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Who Keeps the Seat? Administrative Legacy, Economic Weight and the Allocation of Capitals and Names in Vietnam's 2025 Provincial Merger

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Abstract

Mergers of subnational units create prizes that cannot be shared: one administrative seat and one name for each new unit. This paper studies how these prizes were allocated when Vietnam consolidated 52 provinces into 23 in 2025. Poisson-binomial tests, a search over allocation rules, penalised conditional logit models and leave-one-group-out validation compare the seat host and the name keeper with the other members of each merged group. A lexicographic rule reproduces almost every seat decision. When a merger re-unites a province that existed before the splits of the 1990s, the seat returns to that province's capital at the time of division; otherwise it goes to the largest economy. The rule survives correction for specification search and is selected in every validation fold. Governance quality and geographic centrality add little, although only large effects can be excluded. Names follow no comparable rule. They lean towards more developed members and separate from the seat mainly where economic claims are evenly balanced, a pattern consistent with symbolic compensation. The legacy effect depends on how provinces that moved their capitals are coded. Administrative history thus acts as a focal point in territorial reform, and material and symbolic assets are divided by different logics.

Keywords: Territorial reform, Provincial merger, Administrative capital, Path dependence, Conditional logit, Vietnam

JEL Classification: H77 , H11 , D73 , R50 , O53

1 Introduction

On 12 June 2025 the National Assembly of Vietnam reduced the number of provincial-level units from 63 to 34 in a single resolution (National Assembly of Vietnam 2025a). The decision followed a plenum of the Communist Party's Central Committee two months earlier, which had approved the list of merged units, their provisional names and the location of each new political and administrative centre, and which also decided to abolish the district tier of local government (Central Committee of the Communist Party of Vietnam 2025). Eleven provinces were left untouched (Central Committee of the Communist Party of Vietnam 2025). The remaining 52 were folded into 23 new units, most of them pairs and six of them triples. Each of these mergers produced two indivisible prizes. Only one former provincial capital could become the seat of the new government, and only one former province could lend its name to the new unit. Every other member lost its status as a provincial capital, its name on the map, or both.

How did the centre decide who kept what? The question matters beyond Vietnam. Territorial consolidation has become one of the most common forms of public sector reform, and a large literature examines why jurisdictions merge, which partners they choose and what mergers do to spending, debt and democratic engagement (Weese 2015; Saarimaa and Tukiainen 2014; Miyazaki 2014; Blom-Hansen et al. 2016; Lassen and Serritzlew 2011; Jordahl and Liang 2010; Reingewertz 2012). A parallel literature on administrative unit proliferation studies the opposite movement, in which central governments create new subnational units for political ends (Grossman and Lewis 2014; Grossman et al. 2017; Malesky 2009; Bazzi and Gudgeon 2021). Both literatures take the location of the new administrative centre largely as given. Yet capitals are among the most consequential assets a jurisdiction can hold. Political status shapes the long-run fortunes of cities (Bai and Jia 2023; Jia et al. 2021), the public employment that comes with a seat of government spills over into local private activity (Becker et al. 2021), and the location of the capital affects accountability and the quality of government (Campante and Do 2014; Campante et al. 2019). Political factors such as dictatorship and instability also concentrate a nation's urban population in its central city (Ades and Glaeser 1995). When units are split rather than merged, the newly created units that must establish a new capital and government bear the largest output losses (Cassidy and Velayudhan 2026). Names carry a different kind of value. Place names are instruments of political memory and identity rather than of administration (Rose-Redwood et al. 2010), and their loss is a salient symbolic cost for the communities that bear it.

This paper offers a systematic account of how these two prizes were allocated in the 2025 reform. The setting has three useful features. First, the outcome is observed for every merged group, and the official criteria are public. The Prime Minister's implementing decision asked that the new centre be chosen from among the existing provincial capitals so that the new government could start working quickly, and listed favourable location, synchronised infrastructure, room for future growth, regional balance and national defence as further considerations (Prime Minister of Vietnam 2025). For names, the same decision gave priority to one of the existing provincial names and mentioned tradition, history and culture (Prime Minister of Vietnam 2025). Second,

many 2025 groups re-unite provinces that had been one unit before the splits of 1991, 1996 and 2003 (National Assembly of Vietnam 1991a,b, 1996, 2003). This history creates a clean measure of administrative legacy: the province that hosted the capital of the earlier unit at the moment of division. Third, seat and name are allocated simultaneously within the same groups, which makes it possible to compare the logic of a material asset with that of a symbolic one.

The empirical strategy is designed for a small number of choice sets. The unit of observation is a province within a merged group, and the outcome is which member received the seat or the name. The analysis combines exact Poisson-binomial tests of how often the winner ranks first on a criterion, a search over 94 lexicographic allocation rules with a null distribution that accounts for the search itself (White 2000; Romano and Wolf 2005), conditional logit models estimated with Firth's bias-reducing penalty and profile-likelihood intervals (Firth 1993; Heinze and Schemper 2002; Heinze and Puhr 2010), permutation and conditional bootstrap tests, and leave-one-group-out validation. Each piece answers a different threat. Exact tests make no parametric assumptions. The rule search confronts the risk that a good-looking rule is an artefact of looking at many. The penalised models handle separation in sparse choice data, and out-of-sample checks show whether the patterns predict groups not used in estimation.

Four findings stand out. The first is that the seat follows a simple rule. When a merger re-unites an earlier province, the seat goes back to that province's capital at the time of division; when it does not, the seat goes to the member with the largest economy. This two-step rule assigns the seat correctly in 22 of 23 groups. It remains significant after correcting for the search over all candidate rules, and when the rule is chosen afresh on 22 groups and applied to the remaining one, the same rule is selected in all 23 folds. The second finding is that economic weight and legacy enter as distinct forces. In the conditional logit, a one standard deviation increase in within-group economic weight raises the odds of hosting the seat by a factor of about 3.5, and being the earlier capital raises them by a factor of about 6.6. Within groups that re-unite an earlier province, legacy dominates and economic weight plays no role, which is exactly the lexicographic structure the rule describes. The third finding is negative. Measures of provincial governance and of geographic centrality, both of which echo the official criteria, add nothing to the seat models. Power calculations show that this null is informative only about large effects, and the paper treats it accordingly. The fourth finding concerns names. No rule survives search correction for the name, and rule selection out of sample predicts the name no better than chance. The name responds less to economic weight than the seat does, it leans towards more developed members, and it separates from the seat mainly in groups where the economic claims of the two largest members are evenly balanced.

These results contribute to three conversations. The first is the political economy of territorial reform. Existing work explains the formation of mergers through scale economies, fiscal incentives and heterogeneity (Alesina and Spolaore 1997; Gordon and Knight 2009; Weese 2015), and the incentives of local actors before and after mergers (Tyrefors Hinnerich 2009; Hyytinen et al. 2014; Saarimaa and Tukiainen 2015; Hansen 2014). The present paper turns to a different margin, the internal division of a merged unit's indivisible assets, and shows that it is governed by a sparse and predictable

rule. The second conversation concerns path dependence in political geography. A large body of work shows that locations keep their advantages long after the original reason has vanished (Bleakley and Lin 2012; Pierson 2000), and that political hierarchy shapes the fortunes of places (Bai and Jia 2023). The results here identify a specific mechanism: dissolved administrative units leave behind a focal point that reorganisers return to decades later. The third conversation concerns how authoritarian centres manage subnational elites. Research on Vietnam shows that the centre has redrawn provincial boundaries to shift the balance of power within the party (Malesky 2009) and has experimented with recentralising local institutions (Malesky et al. 2014; Trinh and Lu 2026). The separation of seat and name in balanced groups points to a low-cost instrument of compensation that complements the material concessions studied elsewhere.

The remainder of the paper proceeds as follows. Section 2 describes the reform and its history. Section 3 sets out a simple framework and the hypotheses. Section 4 presents the data and the empirical methods. Section 5 reports the results and Section 6 the robustness checks. Section 7 discusses the findings and Section 8 concludes.

2 Background

2.1 Splits and mergers before 2025

Vietnam's provincial map has been redrawn many times since reunification. In late 1975 and early 1976 the northern National Assembly and the southern Provisional Revolutionary Government merged many provinces into a much smaller number of large units (National Assembly of the Democratic Republic of Vietnam 1975; Provisional Revolutionary Government of the Republic of South Vietnam 1976). Some of these large provinces predated reunification. Bac Thai was formed from Bac Kan and Thai Nguyen in 1965, Vinh Phu from Vinh Phuc and Phu Tho in 1968, and Ha Bac from Bac Ninh and Bac Giang in 1962 (Standing Committee of the National Assembly of the Democratic Republic of Vietnam 1965, 1968; National Assembly of the Democratic Republic of Vietnam 1962). From 1989 onwards the direction reversed. Successive divisions in 1989, 1991, 1996 and 2003 restored most of the provinces that had been absorbed (National Assembly of Vietnam 1989, 1991a,b, 1996, 2003). Malesky (2009) shows that these divisions were not politically neutral. Because provincial party leaders hold seats in the Central Committee, splitting provinces changed the balance of power within the party and helped reformers overcome resistance to economic liberalisation.

The 2025 reform partly undid this history. Of the 23 merged groups, ten re-unite, in full or with one added province, a province that had existed earlier, including the city that served as its capital (Table 1). Hoang Lien Son, Ha Tuyen, Bac Thai, Vinh Phu, Ha Bac, Ha Nam Ninh, Quang Nam - Da Nang, Cuu Long, the 1976 province of Hau Giang and Minh Hai all reappear in some form. In eight of these cases the earlier province is re-created in full, and in two a further province is added. The capital of the earlier province at the time of division is documented in the legislative record and summarised in Appendix Table A1. Three earlier provinces moved their capitals during their lifetime. Ha Tuyen was governed from Ha Giang until 1979 and from

Tuyen Quang afterwards, Hoang Lien Son moved from Lao Cai to Yen Bai in 1978, and Minh Hai moved from Bac Lieu to Ca Mau in 1984 (Council of Ministers of Vietnam 1984). These three cases matter for the coding of legacy and are examined separately in Section 6. One further group has a partial history. Quang Binh and Quang Tri both belonged to Binh Tri Thien, together with Thua Thien, from its formation in 1976 (National Assembly of the Democratic Republic of Vietnam 1975; Provisional Revolutionary Government of the Republic of South Vietnam 1976) until its division in 1989 (National Assembly of Vietnam 1989), but that province was governed from Hue, which lies outside the 2025 group. Neither member can therefore claim to be the earlier capital, and the group is treated throughout as one without an earlier common province.

2.2 The 2025 reform

The reform was decided quickly and from the top. The Central Committee's resolution of April 2025 approved the number of provincial units, the composition of each merged group, the provisional name and the location of each new centre (Central Committee of the Communist Party of Vietnam 2025). The Standing Committee of the National Assembly and the Prime Minister issued implementing rules within days (Standing Committee of the National Assembly of Vietnam 2025; Prime Minister of Vietnam 2025), the implementing rules required provincial authorities to consult residents and to submit the plans to people's councils for a vote (Standing Committee of the National Assembly of Vietnam 2025), and the National Assembly adopted the final resolution in June (National Assembly of Vietnam 2025a).

