf, Micha Germann, Andreas Glaser, Robin Gut, Joey Jüstrich, Kymani Koelewijn, Daniel Kübler, Beat Kuoni, Irina Lehner, Sarah Lüthold, Fernando Mendez, Beat Müller, Joel Probst, Gabriela Rohner, Liana Sala, Uwe Serdült, Evren Somer, Gianluca Sorrentino, Anastasyia Souslova, Andrin Walla, Yanina Welp, Jonathan Wheatley, and Jonas Wüthrich.

A special thank you goes to the following persons for their inputs and critical comments on the *World of Referendums* reports: Laurent Bernhard, Benjamin Böhler, Junmo Cheon, Michaela Fischer, Louis Gebistorf, Andreas Glaser, Gabriel Hofmann, Daniel Kübler, Luka Markić, Joel Probst, and Marine Trichet.

Part A.

International analysis

This part of the report provides a comparative overview of the data on national referendums worldwide contained in the *Referendum Database*. The comparative analysis focuses on:

- \cdot the number and share of referendums and ballot dates (Chapter 1).
- · a trend analysis looking at individual countries and their number of referendums over time (Chapter 2).
- the type of referendums worldwide and referendums according to regime type (Chapter 3).
- the turnout in referendums worldwide (Chapter 4).
- \cdot the topics that were voted on (Chapter 5).

1. Number and share of referendums and ballot dates

1.1. National referendums and ballot dates per decade

Figure 1.1 shows the number of national referendums and ballot dates per decade from 1790 until today. The number of referendums (a) fluctuated at low levels in the 19th century. In the 20th century, it has increased steadily from around 50 in the decade from 1900 to 1909 to over 600 in the decade from 1990 to 1999. Since then, the number has decreased to slightly more than 400 per decade from 2010 to 2019. In total, 3067 referendums have been held worldwide since 1790.

Once we **exclude Switzerland (CH) and Liechtenstein (LI)** from the analysis (b), the number of referendums worldwide since 1790 is reduced to 2270. Nevertheless, the general trends are the same: Having omitted Switzerland and Liechtenstein, we see a peak at around 500 referendums in the 1990s, with a bit of a decline since then.

Looking at ballot dates, the picture is more evened-out, but the general trends are similar. There is an increase to a peak of around 250 ballot dates in the decade from 1990 to 1999 (c), with a small decrease for the decades afterwards. Excluding Switzerland and Liechtenstein (d), the pattern is the same but the total number of ballot dates is reduced from 1597 to 1185.

(a) Referendums (b) Referendums (without CH & LI) Total number of referendums: 3067 Total number of referendums: 2270 (c) Ballot dates (d) Ballot dates (without CH & LI)

Figure 1.1.: Number of national referendums and ballot dates per decade since 1790

Total number of ballot dates: 1185

Total number of ballot dates: 1597

1.2. Number and share of countries holding referendums

Figure 1.2 shows the number of countries that held referendums at least once a decade. It has increased tenfold since 1900, from around 10 in the 1900s to over 100 from 1990 to 2000 (a). If we control for the number of countries worldwide (Beger 2021; Correlates of War Project 2017), we find that the highest share was in the 1950s and the 1990s, when around half of all countries worldwide held at least one referendum (b).

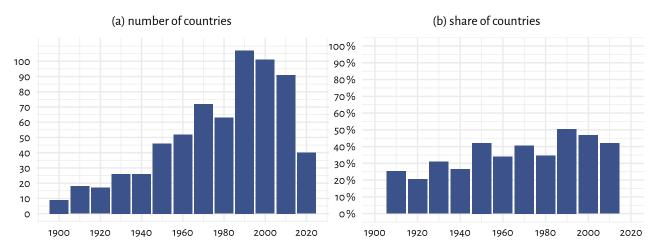


Figure 1.2.: Number and share of countries holding referendums since 1900

1.3. Top-ten analysis

Looking at the top-ten countries with the most referendums (a), we see that Switzerland held by far the most referendums since 1900, followed by New Zealand and Liechtenstein. Looking at ballot dates (b), Switzerland is still the lone frontrunner, with Liechtenstein coming in second and New Zealand third. It becomes apparent from Figure 1.3, that only ten countries are responsible for half the referendums and a third of all ballot dates worldwide since 1900.