The implementing rules contain the only official statement of criteria. For the centre, the Prime Minister's decision asks that one of the existing provincial centres be chosen so that the new government can begin operating quickly, and that the centre have a favourable location, synchronised infrastructure and transport links, including links to the sea, room for future development, a balanced relationship among the merged localities and a position consistent with national defence (Prime Minister of Vietnam 2025). For the name, the decision gives priority to one of the pre-merger names in order to limit the cost to residents and firms of converting their documents, and asks that the choice reflect tradition, history and culture and be short, easy to recognise and easy to remember (Prime Minister of Vietnam 2025; Standing Committee of the National Assembly of Vietnam 2025). These criteria are broad. Most members of most groups could claim to satisfy several of them, and the rules do not state how they should be weighed. The empirical question is therefore which observable characteristics, if any, organise the decisions that were actually made.

3 Framework

3.1 Two prizes

Consider a merged group g with members $i = 1, \ldots, n_g$, where n_g is two or three. The centre assigns a seat s_g and a name m_g to one member each. The seat is an administrative asset. Moving the provincial apparatus into a city that already houses a

provincial party committee, people's council and departments is cheap, while building or relocating these institutions is costly. This is why the official rules restrict the choice to existing capitals and stress a quick start (Prime Minister of Vietnam 2025). The literature on public employment and political hierarchy also implies that the seat is valuable to the community that receives it (Becker et al. 2021; Bai and Jia 2023), so the seat is both a cost decision for the centre and a prize for the members.

The name is a symbolic asset. Changing it imposes administrative costs, mainly through the conversion of documents held by residents and firms, which is why existing names are given priority (Prime Minister of Vietnam 2025), but it also carries meaning for identity and memory (Rose-Redwood et al. 2010). A member that loses both the seat and the name loses all visible standing in the new unit, whereas a member that loses only one keeps a recognisable claim.

3.2 Hypotheses

Let the value to the centre of placing the seat in member i be

$$U^s_{ig} = \beta_E E_{ig} + \beta_L L_{ig} + \mathbf{z}'_{ig}\boldsymbol{\gamma} + \varepsilon_{ig}, \tag{1}$$

where E_{ig} is the member's economic weight relative to the other members, L_{ig} indicates that the member hosted the capital of an earlier province covering the group, and $\mathbf{z}_{ig}$ collects other attributes such as governance quality, centrality and development. The seat goes to the member with the highest value. If ε_{ig} follows a type I extreme value distribution, the probability that member i receives the seat takes the conditional logit form. Three hypotheses follow.

H1 (economic weight). The seat goes to the member with the largest economy, $\beta_E > 0$. A larger economy concentrates firms, population and public services, so a seat there minimises the distance between the government and most of its constituents and fits the official emphasis on infrastructure and connectivity (Prime Minister of Vietnam 2025).

H2 (administrative legacy). When the group re-unites an earlier province, the seat returns to that province's capital at division, $\beta_L > 0$. Such a city once housed the institutions of a larger province, its officials know how to govern the combined territory, and its claim is focal in the sense that all parties can recognise it without negotiation. Path dependence arguments predict that such focal points persist (Pierson 2000; Bleakley and Lin 2012). Because the 2025 reform was prepared within a few months, simple and defensible rules are especially likely to guide decisions (Lindblom 1959; Gigerenzer and Goldstein 1996).

H3 (stated criteria). Governance quality and centrality raise the probability of hosting the seat, $\boldsymbol{\gamma} > 0$ for these elements. This hypothesis takes the official language at face value.

For the name, the same structure applies with a different weight on each attribute. The fourth hypothesis concerns the joint allocation.

H4 (compensation). Names are less tied to economic weight than seats, and the name is more likely to go to a member other than the seat host when the economic claims of the members are balanced. If one member is clearly larger, giving it both

prizes is easy to justify. If two members are close, giving the name to the one that loses the seat spreads the symbolic and material gains. The argument parallels models of jurisdictional size, in which the gains from integration must be weighed against the costs borne by heterogeneous members (Alesina and Spolaore 1997), and evidence that merger outcomes depend on how members expect costs and benefits to be shared (Weese 2015; Blesse and Heinemann 2020; Brink 2004).

4 Data and methods

4.1 Sample and variables

The sample contains the 52 provinces that took part in the 2025 mergers, grouped into 23 merged units: 17 pairs and six triples (National Assembly of Vietnam 2025a). Four groups are led by a centrally-run city (Hai Phong, Da Nang, Ho Chi Minh City and Can Tho), and in each of them the city became both the seat and the name. Because these cases may follow a separate logic, all main models are re-estimated on the 19 contested groups that contain no centrally-run city. Table 1 lists the groups, the seat host, the name keeper, the member with the largest gross regional domestic product (GRDP) and the earlier province where one exists. The seat and the name went to different members in seven groups, all of them pairs. The seat went to the largest economy in 18 groups and the name in 15.

Economic data for 2024 come from the official statistical yearbook (National Statistics Office of Vietnam 2025b): population, GRDP, the number of operating firms, the stock of foreign direct investment, GRDP per capita, the urban share of the population and the share of trained workers. Governance is measured with the Provincial Competitiveness Index compiled by the Vietnam Chamber of Commerce and Industry and the Provincial Governance and Public Administration Performance Index, both of which are standard annual indicators of provincial institutions. Geographic measures use province boundaries from geoBoundaries (Runfola et al. 2020). Centrality is minus the mean straight-line distance from a province's capital to a grid of points covering the whole new territory, so that higher values indicate a capital closer to the merged unit as a whole. Further indicators record whether a province is coastal, whether it borders another country and its share of the new unit's land area. Appendix Table A5 gives full definitions.

All continuous covariates are expressed as deviations from the group mean and divided by their within-group standard deviation, so that each coefficient measures the effect of a one standard deviation difference between members of the same group. Economic weight is the first principal component of the within-group deviations of log population, log GRDP, log operating firms and log FDI stock. The component explains 77 percent of the within-group variation, and the loadings are close to equal for the first three variables (0.51, 0.55, 0.54) and somewhat lower for FDI (0.38). The governance index averages the standardised PCI and PAPI scores, and the development index averages standardised log GRDP per capita and the urban share.

Legacy capital equals one if the province hosted the capital of an earlier province that comprised at least two members of its 2025 group at the time that earlier province was divided. Ten provinces satisfy this definition, one in each re-united group

Table 1 The 23 merged groups: seat, name and claims

Group	Seat	Name	Other members	GRDP leader	Earlier province (capital at division)
1	Tuyen Quang	Tuyen Quang	Ha Giang	Tuyen Quang	Ha Tuyen (Tuyen Quang)
2	Yen Bai	Lao Cai†		Lao Cai	Hoang Lien Son (Yen Bai)
3	Thai Nguyen	Thai Nguyen	Bac Kan	Thai Nguyen	Bac Thai (Thai Nguyen)
4	Phu Tho	Phu Tho	Vinh Phuc, Hoa Binh	Vinh Phuc	Vinh Phu (Phu Tho)
5	Bac Giang	Bac Ninh†		Bac Ninh	Ha Bac (Bac Giang)
6	Hung Yen	Hung Yen	Thai Binh	Hung Yen	
7[c]	Hai Phong	Hai Phong	Hai Duong	Hai Phong	
8	Ninh Binh	Ninh Binh	Nam Dinh, Ha Nam	Nam Dinh	Ha Nam Ninh (Nam Dinh)
9	Quang Binh	Quang Tri†		Quang Binh	
10[c]	Da Nang	Da Nang	Quang Nam	Da Nang	Quang Nam - Da Nang (Da Nang)
11	Quang Ngai	Quang Ngai	Kon Tum	Quang Ngai	
12	Binh Dinh	Gia Lai†		Binh Dinh	
13	Khanh Hoa	Khanh Hoa	Ninh Thuan	Khanh Hoa	
14	Lam Dong	Lam Dong	Binh Thuan, Dak Nong	Lam Dong	
15	Dak Lak	Dak Lak	Phu Yen	Dak Lak	
16[c]	Ho Chi Minh	Ho Chi Minh	Binh Duong, Ba Ria-Vung Tau	Ho Chi Minh	
17	Dong Nai	Dong Nai	Binh Phuoc	Dong Nai	
18	Long An	Tay Ninh†		Long An	
19[c]	Can Tho	Can Tho	Soc Trang, Hau Giang	Can Tho	Hau Giang, 1976 (Can Tho)
20	Vinh Long	Vinh Long	Tra Vinh, Ben Tre	Tra Vinh	Cuu Long (Vinh Long)
21	Tien Giang	Dong Thap†		Tien Giang	
22	Ca Mau	Ca Mau	Bac Lieu	Ca Mau	Minh Hai (Ca Mau)
23	Kien Giang	An Giang†		Kien Giang	

Note: Seat is the province whose capital became the political and administrative centre of the 2025 unit; Name is the province whose name the 2025 unit took, so the Name column also gives the name of the new unit. †Seat and name went to different members (split). GRDP leader is the member with the largest gross regional domestic product in 2024. The province in parentheses hosted the capital of the earlier province when it was divided (Appendix Table A1). [c]Group led by a centrally-run city. Counts: 23 groups, 7 splits, 10 re-united groups, 4 city-led groups; seat to the GRDP leader in 18 groups and name to the GRDP leader in 15. Sources: National Assembly of Vietnam (2025a), Central Committee of the Communist Party of Vietnam (2025), National Statistics Office of Vietnam (2025b) and the acts listed in Table A1.

(Appendix Table A1). For the three earlier provinces that moved their capital, the baseline coding uses the capital at division, which is also the capital that operated for most of the earlier province's life: 81 percent of Ha Tuyen's existence, 85 percent of Hoang Lien Son's and 61 percent of Minh Hai's. An alternative measure, legacy intensity, records the share of the earlier province's lifetime during which the member hosted its capital and assigns fractional values to both cities in these three cases.

4.2 Descriptive patterns

Table 2 summarises the covariates. Provinces in the sample are heterogeneous: GRDP ranges from about 19 trillion to about 1,763 trillion dong, and population from 0.3 to 9.5 million. Seat hosts are on average larger than the other members in population, GRDP, firms and FDI. They are also much more likely to be legacy capitals: 39 percent of seat hosts are former capitals of an earlier province, against 3 percent of other members. The differences in governance, centrality and land area are small. Name keepers also tend to be larger and more urban than the members that lost the name, but the gaps in legacy and economic size are smaller than for the seat.