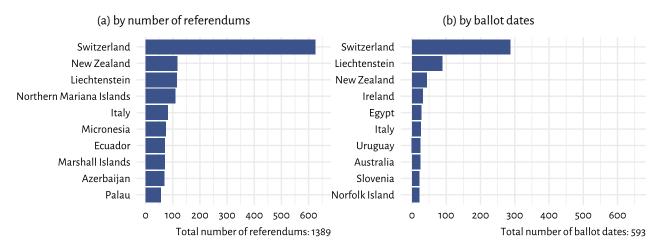
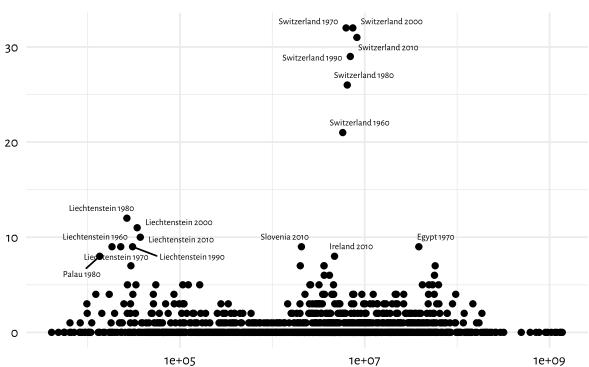


Figure 1.3.: Top-ten countries since 1900

1.4. Population size and ballot dates per country

With regard to direct democracy, there has been an ongoing debate on whether countries with smaller populations hold referendums more often than countries with larger populations. In line with the findings of Anckar (2004) and Vatter (2000), the analysis in Figure 1.4 shows that there is no correlation between a country's population size (data by The World Bank (2023)) and its number of ballot dates per decade. With the exception of a few outliers, mainly from Switzerland and Liechtenstein, we don't observe more referendums (y-axis) in countries with a small population (x-axis). In fact, even larger countries can have a relatively high number of referendums per decade, e.g. Egypt in the 1970s.



 $Figure 1.4.: Number of referendums \ per \ decade \ by \ population \ size$

Population size (log)

2. Trend analysis

For the trend analysis, we refer to Huntington (1993) who defined the following five time intervals of democratization and autocratization. To avoid overlapping time spans, we refer to the categorization by Lührmann and Lindberg (2019):

· First (long) wave of democratization: 1828–1925

· First reverse wave: 1926-1942

· Second wave of democratization: 1943–1960

· Second reverse wave: 1961–1974

· Third wave of democratization: 1975 until today

2.1. Number of ballot dates per wave of democratization

Counting the absolute number of ballot dates during these periods, we find the following:

- During the first wave of democratization, around 200 ballot dates took place, followed by 100 in the first reverse wave.
- During the second wave of democratization, 150 ballot dates took place, followed by 200 ballot dates in the second reverse wave.
- During the third and longest wave of democratization, almost 1000 ballot dates took place.

This shows that the number of ballot dates is not tied to the type of wave (democratization or reverse). Well into the third wave of democratization, the relative (per year) number has been steadily increasing over the years, as can be seen by looking at Figure 2.1. However, the last few decades saw a downward trend:

20
10
10
1900
1925
1942
1960
1974
2023
3rd wave
3rd wave

Figure 2.1.: Number of ballot dates per year in waves of democratization since 1900

Total number of ballot dates: 1503

2.2. Number of ballot dates per wave, top ten countries

As we can see in Table 2.1, **Switzerland**, **Liechtenstein**, **New Zealand**, **Uruguay** and **Australia** have held ballot dates consistently over the several waves and reverse waves. Newcomers were **Ireland** and **Italy** in the first reverse wave, **Egypt** in the second wave, **Norfolk Island** in the second reverse wave and **Slovenia** in the third wave.

Table 2.1.: Number of ballot dates per wave of democratization since 1900, top ten countries

	1st wave	1st reverse wave	2nd wave	2nd reverse wave	3rd wave	Total
Switzerland	35	27	45	34	146	287
Liechtenstein	6	11	7	14	50	88
New Zealand	9	4	8	5	17	43
Ireland	0	1	1	3	26	31
Egypt	0	0	2	6	19	27
Italy	0	1	1	1	23	26
Uruguay	1	3	4	3	14	25
Australia	8	3	4	3	6	24
Norfolk Island	0	0	0	2	19	21
Slovenia	0	0	0	0	21	21
Total	88	91	147	184	993	1503

2.3. Ballot dates in democratizing and autocratizing countries, per wave

To differentiate between democratizing and autocratizing countries, we calculate the change of the *liberal democracy index* by Coppedge et al. (2023) between two consecutive years. In this analysis, the number of ballot dates is reduced because the *liberal democracy index* is not available for many small countries or territorial units with many referendums, such as Liechtenstein or Norfolk Island.