Table 2 Descriptive statistics, 52 merged provinces (2024)

	All provinces				Seat		Name	
Variable	Mean	SD	Min	Max	Hosts	Others	Keepers	Others
Population (thousand)	1,493	1,267	329	9,544	1,841	1,217	1,787	1,260
GRDP (tn VND)	167.8	248.9	18.8	1,762.7	224.3	123.1	221.6	125.2
Firms (thousand)	13.1	37.1	0.8	269.9	20.9	6.9	20.6	7.2
FDI stock (bn USD)	7.76	12.64	0.00	58.96	9.20	6.61	9.49	6.39
GRDP per capita (m VND)	98.3	47.9	37.8	339.0	101.0	96.2	103.9	93.9
Urban share (%)	32.9	17.2	11.9	87.8	34.7	31.4	37.1	29.5
Trained labour (%)	24.7	8.0	12.9	51.3	27.3	22.7	27.1	22.8
PCI (index)	67.49	2.86	57.48	74.84	67.86	67.19	67.78	67.26
PAPI (z-score)	-0.09	0.99	-1.92	2.14	-0.26	0.04	-0.01	-0.16
Distance (km)	57.8	19.1	25.0	101.9	59.3	56.6	58.4	57.4
Land area share	0.44	0.17	0.08	0.92	0.44	0.44	0.42	0.46
Coastal (0/1)	0.44	0.50	0	1	0.48	0.41	0.35	0.52
Border (0/1)	0.29	0.46	0	1	0.17	0.38	0.30	0.28
Legacy capital (0/1)	0.19	0.40	0	1	0.39	0.03	0.30	0.10
Legacy intensity	0.19	0.37	0	1	0.36	0.06	0.29	0.12

Note: N = 52 provinces in 23 groups; 23 seat hosts and 29 other members, 23 name keepers and 29 other members. Hosts, Others and Keepers are means over the provinces in each category. Distance is the mean straight-line distance from the provincial capital to a grid covering the new unit. PAPI is standardised within year. m: million; bn: billion; tn: trillion. The smallest FDI stock is 4 million USD. Sources: National Statistics Office of Vietnam (2025b), Runfola et al. (2020), PCI and PAPI reports, and Appendix Table A1.

4.3 Tests and rules

The simplest question is how often the seat host ranks first in its group on a given criterion. Under the null hypothesis that the seat is assigned at random within each group, the probability that the host ranks first in group g is $p_g = k_g/n_g$, where k_g is the number of members tied at the top, which equals one except for a single tie. The number of groups in which the host ranks first is then a sum of independent Bernoulli variables with different probabilities, which follows a Poisson-binomial distribution. Its exact distribution is computed by recursive convolution, one of the exact methods discussed by Hong (2013). Five criteria that correspond most directly to the hypotheses and the official rules are treated as primary (population, GRDP, centrality, PCI and PAPI), and their p-values are adjusted with the Holm step-down procedure. The same test is applied to the name keeper.

A lexicographic rule ranks members on one criterion and uses a second criterion only to break ties or to decide where the first criterion is silent. Such rules describe many real decisions well and can predict as accurately as weighted models (Gigerenzer and Goldstein 1996). The candidate set contains 94 rules: each of 18 continuous criteria used alone (five measures of economic size, the number of district-level units, land area share, two measures of centrality, three development indicators, labour productivity and five governance indices), each of four binary criteria (legacy capital, centrally-run city, coastal location and international border) used alone, and each binary criterion followed by each continuous criterion. A rule that leaves a group undecided counts as a miss.

Searching over 94 rules makes the best rule look better than it is. To correct for this, the analysis simulates 20,000 random allocations of the seat and records, in each simulation, the number of correct assignments of the best of the 94 rules. The search-corrected p-value of a rule is the share of simulations in which the best rule does at least as well as the observed rule. This is the logic of the reality check for data snooping (White 2000) and of its stepwise extensions (Romano and Wolf 2005), applied to a discrete prediction problem. A second check uses leave-one-group-out selection: the best rule is chosen on 22 groups and used to predict the remaining group, and the exercise is repeated for all 23 groups.

4.4 Conditional logit

The probability that member i of group g hosts the seat is

$$\Pr(s_g = i) = \frac{\exp(\mathbf{x}_{ig}'\boldsymbol{\beta})}{\sum_{j=1}^{n_g} \exp(\mathbf{x}_{jg}'\boldsymbol{\beta})}, \tag{2}$$

which follows from Eq. (1). Group-level factors cancel, so the coefficients are identified from differences between members of the same group. With 23 groups and binary regressors that sometimes predict the outcome perfectly within subsets, maximum likelihood estimates can be biased or infinite. The models are therefore estimated by

maximising the penalised log-likelihood

$$\ell^{*}(\boldsymbol{\beta}) = \ell(\boldsymbol{\beta}) + \tfrac{1}{2}\log\left|\mathbf{I}(\boldsymbol{\beta})\right|, \tag{3}$$

where $\mathbf{I}(\boldsymbol{\beta})$ is the Fisher information. The penalty removes the first-order bias of the estimator and guarantees finite estimates under separation (Firth 1993; Heinze and Schemper 2002), and it extends directly to conditional logistic models (Heinze and Puhr 2010; Sun et al. 2011). Confidence intervals are obtained by profiling the penalised likelihood (Venzon and Moolgavkar 1988) and tests use the penalised likelihood ratio.

Three further forms of inference supplement the asymptotic tests. Permutation p-values compare the observed estimate with its distribution across 2,000 data sets in which the chosen member of each group is drawn at random. A conditional parametric bootstrap tests legacy given the other regressors: choices are simulated from the model estimated without legacy, the full model is re-estimated, and the observed penalised likelihood ratio is compared with the simulated ones. Model comparison uses the small-sample corrected Akaike criterion and Akaike weights (Hurvich and Tsai 1989; Burnham and Anderson 2004), together with leave-one-group-out log loss and hit rates. The hit rate gives a model credit of $1/k$ when the actual host is among k members tied at the highest predicted probability.

The seat models are labelled A to F. Model A contains economic weight, model B legacy capital, and model C both. Models D, E and F add, in turn, the governance index, centrality and the development index to model C. The name models use the same notation, with model G containing economic weight and development level.

4.5 Seat and name

Three exercises link the two outcomes. First, seat and name models with the same regressors are re-estimated on 2,000 bootstrap samples that draw groups with replacement, and the difference between the two coefficient vectors is evaluated directly. Second, the observed number of splits is compared with the number expected if seat and name were allocated independently, either at random or according to the fitted models. Third, the probability of a split is related to the balance of economic claims, measured as the GRDP of the second-largest member divided by that of the largest. Balance ranges from close to zero, when one member dominates, to one, when the two leading members are equal. The comparison uses exact Mann-Whitney tests and Firth logistic regressions.

5 Results

5.1 Who ranks first

Table 3 and Fig. 1 report how often the seat host and the name keeper rank first on each criterion. Under random allocation, the expected count is 10.5 of 23. The seat host is the largest economy by GRDP in 18 groups and has the most operating firms in 18 groups ($p = 0.003$ for both). It is the most populous member in 16 groups ($p = 0.034$).

Only the GRDP result survives the Holm adjustment over the five primary criteria. Centrality, PCI and PAPI are all close to the random benchmark: the seat host is the most central member in only nine groups and leads in PAPI in only ten. Among the ten re-united groups, the seat returns to the capital of the earlier province in nine, against an expectation of 4.33 ($p = 0.006$).

The name keeper ranks first far less systematically on economic size. It leads in GRDP in 15 groups ($p = 0.090$) and in population in 13 ($p = 0.397$). It is more often the leader on development: GRDP per capita (17 groups, $p = 0.017$), the trained labour share (17, $p = 0.010$) and the urban share (16, $p = 0.034$). The name goes to the legacy capital in seven of ten re-united groups ($p = 0.161$). The contrast already suggests that the seat follows size and history, whereas the name leans towards the more developed member.

Table 3 How often the seat host and the name keeper rank first in their group

		Seat			Name		
Criterion	Expected	Hits	p	Holm	Hits	p	Holm
Primary criteria							
Population	10.50	16	0.034	0.135	13	0.397	1.000
GRDP	10.50	18	0.003	0.013	15	0.090	0.451
Most central	10.50	9	0.676	1.000	10	1.000	1.000
PCI	10.50	14	0.204	0.613	13	0.397	1.000
PAPI	10.50	10	1.000	1.000	13	0.397	1.000
Other criteria							
Operating firms	10.50	18	0.003		15	0.090	
FDI stock	10.50	14	0.204		13	0.397	
GRDP per capita	11.00	15	0.130		17	0.017	
Urban share	10.50	11	0.995		16	0.034	
Trained labour share	10.50	16	0.034		17	0.010	
Largest land area	10.50	9	0.676		6	0.086	
Legacy capital (10 groups)	4.33	9	0.006		7	0.161	

Note: Hits is the number of groups in which the seat host (name keeper) ranks first on the criterion. Expected is the mean of the exact Poisson-binomial null under random allocation within groups. p-values are two-sided. Holm adjusts over the five primary criteria. In one group (Tien Giang and Dong Thap) both members report the same GRDP per capita, so both rank first and the expected count rises to 11.00. The legacy row uses the ten re-united groups.

Fig. 2 shows the raw material behind these counts. Each row is a merged group, and each dot is a member placed by its share of the group's GRDP. In most groups without an earlier common province, the member furthest to the right holds the seat. The exceptions to economic dominance are concentrated among the re-united groups, where the ringed legacy capital holds the seat even when it is not the largest economy, as in the 2025 units of Lao Cai (seat in Yen Bai), Phu Tho, Bac Ninh (seat in Bac Giang) and Vinh Long.

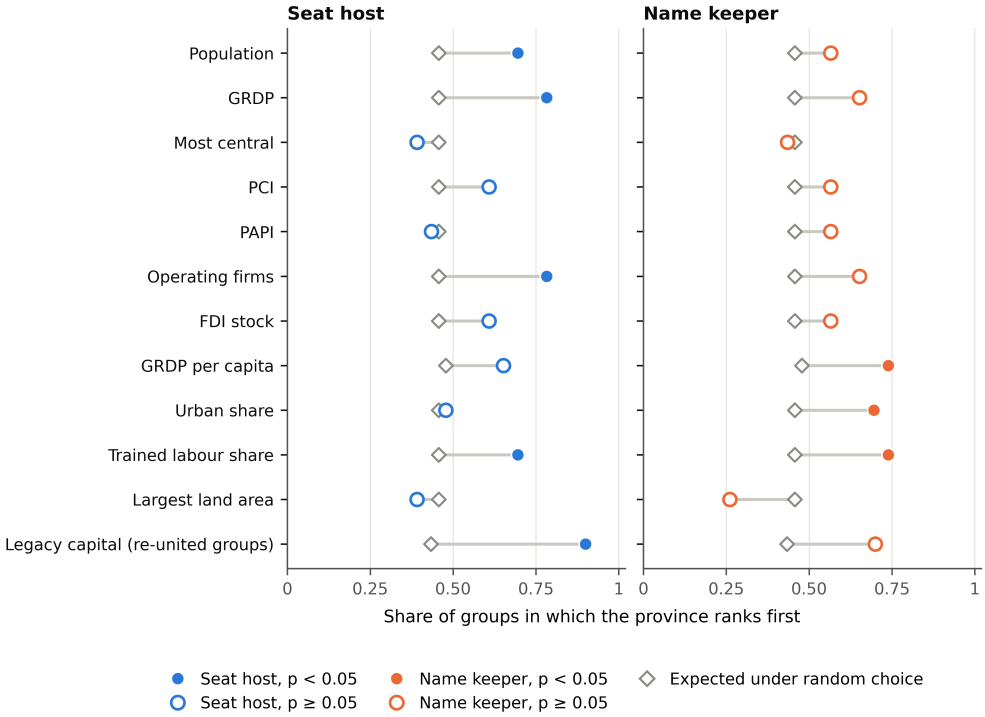


Fig. 1 Share of groups in which the seat host (left) and the name keeper (right) rank first on each criterion. Filled markers indicate $p < 0.05$ in the exact Poisson-binomial test; open diamonds show the expectation under random allocation within groups.