Looking at Figure 2.2, we find that the number of ballot dates in **democratizing countries**¹ has risen steadily until it reached a peak in the 1990s. Since then, the number of ballot dates in democratizing countries has declined. In comparison, the number of ballot dates in **autocratizing countries**² remained constant until the end of the 1980ies, after which it increased and remained constant at a much higher rate than before.

Comparing the net difference between democratizers and autocratizers, there were more ballot dates in autocratizing countries during the 1st reverse wave, but not during the 2nd reverse wave. In the ongoing 3rd wave, we observed an interesting pattern:

- In the beginning of the third wave, there were almost always more ballot dates in democratizing countries.
- At the end of the 1990s and the turn of the new millennium, there were more ballot dates in autocratizing countries.
- This trend reversed in the 2000s, when democratizing countries held more ballot dates.
- Since around 2010 however, ballot dates in autocratizing countries have quite consistently outnumbered those in democratizing countries.

¹ Countries with a positive change in the liberal democracy index from one year to the next.

² Countries with a negative change in the liberal democracy index from one year to the next.

15 10 5 0 5 10 1st 2nd 1st 2nd 3rd reverse 15 reverse wave wave wave wave wave 1900 1920 1980 1910 1930 1940 1950 1960 1970 1990 2000 2010 2020 democratizer autocratizer

Figure 2.2.: Number of ballot dates per year, per wave since 1900, democratizers and autocratizers

Total number of ballot dates: 826

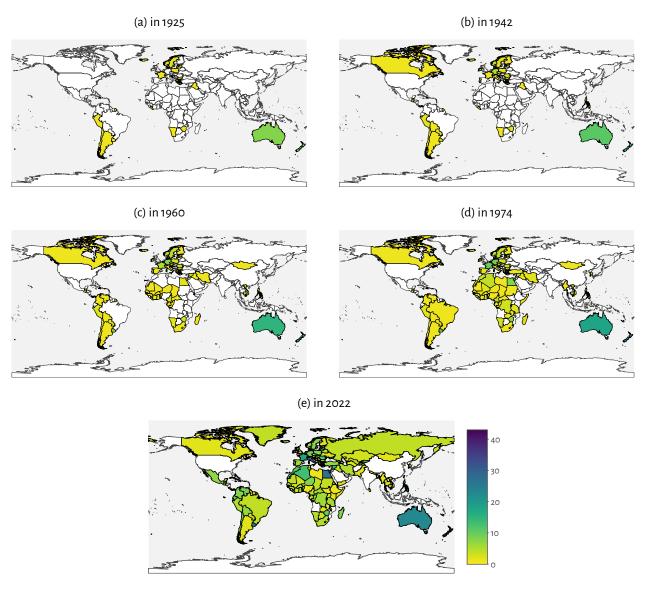
2.4. Cumulative world map

ballot dates per year

The world map below shows the cumulative number of ballot dates on a yearly basis since 1900. It is striking that referendums have spread across almost the entire world to this day. In many countries, referendum use has not been limited to just a few, and in some cases even more than 100 referendums have been held.

For ease of presentation, Switzerland and Liechtenstein were excluded from the map, as otherwise the rest of the world would not have been distinguishable in terms of colour. Furthermore, some small states and territories are not shown. Please note that the map shows country borders as of 2022. For example, referendums in *Germany* include those that were held in the *German Reich* (Weimar Republic and Third Reich), the Federal Republic of Germany and the German Democratic Republic.

Figure 2.3.: Cumulative number of ballot dates (excluding Switzerland and Liechtenstein)



3. Referendum and regime type

3.1. Referendum type worldwide

In Figure 3.1 and Figure 3.2, we analyze the institutional trigger type of referendums worldwide since 1900. This variable denotes the way in which a referendum was initiated. As we can see, the differences between the world regions are quite pronounced:

- · In **Africa** (a), most referendums were *top-down* and some *automatic*. There were no *bottom-up referendums*.
- In the **Americas** (b), most referendums were *top-down*, with some *automatic* and few *bottom-up* referendums.
- · In **Asia** (c), most referendums were either *automatic* or *top-down*. The number of *top-down* referendums remained low.
- In Europe (d), the frequency of top-down and automatic referendums was similar. The number of bottom-up referendums peaked at the turn of the millennium.
- In **Oceania** (e), there were many *automatic* referendums and few *bottom-up* and even fewer *top-down* referendums.

In summary, *top-down* referendums dominated in Africa and the Americas. In Asia and Oceania, there was an increase in *automatic* referendums. In Europe, there were the most *bottom-up* referendums, and the number of *top-down* and *automatic* referendums was similar.