5.2 Allocation rules

Table 4 and Fig. 3 compare allocation rules. Single criteria perform modestly. GRDP and operating firms, the strongest single criteria in Table 4, each assign 18 seats correctly. That count is significant on its own ($p = 0.001$, one-sided) but not after correction for the search over 94 rules ($p = 0.065$). The rule that gives the seat to the legacy capital where one exists and to the largest economy otherwise assigns 22 seats correctly. The best of the 94 rules reached this accuracy in only a handful of the 20,000 random allocations, and the search-corrected p-value is 0.0001. In the 19 contested groups the rule assigns 18 seats correctly (search-corrected $p < 0.001$). Its only miss is Ninh Binh, where the earlier province of Ha Nam Ninh had been governed from Nam Dinh but the 2025 seat went to Ninh Binh, the smallest of the three economies by a narrow margin.

The out-of-sample test is equally clear. When the best rule is selected on 22 groups and applied to the excluded group, the same rule, legacy capital followed by GRDP, is chosen in all 23 folds and predicts 22 of the 23 excluded seats ($p < 0.001$ against random choice). The second criterion matters: when population replaces GRDP, the rule assigns 19 seats correctly (search-corrected $p = 0.016$).

Table 4 Allocation rules: accuracy and search-corrected significance

	Seat (23 groups)			Seat (19)		Name (23)	
Rule	Hits	p	p_s	Hits	p_s	Hits	p_s
Panel A. In sample							
Random choice	10.5			8.8		10.5	
Population	16	0.017	0.434	13	0.696	13	0.989
GRDP	18	0.001	0.065	14	0.368	15	0.720
Operating firms	18	0.001	0.065	14	0.368	15	0.720
Most central	9	0.801	1.000	7	1.000	10	1.000
PCI	14	0.102	0.919	12	0.928	13	0.989
PAPI	10	0.662	1.000	8	1.000	13	0.989
GRDP per capita	14	0.102	0.919	11	0.994	16	0.434
Trained labour	16	0.017	0.434	12	0.928	17	0.191
Legacy only	9	0.801	1.000	7	1.000	7	1.000
Legacy, then GRDP	22	<0.001	<0.001	18	<0.001	15	0.720
Legacy, then population	19	<0.001	0.016	15	0.138	16	0.434
City, then GRDP	18	0.001	0.065	14	0.368	15	0.720
Panel B. Leave one group out							
Seat	22	<0.001	Legacy, then GRDP (23/23 folds)				
Name	11	0.498	Trained labour (17/23 folds)				

Note: Hits is the number of groups in which the rule picks the actual seat host or name keeper. p is the one-sided exact Poisson-binomial test of a single rule against random choice. p_s is the search-corrected p-value, the share of 20,000 random allocations in which the best of 94 candidate rules is at least as accurate as the rule in the row; for the seat, the null distribution of the best rule has median 15, 95th percentile 18 and 99th percentile 19. In Panel B, Hits is the number of excluded groups predicted correctly by the rule selected on the other 22 groups, and p is computed against random choice. A rule that leaves a group undecided counts as a miss; in the one group with tied GRDP per capita this applies to the GRDP per capita rule.

For the name, no rule comes close. The best name rule, the trained labour share, picks 17 names correctly, but its search-corrected p-value is 0.191. Out of sample, rule selection for the name is unstable across folds and predicts only 11 names correctly, which is indistinguishable from random choice ($p = 0.498$). The name, unlike the seat, is not governed by a single observable criterion.

5.3 Seat models

Table 5 reports the conditional logit models for the seat. Economic weight alone (model A) has an odds ratio of 3.68 per within-group standard deviation, and legacy alone (model B) has an odds ratio of 8.79. Both remain large and significant when entered together. In model C, a one standard deviation increase in economic weight multiplies the odds of hosting the seat by 3.48 (95% profile interval 1.39 to 21.72, penalised likelihood ratio $p = 0.002$, permutation $p < 0.001$). Being the legacy capital multiplies them by 6.58 (1.35 to 65.06, $p = 0.018$, permutation $p = 0.009$). The conditional bootstrap test of legacy given economic weight gives $p = 0.023$. Model C has the lowest corrected Akaike criterion and carries almost half of the Akaike weight across the six

models. Its in-sample and leave-one-group-out hit rates are both 0.913, against 0.457 for random choice, and it predicts all seats correctly except Ninh Binh and, by a small margin, Lam Dong.

The intervals are wide, as expected with 23 choice sets, and they are asymmetric because the profile likelihood is flat in the direction of very large effects. The lower bounds are the informative part: economic weight raises the odds by at least about 40 percent per standard deviation, and legacy by at least about 35 percent. Holm adjustment over the five seat hypotheses tested in Table 5 leaves economic weight significant ($p = 0.011$) and moves legacy to $p = 0.071$. The exact and rule-based tests in Sections 5.1 and 5.2, which do not depend on the logit specification, give stronger support for legacy.

The governance index, centrality and development level add nothing. Their odds ratios are 0.89, 1.08 and 1.16, all with p-values above 0.6, and adding them raises the corrected Akaike criterion by more than two points. The estimates of economic weight and legacy are stable across models D to F. Model F has a marginally better out-of-sample log loss than model C, but its development coefficient is small and imprecise. Fig. 4 displays the odds ratios across models.

The same pattern holds in the 19 contested groups (Appendix Table A2). In model C economic weight has an odds ratio of 3.02 ($p = 0.015$, permutation $p = 0.003$) and legacy an odds ratio of 5.98 ($p = 0.030$, permutation $p = 0.027$), with an out-of-sample hit rate of 0.895 against 0.465 for random choice. The four city-led groups therefore do not drive the results.

Fig. 5 shows what legacy adds at the level of individual decisions. For groups without an earlier common province, the predicted probability of the actual seat host barely changes between models A and C. For the re-united groups the change is large. The legacy capitals of Hoang Lien Son, Vinh Phu, Ha Bac and Cuu Long (Yen Bai, Phu Tho, Bac Giang and Vinh Long) each have a predicted probability below 0.36 under model A, because they are not the largest economies of their groups, and probabilities between 0.70 and 0.79 under model C. Ninh Binh is the only seat host whose probability falls below 0.35 under model C.

5.4 Name models

The name models in Table 6 tell a different story. Economic weight alone has an odds ratio of 1.95 for the name, about half the seat estimate, and legacy is small and imprecise (odds ratio 2.06, $p = 0.281$, in model C). When development level is added, it becomes the stronger predictor (odds ratio 1.96, $p = 0.047$, permutation $p = 0.019$, in model F), and economic weight falls to 1.46 ($p = 0.198$). Model F has the lowest corrected Akaike criterion, but the out-of-sample hit rate of the best name model is only 0.652, and in the contested groups the development effect weakens (odds ratio 2.15, penalised likelihood ratio $p = 0.067$, permutation $p = 0.048$; Appendix Table A3). The name leans towards the more developed and urban member, but much of the variation remains unexplained by any measured attribute.

Table 5 Seat: conditional logit, all 23 groups

	(A)	(B)	(C)	(D)	(E)	(F)
Economic weight	3.68		3.48	3.23	3.23	2.92
	[1.55, 15.13]		[1.39, 21.72]	[1.35, 18.39]	[1.35, 18.11]	[1.23, 16.83]
p (PLR)	<0.001		0.002	0.003	0.003	0.009
p (perm.)	<0.001		<0.001	<0.001	<0.001	0.003
Legacy capital		8.79	6.58	6.72	5.98	6.50
		[1.99, 82.66]	[1.35, 65.06]	[1.36, 66.38]	[1.26, 57.59]	[1.25, 134.70]
p (PLR)		0.003	0.018	0.017	0.022	0.024
p (perm.)		0.007	0.009	0.009	0.019	0.014
Governance index				0.89		
				[0.47, 1.51]		
p (PLR)				0.668		
p (perm.)				0.584		
Centrality					1.08	
					[0.60, 2.12]	
p (PLR)					0.809	
p (perm.)					0.726	
Development level						1.16
						[0.58, 3.55]
p (PLR)						0.719
p (perm.)						0.509
Log likelihood	-10.98	-13.40	-7.67	-7.54	-7.60	-7.45
LR χ^2	14.80	9.94	21.41	21.68	21.55	21.84
McFadden R^2	0.403	0.271	0.583	0.590	0.586	0.594
AICc	24.14	29.00	19.94	22.34	22.46	22.17
Akaike weight	0.060	0.005	0.489	0.147	0.138	0.160
Hit rate	0.739	0.659	0.913	0.957	0.957	0.957
Hit rate (LOGO)	0.739	0.659	0.913	0.913	0.913	0.957
Log loss (LOGO)	0.501	0.632	0.498	0.503	0.499	0.489

Note: Odds ratios from Firth-penalised conditional logit; continuous regressors are scaled by their within-group standard deviation. Brackets show 95% profile penalised likelihood intervals. Each block reports the penalised likelihood ratio p-value and the permutation p-value (2,000 draws). All LR statistics have $p \leq 0.002$ and permutation $p \leq 0.007$. LOGO statistics are from leave-one-group-out validation. PLR: penalised likelihood ratio; perm.: permutation. The random-choice hit rate is 0.457. Holm-adjusted p-values over the five tested hypotheses: economic weight (C) 0.011, legacy (C) 0.071, governance (D), centrality (E) and development (F) 1.000. N = 52 provinces in 23 groups; no model shows quasi-separation.

5.5 Seat versus name

Panel A of Table 7 compares the seat and name coefficients directly, using a group bootstrap of the specification with economic weight, development level and legacy. The log-odds coefficient on economic weight is 1.07 for the seat and 0.38 for the name. The difference of 0.69 has a 95% bootstrap interval that excludes zero ($p = 0.036$). Development level points the other way, with a larger coefficient for the name than for the seat, but the difference is imprecise ($p = 0.212$). The difference for legacy is also imprecise. The seat is thus significantly more sensitive to economic weight than the name.