250 200 150 100 50 1900 1920 1940 1960 1980 2000 2020 automatic top down bottom up

Figure 3.1.: Referendums by institutional trigger type per decade since 1900

Total number of referendums: 2912

(a) Africa (b) Americas (c) Asia 40 30 30 40 20 20 10 0 1900 1950 utomatic top dow Total number of referendums: 284 Total number of refer ndums: 437 (d) Europe (e) Oceania 125 100 75 50 25 0 bottom up bottom up Total number of referendums: 627

Figure 3.2.: Referendums by institutional trigger type and region per decade since 1900

3.2. Referendum type by regime type

In Figure 3.3, we differentiate the **type** of referendum by **regime type**, using the Regimes of the World (RoW) measure by V-Dem (Coppedge et al. 2023). We find the following:

- In **closed autocracies** (a), mostly *top-down* and a few *automatic* referendums were held. There were only three *bottom-up* referendums in closed autocracies.
- In **electoral autocracies** (b), the number of *top-down* and *automatic* referendums was similar and higher than in closed autocracies. Again, there were almost no *bottom-up* referendums.
- In **electoral democracies** (c), again mostly *top-down* referendums were held. The number of *automatic* and *bottom-up* referendums was about equal.
- In liberal democracies (d), the number of bottom-up referendums was highest, followed by automatic referendums and then top-down referendums.
- The number of referendums in countries without a Regimes of the World value (NAs) was very high. This is due to the fact that the RoW measure is not available for many of the small island states making up the bulk of automatic referendums.

In summary, we see that referendums took place across democracies and autocracies. However, the **trigger type** varies. *Top-down* referendums dominate in *closed autocracies* and *electoral democracies*. The number of *top-down* and *automatic* referendums is similar in *electoral autocracies* and *liberal democracies*. *Bottom-up* referendums were almost only observed in *liberal democracies*.

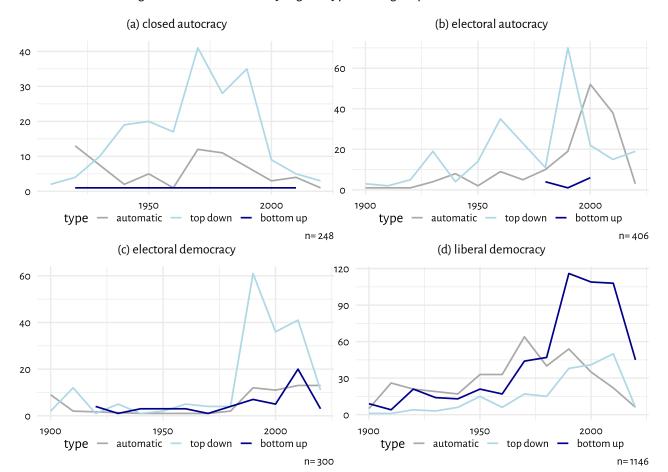


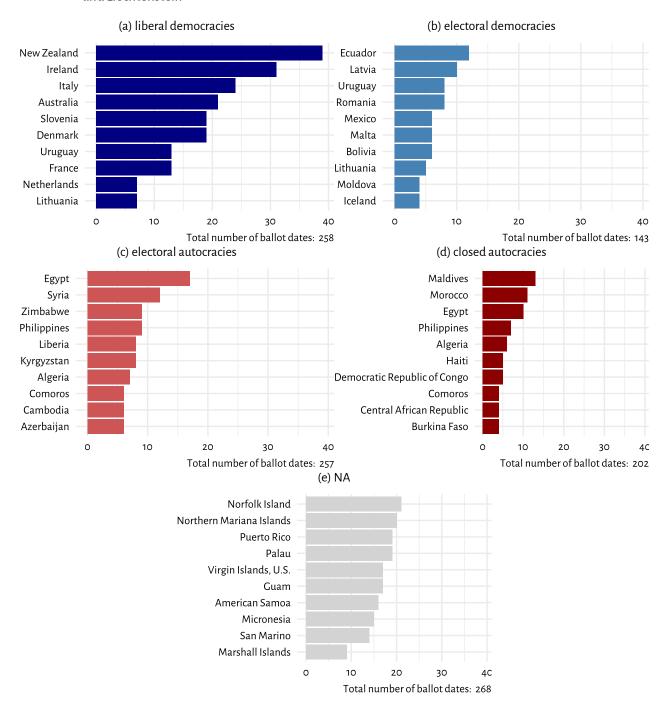
Figure 3.3.: Referendums by regime type and region per decade since 1900

3.3. Rank number of ballot dates by regime type (V-Dem)

Figure 3.4 shows the number of ballot dates differentiated by Regimes of the World (RoW) (Coppedge et al. 2023):

- Around 260 ballot dates took place in *liberal democracies*. Excluding Switzerland with close to 300 ballot dates, the frontrunners were New Zealand (39), Ireland (31) and Italy (23). Note that Lithuania is among the top-ten for both *liberal* (7) and *electoral democracies* (5).
- A total of around 150 ballot dates took place in *electoral democracies*. Here, the frontrunners are Ecuador and Uruguay.
- Around 260 ballot dates took place in *electoral autocracies*. The most frequent countries were Egypt (18), Syria (11) and Zimbabwe and the Philippines with 9 each.
- Around 200 ballot dates took place in closed autocracies. Here, the most frequent countries were the Maldives (13), Morocco (11) and again Egypt (9).
- For around 270 ballot dates, there was no information concerning regime type available. This is where the country names could not be matched with the RoW dataset. This can be due to sovereign states not coded by RoW (e.g. Liechtenstein, Palau or Micronesia) or it can be due to RDB coding territorial units that are not sovereign states (e.g. Norfolk Island: Australia, Northern Mariana Islands: USA, U.S. Virgin Islands, etc.).

Figure 3.4.: Top-ten countries since 1900 by number of ballot dates and regime type (RoW), without Switzerland and Liechtenstein

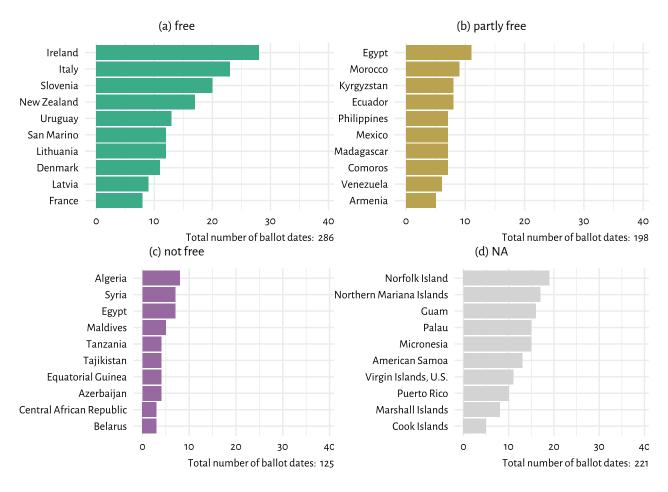


3.4. Rank number of ballot dates by regime type (Freedom House)

In Figure 3.5, we re-run the analysis according to **type** of referendums by **regime type**, this time using the Freedom House measure of regime type (Freedom House 2023). Because Freedom House only gathered data since 1973, the overall numbers are lower and the ranking order changes. What is new with the Freedom House data is that smaller countries such as **San Marino** (*free*), the **Comoros** (*partly free*) and the **Maldives** (*not free*) are added to the list, thus making for a more complete analysis.

However, even using Freedom House data, there were more than 230 cases (NA) where there was no measure of regime type available for a given year.

Figure 3.5.: Top-ten countries since 1973 by number of ballot dates and regime type (Freedom House), without Switzerland and Liechtenstein



4. Turnout

As we can see in Figure 4.1, the average turnout in referendums has decreased from 75 % in the 1940s to just under 50 % today. The trend is similar over the regions, except for Oceania, where participation is recovering after a long period of decline and is increasing on average (see Figure 4.2).

Looking at turnout by *institutional trigger type*, we find that *bottom-up* referendums have the lowest turnout, followed by *top-down* referendums. *Automatic* referendums seem to have the highest turnout. However, there are vast differences over the different regions, as can be seen in Figure 4.2 and and Figure 4.3. While participation in national *bottom-up* referendums in the Americas dramatically decreased over the last decade, the opposite trend is observed in Oceania.