Table 6 Name: conditional logit, all 23 groups

	(A)	(C)	(F)	(G)
Economic weight	1.95	1.83	1.46	1.54
	[1.14, 4.43]	[1.06, 4.10]	[0.82, 3.05]	[0.88, 3.32]
p (PLR)	0.011	0.027	0.198	0.131
p (perm.)	0.008	0.014	0.133	0.076
Legacy capital		2.06	3.77	
		[0.56, 8.91]	[0.67, 50.42]	
p (PLR)		0.281	0.142	
p (perm.)		0.264	0.076	
Development level			1.96	1.64
			[1.01, 5.58]	[0.96, 3.42]
p (PLR)			0.047	0.073
p (perm.)			0.019	0.048
Log likelihood	-14.61	-13.99	-11.30	-12.78
LR χ^2	7.54	8.77	14.15	11.20
McFadden R^2	0.205	0.239	0.385	0.305
AICc	31.40	32.58	29.87	30.15
Akaike weight	0.179	0.099	0.386	0.335
Hit rate	0.609	0.609	0.783	0.652
Hit rate (LOGO)	0.609	0.609	0.652	0.652
Log loss (LOGO)	0.658	0.680	0.618	0.629

Note: See Table 5. LR χ^2 p-values are 0.006 (A), 0.012 (C), 0.003 (F) and 0.004 (G). Conditional bootstrap p for legacy: 0.272 (C) and 0.131 (F). The random-choice hit rate is 0.457.

Panel B asks whether the observed number of splits departs from what independent allocations would produce. If seats and names were assigned at random and independently, 12.5 splits would be expected, and the observed seven are significantly fewer ($p = 0.017$). Once both allocations follow their fitted models, however, the expected number falls to between 8.2 and 9.4, and the observed count is no longer unusual. The co-location of seat and name in 16 of the 23 groups is therefore explained by the fact that both prizes respond to similar attributes, not by an additional rule that bundles them.

Table 8 shows where splits occur. Groups that split have a median GRDP balance of 0.85, compared with 0.62 for groups that do not ($p = 0.022$). Among groups without an earlier common province the contrast is sharper, 0.85 against 0.43 ($p = 0.019$), and a one standard deviation increase in balance multiplies the odds of a split by about five. Four of the six balanced groups without a shared history split, against one of the seven unbalanced ones. In the re-united groups balance plays no role, which is consistent with the seat being settled by history in these cases. In a joint model, balance remains significant ($p = 0.019$) while the re-united indicator does not. Fig. 6 plots the relationship.

The seven splits share a simple structure. All of them occur in pairs, and none of the six triples splits. In five, the seat goes to the largest economy and the name to the smaller partner: Quang Binh and Quang Tri, Binh Dinh and Gia Lai, Long An and Tay Ninh, Tien Giang and Dong Thap, and Kien Giang and An Giang. In the

Table 7 Seat versus name

Panel A. Group bootstrap (log odds) Variable	Seat	Name	Name minus seat	p
Economic weight	1.07 [0.52, 3.35]	0.38 [-0.40, 0.85]	-0.69 [-3.28, -0.04]	0.036
Development level	0.15 [-0.48, 0.95]	0.67 [0.15, 2.21]	0.53 [-0.38, 2.29]	0.212
Legacy capital	1.87 [0.37, 5.25]	1.33 [-0.30, 4.11]	-0.55 [-3.82, 1.67]	0.537
Panel B. Splits under independent allocation Benchmark	Observed	Expected	p (more)	p (fewer)
Random choice	7	12.50	0.995	0.017
Seat model C, name model C	7	8.22	0.782	0.377
Seat model C, name model G	7	9.38	0.913	0.189

Note: Panel A uses 1,998 successful bootstrap draws of the 23 groups (of 2,000) for the specification with economic weight, development level and legacy capital. Brackets give 95% percentile intervals and p is two-sided. Panel B compares the observed number of splits with its exact distribution when seat and name are allocated independently, either at random or with the fitted probabilities of the stated models.

other two, Lao Cai and Bac Ninh, the seat returns to the legacy capital, Yen Bai and Bac Giang respectively, and the name goes to the larger economy. In every split, each member of the pair therefore receives one prize, and in each case the prize that the rule does not award follows the competing claim. This is the pattern that H4 predicts.

6 Robustness

6.1 Specifications

Table 9 reports variations of model C. Replacing economic weight with GRDP alone leaves the economic coefficient unchanged (odds ratio 3.49) and raises the legacy odds ratio to 8.21, and using population yields a smaller but still significant economic effect. Averaging covariates over 2022 to 2024 instead of using 2024 values changes nothing. Adding a coastal indicator or an international border indicator, which proxy for the links to the sea and the defence considerations named in the official rules (Prime Minister of Vietnam 2025), does not improve the model. Their odds ratios are 0.78 and 0.44 with p-values of 0.76 and 0.49, and economic weight remains significant. Adding the border indicator raises the p-value of legacy to 0.053, a sign of how little information 23 groups contain once several regressors enter together. Excluding the seven groups that cross the boundaries of the country's socio-economic regions weakens legacy ($p = 0.099$) while economic weight remains significant. Restricting the sample to pairs produces quasi-separation and very large Firth estimates, which reflects the near-perfect fit of the rule in pairs.

The re-united groups deserve special attention. Within the ten groups that re-unite an earlier province, legacy has an odds ratio of 8.85 ($p = 0.007$) and economic weight has none (odds ratio 0.82, $p = 0.630$). Within these groups, history settles the

Table 8 Splits and the balance of economic claims

Panel A. GRDP balance and splits

			Median balance			
Sample	Groups	Splits	Split	No split	MW p	Firth OR (p)
All groups	23	7	0.848	0.624	0.022	3.54 (0.031)
No earlier common province	13	5	0.848	0.433	0.019	5.18 (0.017)
excluding city-led groups	11	5	0.848	0.433	0.052	4.04 (0.044)
Re-united groups	10	2	0.760	0.730	0.711	1.08 (0.901)
All groups, joint model	23	7				3.85 (0.019)

Panel B. Splits by history and balance

	Unbalanced		Balanced	
Earlier common province	Groups	Splits	Groups	Splits
No	7	1	6	4
Yes	4	1	6	1

Note: Balance is the GRDP of the second-largest member divided by that of the largest member. MW is the exact Mann-Whitney test of balance between groups with and without a split; the Firth odds ratio is per standard deviation of balance. The joint model includes balance and an indicator for re-united groups (odds ratio 0.27, $p = 0.184$). In Panel B, balanced groups have balance at or above the sample median. Quang Binh and Quang Tri, which belonged to Binh Tri Thien but did not contain its capital, are counted among groups without an earlier common province.

question and size plays no part. This is the lexicographic order of the rule, recovered without imposing it. The leave-one-group-out jackknife in Panel B of Table 10 shows that no single group reverses the sign of either coefficient, and that Ninh Binh, the rule's only miss, is the most influential observation.

6.2 Moved capitals

The most important sensitivity concerns the three earlier provinces that moved their capitals. The baseline codes the capital at the time of division. If instead each of these provinces is coded by its first capital, the legacy effect disappears (odds ratio 1.32, $p = 0.690$), and the exact test in Panel A of Table 10 finds only six seats returning to legacy capitals out of ten. If the legacy indicator is set to zero in these three groups, the legacy coefficient remains large but imprecise (odds ratio 4.36, $p = 0.101$). If the three groups are instead excluded from the exact test, six of the seven remaining re-united groups return the seat to the legacy capital ($p = 0.019$ against random choice). The result therefore rests partly on the three moved-capital cases.

Three considerations support the baseline coding. First, it is the capital that was in operation when the earlier province was divided, and so it is the city that last housed the institutions of the larger unit. The official rules emphasise exactly this feature: the new government should start from an existing apparatus (Prime Minister of Vietnam 2025). Second, the capital at division was also the capital for most of each earlier province's existence, between 61 and 85 percent of its lifetime. The first capitals served for less than nine years in each case and, in Ha Tuyen and Hoang Lien Son, for less than three. Third, the legacy intensity measure, which divides credit between the

two capitals according to tenure and requires no binary choice, yields an odds ratio of 6.65 ($p = 0.032$), close to the baseline. The coding is a substantive choice, but it is the one that corresponds to the mechanism described in Section 3, and the alternative codings are reported in full.

Table 9 Robustness of model C for the seat

		Economic weight			Legacy capital		
Specification	Groups	OR	95% CI	p	OR	95% CI	p
Baseline (model C)	23	3.48	1.39, 21.72	0.002	6.58	1.35, 65.06	0.018
Legacy intensity	23	3.43	1.39, 20.09	0.002	6.65	1.16, 83.16	0.032
Moved capitals: first capital	23	3.45	1.50, 13.54	<0.001	1.32	0.32, 5.53	0.690
Moved capitals: coded zero	23	3.34	1.41, 15.82	0.002	4.36	0.76, 45.25	0.101
GRDP as size measure	23	3.49	1.41, 29.06	0.002	8.21	1.62, 95.14	0.009
Population as size measure	23	1.86	1.04, 4.97	0.033	6.05	1.29, 57.99	0.020
Means 2022-2024	23	3.41	1.38, 20.42	0.002	6.73	1.38, 66.63	0.016
Contested groups	19	3.02	1.18, 18.88	0.015	5.98	1.17, 60.07	0.030
Contested, legacy intensity	19	3.00	1.18, 17.63	0.014	6.00	0.98, 76.64	0.053
Pairs only[a]	17	15.04	1.78, >999	0.002	23.67	1.57, >999	0.017
Re-united groups	10	0.82	0.38, 3.15	0.630	8.85	1.69, 125.40	0.007
Within-region groups	16	2.41	1.07, 16.04	0.028	4.19	0.77, 41.97	0.099
PCI sub-indices added[b]	23	3.24	1.35, 18.55	0.003	6.67	1.36, 65.82	0.018
Coastal added[b]	23	3.45	1.33, 27.01	0.004	6.02	1.26, 58.18	0.023
Border added[b]	23	2.95	1.24, 15.14	0.009	5.06	0.98, 49.79	0.053

Note: Firth-penalised conditional logit odds ratios with 95% profile penalised likelihood intervals and penalised likelihood ratio p-values. Permutation p-values (1,000 draws; 2,000 for the baseline and contested rows) lead to the same conclusions and are included in the replication files. In the row for moved capitals coded zero, the legacy indicator is set to zero for the three earlier provinces that moved their capital. [a]Quasi-separation under maximum likelihood. [b]Odds ratios of the added regressor: PCI sub-indices 0.90 [0.48, 1.50], $p = 0.679$; coastal 0.78 [0.12, 3.81], $p = 0.763$; international border 0.44 [0.02, 4.24], $p = 0.489$.

6.3 Power

The null results for governance and centrality need careful reading. Table 11 simulates seat choices from model C with an added regressor of a given true effect and records how often the penalised likelihood ratio test rejects at the 5 percent level. The test is conservative, with a size of 0.022 for governance and 0.044 for centrality. Power reaches about 0.5 for an odds ratio of 2 and 0.72 to 0.82 for an odds ratio of 2.72. The data therefore rule out large effects of the kind implied by a strong reading of the official criteria, but they cannot exclude moderate ones. The point estimates, 0.89 for governance and 1.08 for centrality, are close to one, and the intervals exclude odds ratios above about 1.5 for governance and 2.1 for centrality.