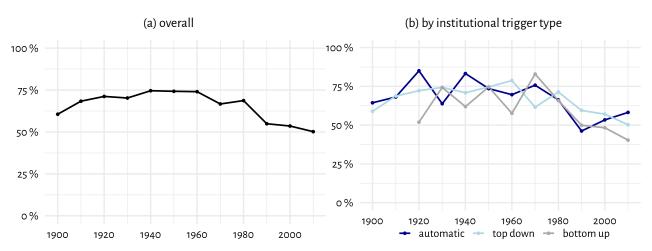
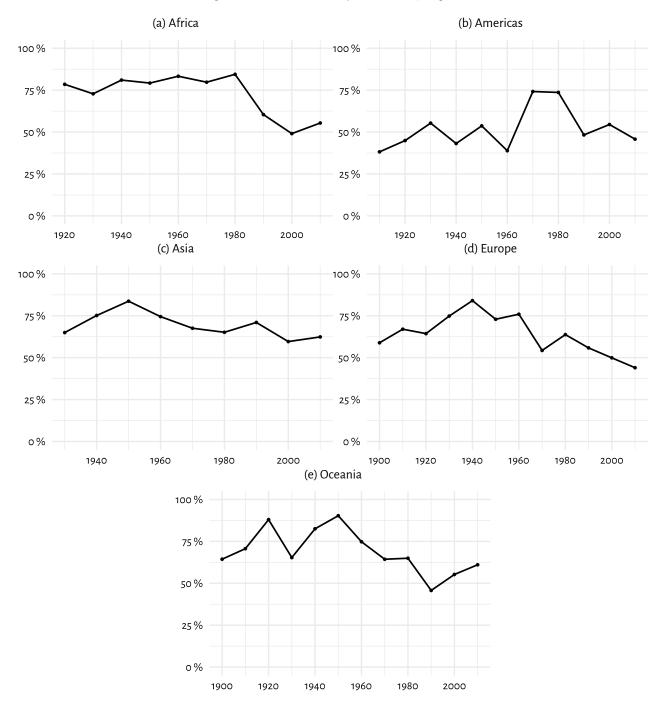
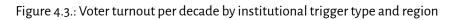
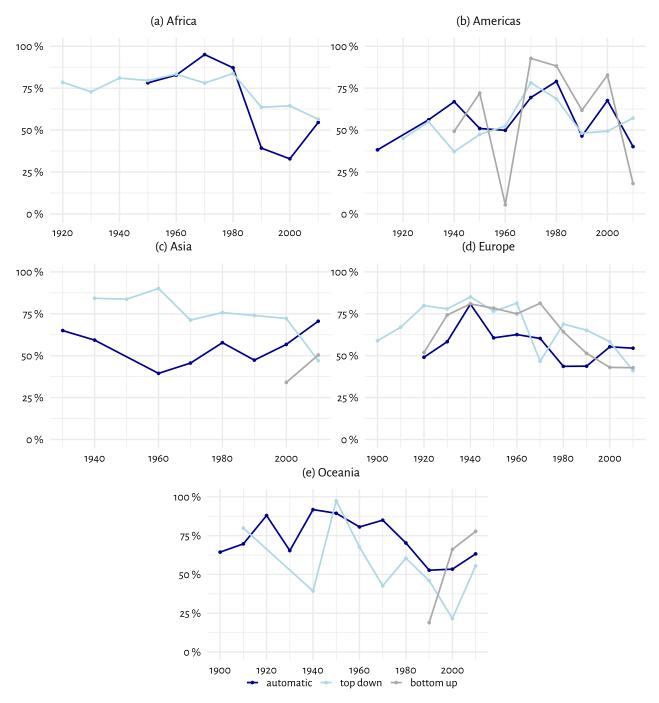


Figure 4.1.: Voter turnout per decade









5. Political topics

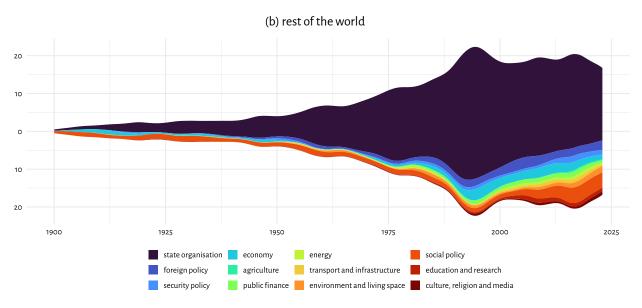
5.1. Comparing topic diversity in Switzerland/Liechtenstein with the rest of the world

Differentiating Switzerland and Liechtenstein in Figure 5.1 from the rest of the world, we find that the topics of their referendums have been much more diverse. Whereas the rest of the world held the overwhelming majority of referendums on **state organisation**, Switzerland and Liechtenstein have also been voting on that topic, but not only. Just as frequently, they have been voting on **social policy**, a bit less frequently on **public finance**, **the economy** and a host of other topics.

(a) Switzerland and Liechtenstein

5
1900 1925 1950 1975 2000 2025

Figure 5.1.: Frequency of top-tier political topics over time



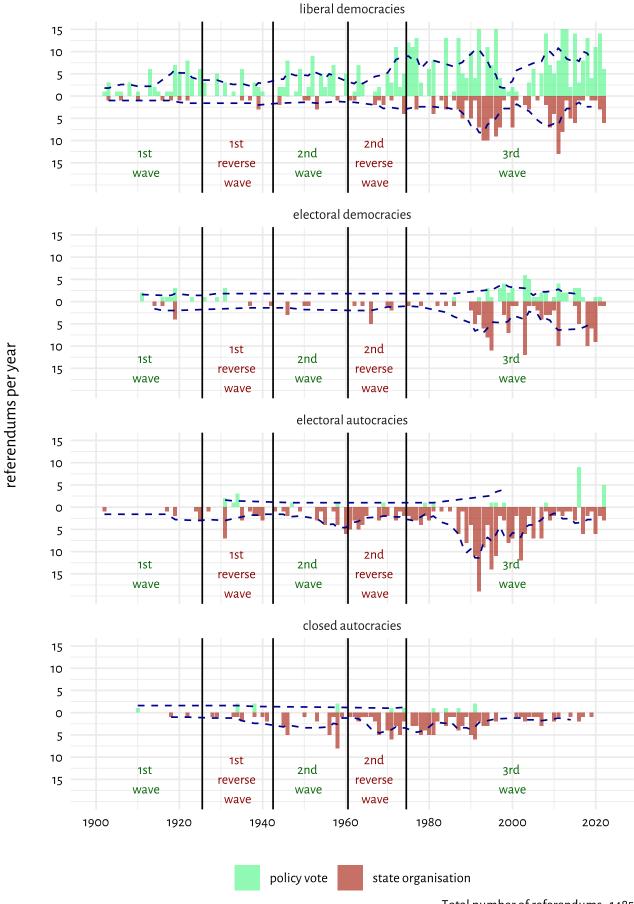
5.2. Votes on policies and state organization by regime type

Differentiating the topics of referendums between votes on **state organization** and on **policies** and distinguishing between regime types in Figure 5.2, we find the following:

- · Over time, **liberal democracies** have held more votes on actual policies than on state organization.
- This trend is reversed and accentuated for electoral democracies, electoral autocracies and closed autocracies. Over time, these three regime types have held many more referendums on state organization than on actual policies.

These trends can lead us to conclude that **voting on state organization** is something countries do regularly, no matter their regime type, whereas almost only liberal democracies seem to be **voting on policies**.

Figure 5.2.: Top-tier political topics dichotomy by regime type since 1900, without Switzerland and Liechtenstein



Glossary

For more details on the Referendum Database, please refer to the RDB code-book (Brüggemann 2023).

Ballot date Date on which at least one referendum was held in a polity. In our analysis, we oftentimes analyze ballot dates instead of referendums in order not to artificially inflate the number of referendums in certain countries. In some constitutional referendums for example, each article of the constitution is voted on individually. This means that the vote on each article is counted as an individual referendum.

In general, differentiating between **referendums** and **ballot dates** entails a few tradeoffs:

- If we look at single **referendums**, the danger is that we count different response options to the same question as distinct events.
- If we only look at unique **ballot dates** per country, we solve this problem. However, we also lose distinct referendums that took place on the same date.

Ideally, we would include an additional variable in the *Referendum Database* denoting if referendums taking place on the same date belong together or if they are distinct. Until this linking variable has been implemented, we analyze ballot dates also in the Swiss context.

In Switzerland, the Federal Chancellery fixes four dates per year on which all national and subnational referendums are held (Bundeskanzlei 2024). Please note that we tally ballot dates for cantonal votes individually per canton. For example, when Aargau holds a cantonal vote on the same day as Zurich, this will be counted as two cantonal ballot dates in our database.

Canton Subnational entity of Switzerland. 26 cantons together form the Swiss Confederation (Kley 2016).

Citizen Enfranchisement in Swiss referendums varies over time and space. At the national level, women's suffrage was only introduced in 1971, voting age 18 in 1991. Cantonal and even municipal enfranchisement rules can differ from the national rules. For example, Jura and Neuchâtel allow foreigners to vote in cantonal referendums; Glarus allows citizens to vote from the age of 16 (Dermont 2021; Poledna 2022).

Country In this report, we treat as "countries" those territorial units that hold referendums independently. Excluded from this are sub-national entities, such as federal states in the USA or cantons in Switzerland. Territories differ from federal states in that they may have a certain degree of autonomy, but they do not have the same extensive rights as federal states or provinces. As an example serves Greenland, which belongs to Denmark. Although Greenland is not a province in its own right, it has far-reaching

rights of self-determination. For example, the Greenlandic population can also decide on their own independence by referendum.

We rely on the classification into territorial units, based on the ISO 3166 standard that includes independent countries, territories and regions of geographical interest. Furthermore, ISO 3166-3 is used for historical countries that no longer exist.