Table 10 Legacy coding and influential groups

Panel A. Exact tests						
			Random choice		Economic weight	
Legacy coding	Groups	Hits	Expected	p	Expected	p
Capital at division	10	9	4.33	0.003	5.92	0.009
Same, contested groups	8	7	3.50	0.014	4.10	0.011
Moved capitals: first capital	10	6	4.33	0.224	5.64	0.548
Moved capitals: excluded	7	6	2.83	0.019	4.22	0.094
Panel B. Jackknife of model C						
Coefficient	Full	Min	Max	Sign changes	Most influential	
Economic weight	3.48	3.13	14.40	0	Ninh Binh	
Legacy capital	6.58	4.85	39.68	0	Ninh Binh	

Note: In Panel A, Hits is the number of re-united groups in which the seat returns to the legacy capital, and p is the one-sided exact Poisson-binomial test against random choice within groups, or against a benchmark in which each member's probability is predicted by economic weight estimated on the other groups. Panel B reports the range of the odds ratios when each group is dropped in turn.

Table 11 Detectable effects: power of the penalised likelihood ratio test (seat, given model C)

	Estimated OR	Rejection rate at true OR				
Regressor	[95% CI]	1	1.5	2	2.72	4
Governance index	0.89 [0.47, 1.51]	0.022	0.224	0.454	0.722	0.906
Centrality	1.08 [0.60, 2.12]	0.044	0.176	0.528	0.816	0.980

Note: 500 simulated data sets per cell, generated from model C plus the regressor with the stated odds ratio per within-group standard deviation. The column for an odds ratio of one gives the test size.

7 Discussion

The allocation of seats in Vietnam's 2025 merger was neither random nor mysterious. Two variables and one ordering account for nearly every decision, and the ordering is the same one that appears when the data are allowed to choose among 94 alternatives. Several interpretations of this regularity are possible, and the evidence allows some of them to be distinguished.

The first interpretation stresses administrative cost. A city that once governed the combined territory possesses buildings, personnel networks and procedures that were designed for a larger unit, and the officials who staffed them are part of the same provincial elite. Choosing it minimises disruption, which is the central concern stated in the implementing rules (Prime Minister of Vietnam 2025). The finding that legacy dominates within re-united groups and that economic weight matters only where no legacy exists fits this interpretation. Evidence from Indonesian district splits points in the same direction: the output losses that followed fragmentation were largest in new

districts that had to establish a new capital and government (Cassidy and Velayudhan 2026). More broadly, the creation of new local governments has measurable economic and political consequences (Dahis and Szerman 2026; Bazzi and Gudgeon 2021).

The second interpretation stresses focality. Under severe time pressure, decision-makers favour criteria that are easy to justify and hard to contest (Lindblom 1959; Gigerenzer and Goldstein 1996). A previous capital is such a criterion. It refers to a fact that all members recognise and that is not open to reinterpretation, unlike centrality, governance scores or development plans. Economic size has the same property. The two rules together allowed the centre to settle 23 potentially contested decisions without visible bargaining. This interpretation also explains why the official criteria, which are open to competing readings, do not show up in the data. The results resonate with the broader view that political institutions are path dependent because the cost of switching rises with the investments made under the old arrangement (Pierson 2000), and with evidence that places keep their roles long after their original advantage has disappeared (Bleakley and Lin 2012).

A third interpretation concerns the management of political power. Vietnam's provinces are represented in the party's Central Committee, and changes in provincial boundaries have long been used to manage the balance of power within the regime (Malesky 2009). Provincial leaders have also enjoyed considerable informal autonomy (Malesky 2008), and the centre has experimented with recentralising local institutions (Malesky et al. 2014), with outcomes that depend on how far local officials can control the information that reaches the centre (Trinh and Lu 2026). Provincial interests are also voiced in the national legislature, where delegates respond to local concerns within the limits set by the regime (Malesky and Schuler 2010). In such a system, the losers of a merger are local elites whose cooperation the centre needs. Giving the name to the member that loses the seat in balanced groups is a low-cost way to recognise their claim. The pattern that splits are concentrated where claims are balanced, and that in every split each partner receives one prize, is consistent with this view. The evidence that the name is less responsive to economic weight than the seat, and leans towards the more developed and urban member, suggests that the name tracks visibility and identity more than administrative function (Rose-Redwood et al. 2010).

These interpretations are not mutually exclusive, and the data cannot separate them fully. What the data do show is that the official criteria did not operate as stated, or at least did not operate through the observable indicators used here. Governance quality, centrality, coastal access and border location are all unrelated to the seat once size and history are accounted for. Two caveats apply. The power analysis shows that moderate effects of governance or centrality cannot be ruled out, and the official criteria include factors such as room for future growth that are difficult to measure. The finding is therefore that the stated criteria are not needed to explain the observed decisions, not that they played no role in deliberation.

The results also speak to the literature on mergers more generally. Studies of municipal amalgamation in Europe and Japan have documented common-pool behaviour, changes in spending and effects on local democracy (Tyrefors Hinnerich 2009; Jordahl and Liang 2010; Hansen 2014; Blesse and Baskaran 2016; Hirota and Yunoue 2017; Lassen and Serritzlew 2011). A related line of work shows that local politicians and

voters weigh the distribution of gains when they decide whether to merge (Hyytinen et al. 2014; Miyazaki 2014; Gordon and Knight 2009). The Vietnamese case adds a top-down variant in which participation is not voluntary and the distributional question is resolved within the merger rather than through the decision to merge. The allocation of the seat and the name becomes the main channel through which the distribution of gains is settled, and the evidence suggests that this channel is governed by simple and transparent principles for the seat and by a pattern consistent with compensation for the name.

Several limitations deserve mention. The sample contains 23 decisions, so all estimates are imprecise and several results depend on a small number of cases. The legacy result is sensitive to the coding of the three earlier provinces that moved their capitals, and although the baseline choice is grounded in the mechanism and supported by the intensity measure, readers who prefer the first-capital coding will find little support for legacy. The analysis describes the decisions that were made and does not observe the deliberations behind them. Finally, the reform is too recent for its consequences to be evaluated. Whether the cities that lost the seat will decline, as places that lost capital status did in historical China (Bai and Jia 2023), is a question for future work.

8 Conclusion

Territorial mergers force governments to choose which places keep their status. In Vietnam's 2025 reform, that choice followed a rule that can be stated in one sentence: return the seat to the capital of the earlier province where one exists, and otherwise give it to the largest economy. The rule reproduces 22 of 23 decisions, survives correction for specification search and is selected in every out-of-sample fold. Economic weight and legacy enter as distinct effects in conditional logit models, while governance, centrality, coastal access and border location add no explanatory power. Names follow a different logic. They are less tied to economic weight, lean towards more developed members and separate from the seat mainly when economic claims are balanced.

Two broader lessons follow. First, administrative history is a resource that reformers draw on. Provinces that were dissolved decades ago left behind focal points that helped determine where power would be located when the map was redrawn again. Second, material and symbolic assets are allocated by different principles. The seat follows size and history, and the name appears to serve as recognition for members that lose the seat when claims are balanced. Future research could examine whether similar rules govern mergers elsewhere, and how the cities that gained or lost the seat in 2025 develop in the years to come.

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Declarations

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Conflict of interest: The author declares no competing interests.

Ethics approval and consent to participate: Not applicable. The study uses publicly available aggregate data on provinces and involves no human participants.

Consent for publication: Not applicable.

Data availability: The data that support the findings of this study are openly available in Zenodo at https://doi.org/10.5281/zenodo.24221229. The underlying sources are official legal documents, the national statistical yearbook, the published PCI and PAPI provincial indices and the geoBoundaries database.

Materials availability: Not applicable.

Code availability: The Python code used for all estimations, tables and figures is available from the author on reasonable request.

Author contribution: Quoc Lap Nguyen is the sole author and was responsible for the conceptualisation, data collection, methodology, formal analysis, visualisation and writing of the manuscript.

Appendix A Additional tables

References

Ades, A.F., Glaeser, E.L.: Trade and circuses: Explaining urban giants. The Quarterly Journal of Economics **110**(1), 195–227 (1995) https://doi.org/10.2307/2118515

Alesina, A., Spolaore, E.: On the number and size of nations. The Quarterly Journal of Economics **112**(4), 1027–1056 (1997) https://doi.org/10.1162/003355300555411

Burnham, K.P., Anderson, D.R.: Multimodel inference: Understanding AIC and BIC in model selection. Sociological Methods & Research **33**(2), 261–304 (2004) https://doi.org/10.1177/0049124104268644

Blesse, S., Baskaran, T.: Do municipal mergers reduce costs? evidence from a German federal state. Regional Science and Urban Economics **59**, 54–74 (2016) https://doi.org/10.1016/j.regsciurbeco.2016.04.003

Bazzi, S., Gudgeon, M.: The political boundaries of ethnic divisions. American Economic Journal: Applied Economics **13**(1), 235–266 (2021) https://doi.org/10.1257/app.20190309

Blesse, S., Heinemann, F.: Citizens' trade-offs in state merger decisions: Evidence from a randomized survey experiment. Journal of Economic Behavior & Organization **180**, 438–471 (2020) https://doi.org/10.1016/j.jebo.2020.10.018

Blom-Hansen, J., Houlberg, K., Serritzlew, S., Treisman, D.: Jurisdiction size and local government policy expenditure: Assessing the effect of municipal amalgamation. American Political Science Review **110**(4), 812–831 (2016) https://doi.org/10.1017/S0003055416000320

Becker, S.O., Heblich, S., Sturm, D.M.: The impact of public employment: Evidence

Table A1 Earlier provinces re-united by the 2025 merger

Earlier province	Period	Members re-united	Capital at division	First capital	Share
Ha Tuyen	1976-1991	Ha Giang, Tuyen Quang	Tuyen Quang	Ha Giang	0.81
Hoang Lien Son	1976-1991	Lao Cai, Yen Bai	Yen Bai	Lao Cai	0.85
Bac Thai	1965-1996	Bac Kan, Thai Nguyen	Thai Nguyen	Thai Nguyen	1.00
Vinh Phu	1968-1996	Phu Tho, Vinh Phuc	Phu Tho	Phu Tho	1.00
Ha Bac	1962-1996	Bac Giang, Bac Ninh	Bac Giang	Bac Giang	1.00
Ha Nam Ninh	1975-1991	Ha Nam, Nam Dinh, Ninh Binh	Nam Dinh	Nam Dinh	1.00
Quang Nam - Da Nang	1975-1996	Da Nang, Quang Nam	Da Nang	Da Nang	1.00
Cuu Long	1976-1991	Tra Vinh, Vinh Long	Vinh Long	Vinh Long	1.00
Hau Giang (1976)	1976-1991	Can Tho, Hau Giang, Soc Trang	Can Tho	Can Tho	1.00
Minh Hai	1976-1996	Bac Lieu, Ca Mau	Ca Mau	Bac Lieu	0.61