Landsgemeinde The Landsgemeinde is a gathering of all enfranchised citizens of a canton to elect officials and pass laws. Some Swiss cantons have a Landsgemeinde tradition going back to the Middle Ages. Since the founding of the Swiss Confederation in 1848, almost all Landsgemeinden have been replaced with referendum democracy. Zug and Schwyz abolished the Landsgemeinde in 1848, Uri in 1928, Nidwalden in 1996, Appenzell Ausserrhoden in 1997, and Obwalden in 1998.

Today, only the cantons of Appenzell Innerrhoden and Glarus still hold a yearly Landsgemeinde (Stadler 2021). In these two cantons, all enfranchised citizens meet once a year to vote on a wide range of issues. Elections and votes at cantonal level are held by a show of hands. The Landsgemeinde is regarded as the supreme authority of the respective cantons, although it does not replace parliament or the ballot box. The exact number of votes in favor of or against a proposal can only be estimated and cannot be determined precisely. This is also why these votes are excluded from this analysis.

Legal basis Several authors have identified the legal basis as an important aspect of referendums (Suksi 1993; Gallagher 1996; Setälä 1999; Altman 2017). In the RDB, **legal basis** can take on the following values:

- · non-official: The referendum type has no legal basis.
- · ad-hoc: The referendum type has a legal basis which was specifically created for it.
- official: The referendum type has a legal basis that wasn't specifically created for it.

Legislature period The legislature period is the length of a parliament before new elections are held. The National Council has a four-year legislature period. It begins and ends with the constituent sitting of the newly elected parliament, which is held in December after each national elections (The Swiss Parliament 2024).

Postal voting In Switzerland, postal voting was introduced in 1994 at the national level. Today, it is the most common form of voting (Serdült 2024, 212). It is estimated that the introduction of postal voting increased turnout by around 4% (Luechinger, Rosinger, and Stutzer 2007).

Referendum instances In the RDB, we use the term **referendum** to refer to "[...] any popular vote on an issue of policy that is organized by the state or at least by a state-like entity, such as the authorities of a de facto state" (Mendez and Germann 2016, 144).

Regime type For regime type, we refer to the *Regimes of the World (RoW)* classification developed by the *Varieties of Democracy (V-Dem)* project (Coppedge et al. 2023). This classification divides countries into the following four types, according to the competitiveness of access to power (polyarchy) and liberal principles:

- closed autocracy
- · electoral autocracy
- · electoral democracy
- · liberal democracy

Additionally, we also use data compiled by Freedom House (2023) for robustness checks.

Topic The political topic that a referendum is held on. The topics are organized on a three-tier hierarchy which was developed together with Swissvotes, the Institute of Federalism of the University of Fribourg and the Section Politics of the Federal Statistical Office.

Turnout Share of registered voters participating in a referendum.

Trigger type The way the referendum is triggered:

- *automatic*: The referendum is triggered by a constitutional/legal requirement.
- top down: The referendum is triggered by an institution of the political elite like the monarch/president/government, the parliament, a territorial unit, the UN or another institution.
- bottom up: The referendum is triggered by citizen demand (e.g. a signature collection).

Type The institutional type of direct democracy which the referendum is an instance of (Kriesi and Bernhard 2014):

- · mandatory referendum: A referendum that was automatically triggered by certain legal conditions, usually found in the constitution.
- optional referendum: A referendum on a law passed by parliament that came about because the required quorum of citizen opposition was met (usually a certain number of signatures) within a specified period after the law was passed.
- · governmental referendum: A referendum launched by the government/executive or parliament/the legislative.
- citizens' initiative: A referendum launched by citizens, usually via a signature collection.
- *counter proposal*: A counter proposal by the government or parliament to a citizen's initiative.

At the cantonal level in Switzerland, the *referendum type* could be further differentiated (Degen 2016; Bätschmann 2017):

- In addition to the *constitutional initiative*, some cantons also know the *legislative initiative*, in which the object of the initiative is a cantonal law.
- In addition, some cantons also provide for the financial referendum, and diverse forms of administrative referendums.

Waves of democratization For the World of Referendums Report, we aim to show how many and which types of referendums have occurred over different time periods. For these time periods, we refer to the original work done by Huntington (1993) and refined by Lührmann and Lindberg (2019).

World region To categorize countries into world regions, we rely on the United Nations (UN) geoscheme which subdivides all countries into up to three different grouping tiers based on the UN M49 area code hierarchy.

See the documentation of the R function rdb::add_world_regions() for further details.

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