Note: Share is the share of the earlier province's lifetime during which the capital at division served as its capital. Ha Tuyen was governed from Ha Giang from April 1976 to February 1979 and from Tuyen Quang afterwards; Hoang Lien Son from Lao Cai from February 1976 to mid-1978 and from Yen Bai afterwards; Minh Hai from Bac Lieu from March 1976 to May 1984 and from Ca Mau afterwards. Creation: Ha Bac by the National Assembly resolution of 27 October 1962; Bac Thai by Resolution 103-NQ/TVQH of the Standing Committee of the National Assembly of 21 April 1965; Vinh Phu by Resolution 504-NQ/TVQH of 26 January 1968; Ha Tuyen, Hoang Lien Son and Ha Nam Ninh by the National Assembly resolution of 27 December 1975; Quang Nam - Da Nang, Cuu Long, Hau Giang and Minh Hai by Decree 03/ND-76 of 24 February 1976. Divisions: Ha Tuyen and Hoang Lien Son by the National Assembly resolution of 12 August 1991; Ha Nam Ninh, Cuu Long and Hau Giang by the resolution of 26 December 1991 (with a further division of Can Tho in 2003); Bac Thai, Vinh Phu, Ha Bac, Quang Nam - Da Nang and Minh Hai by the resolution of 6 November 1996. Other 2025 members not part of the earlier province: Hoa Binh (Phu Tho group) and Ben Tre (Vinh Long group). Quang Nam - Da Nang was first formed by Decision 119/QD of the revolutionary people's committee of the central zone of 4 October 1975, which the 1976 decree formalised. Sources: National Assembly of the Democratic Republic of Vietnam (1962); Standing Committee of the National Assembly of the Democratic Republic of Vietnam (1965, 1968); National Assembly of the Democratic Republic of Vietnam (1975); Provisional Revolutionary Government of the Republic of South Vietnam (1976); Council of Ministers of Vietnam (1984); National Assembly of Vietnam (1991a,b, 1996, 2003).

Table A2 Seat: conditional logit, 19 contested groups

	(A)	(C)	(D)	(E)
Economic weight	2.81	3.02	2.76	2.81
	[1.23, 11.70]	[1.18, 18.88]	[1.16, 15.39]	[1.14, 15.74]
p (PLR)	0.007	0.015	0.016	0.019
p (perm.)	0.004	0.003	0.004	0.005
Legacy capital		5.98	6.21	5.39
		[1.17, 60.07]	[1.21, 61.79]	[1.10, 52.20]
p (PLR)		0.030	0.027	0.037
p (perm.)		0.027	0.025	0.036
Governance index			0.86	
			[0.43, 1.45]	
p (PLR)			0.568	
p (perm.)			0.490	
Centrality				1.05
				[0.60, 2.04]
p (PLR)				0.862
p (perm.)				0.821
Log likelihood	-10.30	-7.48	-7.28	-7.43
LR χ^2	8.98	14.63	15.01	14.72
McFadden R^2	0.304	0.494	0.508	0.497
AICc	22.83	19.71	22.17	22.47
Akaike weight	0.119	0.570	0.167	0.144
Hit rate	0.684	0.895	0.947	0.947
Hit rate (LOGO)	0.684	0.895	0.895	0.895
Log loss (LOGO)	0.569	0.599	0.582	0.597

Note: See Table 5. 42 provinces in 19 groups without a centrally-run city. The random-choice hit rate is 0.465. Conditional bootstrap p for legacy: 0.023 (C), 0.024 (D), 0.037 (E).

from Bonn. Journal of Urban Economics **122**, 103291 (2021) https://doi.org/10.1016/j.jue.2020.103291

Bai, Y., Jia, R.: The economic consequences of political hierarchy: Evidence from regime changes in China, 1000-2000 C.E. The Review of Economics and Statistics **105**(3), 626–645 (2023) https://doi.org/10.1162/rest_a_01058

Bleakley, H., Lin, J.: Portage and path dependence. The Quarterly Journal of Economics **127**(2), 587–644 (2012) https://doi.org/10.1093/qje/qjs011

Brink, A.: The break-up of municipalities: Voting behavior in local referenda. Economics of Governance **5**(2), 119–135 (2004) https://doi.org/10.1007/s10101-003-0068-0

Campante, F.R., Do, Q.-A.: Isolated capital cities, accountability, and corruption: Evidence from US states. American Economic Review **104**(8), 2456–2481 (2014) https://doi.org/10.1257/aer.104.8.2456

Campante, F.R., Do, Q.-A., Guimaraes, B.: Capital cities, conflict, and misgovernance.

Table A3 Name: conditional logit, 19 contested groups

	(A)	(C)	(F)	(G)
Economic weight	1.55	1.51	1.12	1.27
	[0.93, 3.44]	[0.88, 3.37]	[0.52, 2.69]	[0.65, 2.96]
p (PLR)	0.101	0.153	0.779	0.497
p (perm.)	0.086	0.126	0.729	0.406
Legacy capital		1.61	4.21	
		[0.38, 7.32]	[0.66, 66.84]	
p (PLR)		0.507	0.138	
p (perm.)		0.515	0.086	
Development level			2.15	1.57
			[0.95, 6.61]	[0.81, 3.62]
p (PLR)			0.067	0.191
p (perm.)			0.048	0.164
Log likelihood	-13.11	-12.86	-10.60	-12.06
LR χ^2	3.36	3.87	8.38	5.45
McFadden R^2	0.114	0.131	0.283	0.184
AICc	28.46	30.47	28.81	28.88
Akaike weight	0.332	0.121	0.278	0.268
Hit rate	0.526	0.526	0.789	0.632
Hit rate (LOGO)	0.526	0.421	0.632	0.579
Log loss (LOGO)	0.715	0.768	0.696	0.729

Note: See Table 5. LR χ^2 p-values are 0.067 (A), 0.145 (C), 0.039 (F) and 0.065 (G). The random-choice hit rate is 0.465.

American Economic Journal: Applied Economics **11**(3), 298–337 (2019) https://doi.org/10.1257/app.20170111

Central Committee of the Communist Party of Vietnam: Resolution No. 60-NQ/TW of the Eleventh Plenum of the Thirteenth Central Committee. Hanoi, 12 April 2025. In Vietnamese (2025)

Council of Ministers of Vietnam: Decision No. 75-HDBT concerning Minh Hai Province. Hanoi, 17 May 1984. In Vietnamese (1984)

Cassidy, T., Velayudhan, T.: Government fragmentation and economic growth. The Review of Economics and Statistics **108**(2), 372–389 (2026) https://doi.org/10.1162/rest_a_01493

Dahis, R., Szerman, C.: Decentralizing development: The economic impacts of government splits. American Economic Journal: Applied Economics **18**(3), 220–253 (2026) https://doi.org/10.1257/app.20240009

Firth, D.: Bias reduction of maximum likelihood estimates. Biometrika **80**(1), 27–38 (1993) https://doi.org/10.1093/biomet/80.1.27

Gigerenzer, G., Goldstein, D.G.: Reasoning the fast and frugal way: Models of bounded

Table A4 Predicted probabilities by province (Firth estimates, all groups)

Unit	Province	Seat	Name	Legacy	Share	P_A	P_C
Tuyen Quang	Tuyen Quang	yes	yes	yes	0.59	0.83	0.97
	Ha Giang				0.41	0.17	0.03
Lao Cai	Yen Bai	yes		yes	0.39	0.30	0.74
	Lao Cai		yes		0.61	0.70	0.26
Thai Nguyen	Thai Nguyen	yes	yes	yes	0.89	1.00	1.00
	Bac Kan				0.11	0.00	0.00
Phu Tho	Phu Tho	yes	yes	yes	0.32	0.32	0.76
	Hoa Binh				0.20	0.04	0.02
	Vinh Phuc				0.48	0.64	0.23
Bac Ninh	Bac Giang	yes		yes	0.47	0.35	0.79
	Bac Ninh		yes		0.53	0.65	0.21
Hung Yen	Hung Yen	yes	yes		0.54	0.56	0.56
	Thai Binh				0.46	0.44	0.44
Hai Phong	Hai Phong	yes	yes		0.68	0.84	0.83
	Hai Duong				0.32	0.16	0.17
Ninh Binh	Ninh Binh	yes	yes		0.31	0.17	0.04
	Ha Nam				0.32	0.21	0.05
	Nam Dinh			yes	0.37	0.62	0.91
Quang Tri	Quang Binh	yes			0.54	0.66	0.65
	Quang Tri		yes		0.46	0.34	0.35
Da Nang	Da Nang	yes	yes	yes	0.54	0.70	0.94
	Quang Nam				0.46	0.30	0.06
Quang Ngai	Quang Ngai	yes	yes		0.76	0.97	0.96
	Kon Tum				0.24	0.03	0.04
Gia Lai	Binh Dinh	yes			0.54	0.76	0.75
	Gia Lai		yes		0.46	0.24	0.25
Khanh Hoa	Khanh Hoa	yes	yes		0.70	0.94	0.94
	Ninh Thuan				0.30	0.06	0.06
Lam Dong	Lam Dong	yes	yes		0.44	0.47	0.47
	Binh Thuan				0.38	0.49	0.49
	Dak Nong				0.19	0.03	0.04
Dak Lak	Dak Lak	yes	yes		0.70	0.90	0.89
	Phu Yen				0.30	0.10	0.11
Ho Chi Minh	Ho Chi Minh	yes	yes		0.66	0.98	0.98
	Binh Duong				0.19	0.02	0.02
	Ba Ria-Vung Tau				0.15	0.00	0.00
Dong Nai	Dong Nai	yes	yes		0.81	0.99	0.99
	Binh Phuoc				0.19	0.01	0.01
Tay Ninh	Long An	yes			0.59	0.84	0.83
	Tay Ninh		yes		0.41	0.16	0.17
Can Tho	Can Tho	yes	yes	yes	0.48	0.83	0.97
	Hau Giang				0.24	0.06	0.01
	Soc Trang				0.28	0.11	0.02
Vinh Long	Vinh Long	yes	yes	yes	0.33	0.26	0.70
	Ben Tre				0.29	0.38	0.15
	Tra Vinh				0.38	0.36	0.15
Dong Thap	Tien Giang	yes			0.53	0.77	0.76
	Dong Thap		yes		0.47	0.23	0.24
Ca Mau	Ca Mau	yes	yes	yes	0.57	0.52	0.88
	Bac Lieu				0.43	0.48	0.12
An Giang	Kien Giang	yes			0.53	0.77	0.76
	An Giang		yes		0.47	0.23	0.24

Note: Unit is the 2025 unit. Share is the province's share of the group's GRDP in 2024. P_A and P_C are the predicted probabilities of hosting the seat from Firth-penalised models A (economic weight) and C (economic weight and legacy capital) estimated on all 23 groups. Seat hosts with a predicted probability below 0.35: four under model A (Yen Bai, Phu Tho, Ninh Binh and Vinh Long) and one under model C (Ninh Binh).

Table A5 Variable definitions and sources

Variable	Definition	Source
Seat	1 if the province's capital became the political and administrative centre of the 2025 unit	National Assembly of Vietnam (2025a); Central Committee of the Communist Party of Vietnam (2025)
Name	1 if the 2025 unit took the province's name	National Assembly of Vietnam (2025a)
Economic weight	First principal component of within-group deviations of log population, log GRDP, log operating firms and log FDI stock (2024)	National Statistics Office of Vietnam (2025b)
Legacy capital	1 if the province hosted the capital of an earlier province, comprising at least two members of its 2025 group, when that province was divided	Table A1
Legacy intensity	Share of the earlier province's lifetime during which the province hosted its capital	Table A1
Governance index	Mean of within-year standardised PCI and PAPI scores, scaled by the within-group standard deviation	PCI and PAPI reports
Centrality	Minus the mean straight-line distance from the provincial capital to grid points covering the new unit	Runfola et al. (2020)
Development level	Mean of within-group standardised log GRDP per capita and urban share	National Statistics Office of Vietnam (2025b)
GRDP balance	GRDP of the second-largest member divided by GRDP of the largest member	National Statistics Office of Vietnam (2025b)
Contested groups	Groups without a centrally-run city (19 of 23)	National Assembly of Vietnam (2025a)

Note: All continuous regressors in the conditional logit models are divided by their within-group standard deviation. The economic weight component explains 76.9 percent of the within-group variance, with loadings of 0.51 (population), 0.55 (GRDP), 0.54 (operating firms) and 0.38 (FDI stock).

rationality. Psychological Review **103**(4), 650–669 (1996) https://doi.org/10.1037/0033-295X.103.4.650

Gordon, N., Knight, B.: A spatial merger estimator with an application to school district consolidation. Journal of Public Economics **93**(5-6), 752–765 (2009) https://doi.org/10.1016/j.jpubeco.2009.02.007

Grossman, G., Lewis, J.I.: Administrative unit proliferation. American Political Science Review **108**(1), 196–217 (2014) https://doi.org/10.1017/S0003055413000567

Grossman, G., Pierskalla, J.H., Boswell Dean, E.: Government fragmentation and public goods provision. The Journal of Politics **79**(3), 823–840 (2017) https://doi.org/10.1086/690305

Hansen, S.W.: Common pool size and project size: An empirical test on expenditures using Danish municipal mergers. Public Choice **159**(1), 3–21 (2014) https://doi.org/10.1007/s11127-012-0009-y

Hong, Y.: On computing the distribution function for the Poisson binomial distribution. Computational Statistics & Data Analysis **59**, 41–51 (2013) https://doi.org/

10.1016/j.csda.2012.10.006

Heinze, G., Puhr, R.: Bias-reduced and separation-proof conditional logistic regression with small or sparse data sets. Statistics in Medicine **29**(7-8), 770–777 (2010) https://doi.org/10.1002/sim.3794

Heinze, G., Schemper, M.: A solution to the problem of separation in logistic regression. Statistics in Medicine **21**(16), 2409–2419 (2002) https://doi.org/10.1002/sim.1047

Hyytinen, A., Saarimaa, T., Tukiainen, J.: Electoral vulnerability and size of local governments: Evidence from voting on municipal mergers. Journal of Public Economics **120**, 193–204 (2014) https://doi.org/10.1016/j.jpubeco.2014.09.010

Hurvich, C.M., Tsai, C.-L.: Regression and time series model selection in small samples. Biometrika **76**(2), 297–307 (1989) https://doi.org/10.1093/biomet/76.2.297

Hirota, H., Yunoue, H.: Evaluation of the fiscal effect on municipal mergers: Quasi-experimental evidence from Japanese municipal data. Regional Science and Urban Economics **66**, 132–149 (2017) https://doi.org/10.1016/j.regsciurbeco.2017.05.010

Jordahl, H., Liang, C.-Y.: Merged municipalities, higher debt: On free-riding and the common pool problem in politics. Public Choice **143**(1-2), 157–172 (2010) https://doi.org/10.1007/s11127-009-9495-y

Jia, J., Liang, X., Ma, G.: Political hierarchy and regional economic development: Evidence from a spatial discontinuity in China. Journal of Public Economics **194**, 104352 (2021) https://doi.org/10.1016/j.jpubeco.2020.104352

Lindblom, C.E.: The science of "muddling through". Public Administration Review **19**(2), 79–88 (1959) https://doi.org/10.2307/973677

Lassen, D.D., Serritzlew, S.: Jurisdiction size and local democracy: Evidence on internal political efficacy from large-scale municipal reform. American Political Science Review **105**(2), 238–258 (2011) https://doi.org/10.1017/S000305541100013X

Malesky, E.J.: Straight ahead on red: How foreign direct investment empowers subnational leaders. The Journal of Politics **70**(1), 97–119 (2008) https://doi.org/10.1017/S0022381607080085

Malesky, E.: Gerrymandering, Vietnamese style: Escaping the partial reform equilibrium in a nondemocratic regime. The Journal of Politics **71**(1), 132–159 (2009) https://doi.org/10.1017/S0022381608090099

Miyazaki, T.: Municipal consolidation and local government behavior: Evidence from Japanese voting data on merger referenda. Economics of Governance **15**(4), 387–410

(2014) https://doi.org/10.1007/s10101-014-0145-6

Malesky, E.J., Nguyen, C.V., Tran, A.: The impact of recentralization on public services: A difference-in-differences analysis of the abolition of elected councils in Vietnam. American Political Science Review **108**(1), 144–168 (2014) https://doi.org/10.1017/S0003055413000580

Malesky, E., Schuler, P.: Nodding or needling: Analyzing delegate responsiveness in an authoritarian parliament. American Political Science Review **104**(3), 482–502 (2010) https://doi.org/10.1017/S0003055410000250

National Assembly of the Democratic Republic of Vietnam: Resolution on the Merger of Bac Ninh and Bac Giang Provinces into Ha Bac Province, Second Legislature, Fifth Session. Hanoi, 27 October 1962. In Vietnamese (1962)

National Assembly of the Democratic Republic of Vietnam: Resolution on the Merger of Several Provinces, Fifth Legislature, Second Session. Hanoi, 27 December 1975. In Vietnamese (1975)

National Assembly of Vietnam: Resolution on the Delimitation of the Administrative Boundaries of the Provinces of Nghia Binh, Phu Khanh and Binh Tri Thien, Eighth Legislature, Fifth Session. Hanoi, 30 June 1989. In Vietnamese (1989)

National Assembly of Vietnam: Resolution on the Adjustment of the Administrative Boundaries of Several Provinces and Centrally-Run Cities, Eighth Legislature, Ninth Session. Hanoi, 12 August 1991. In Vietnamese (1991)

National Assembly of Vietnam: Resolution on the Re-Delimitation of the Administrative Boundaries of Several Provinces, Eighth Legislature, Tenth Session. Hanoi, 26 December 1991. In Vietnamese (1991)

National Assembly of Vietnam: Resolution on the Division and Adjustment of the Administrative Boundaries of Several Provinces, Ninth Legislature, Tenth Session. Hanoi, 6 November 1996. In Vietnamese (1996)

National Assembly of Vietnam: Resolution No. 22/2003/QH11 on the Division and Adjustment of the Administrative Boundaries of Several Provinces, Eleventh Legislature, Fourth Session. Hanoi, 26 November 2003. In Vietnamese (2003)

National Assembly of Vietnam: Resolution No. 202/2025/QH15 on the Arrangement of Provincial-Level Administrative Units. Hanoi, 12 June 2025. In Vietnamese (2025)

National Statistics Office of Vietnam: Statistical Yearbook of Viet Nam 2024. Statistical Publishing House, Hanoi (2025)

Pierson, P.: Increasing returns, path dependence, and the study of politics. American Political Science Review **94**(2), 251–267 (2000) https://doi.org/10.2307/2586011

Prime Minister of Vietnam: Decision No. 759/QD-TTg Approving the Project on the Arrangement and Reorganisation of Administrative Units at All Levels and the Two-Tier Model of Local Government. Hanoi, 14 April 2025. In Vietnamese (2025)

Provisional Revolutionary Government of the Republic of South Vietnam: Decree No. 03/ND-76 on the Dissolution of Zones and the Merger of Provinces in South Vietnam. 24 February 1976. In Vietnamese (1976)

Runfola, D., Anderson, A., Baier, H., Crittenden, M., Dowker, E., Fuhrig, S., Goodman, S., Grimsley, G., Layko, R., Melville, G., Mulder, M., Oberman, R., Panganiban, J., Peck, A., Seitz, L., Shea, S., Slevin, H., Youngerman, R., Hobbs, L.: geoBoundaries: A global database of political administrative boundaries. PLoS ONE **15**(4), 0231866 (2020) https://doi.org/10.1371/journal.pone.0231866

Reingewertz, Y.: Do municipal amalgamations work? evidence from municipalities in Israel. Journal of Urban Economics **72**(2-3), 240–251 (2012) https://doi.org/10.1016/j.jue.2012.06.001

Rose-Redwood, R., Alderman, D., Azaryahu, M.: Geographies of toponymic inscription: New directions in critical place-name studies. Progress in Human Geography **34**(4), 453–470 (2010) https://doi.org/10.1177/0309132509351042

Romano, J.P., Wolf, M.: Stepwise multiple testing as formalized data snooping. Econometrica **73**(4), 1237–1282 (2005) https://doi.org/10.1111/j.1468-0262.2005.00615.x

Sun, J.X., Sinha, S., Wang, S., Maiti, T.: Bias reduction in conditional logistic regression. Statistics in Medicine **30**, 348–355 (2011) https://doi.org/10.1002/sim.4105

Saarimaa, T., Tukiainen, J.: I don't care to belong to any club that will have me as a member: Empirical analysis of municipal mergers. Political Science Research and Methods **2**(1), 97–117 (2014) https://doi.org/10.1017/psrm.2013.25

Saarimaa, T., Tukiainen, J.: Common pool problems in voluntary municipal mergers. European Journal of Political Economy **38**, 140–152 (2015) https://doi.org/10.1016/j.ejpoleco.2015.02.006

Standing Committee of the National Assembly of the Democratic Republic of Vietnam: Resolution No. 103-NQ/TVQH on the Merger of Bac Kan and Thai Nguyen Provinces into Bac Thai Province. Hanoi, 21 April 1965. In Vietnamese (1965)

Standing Committee of the National Assembly of the Democratic Republic of Vietnam: Resolution No. 504-NQ/TVQH on the Merger of Vinh Phuc and Phu Tho Provinces into Vinh Phu Province. Hanoi, 26 January 1968. In Vietnamese (1968)

Standing Committee of the National Assembly of Vietnam: Resolution No.

76/2025/UBTVQH15 on the Arrangement of Administrative Units in 2025. Hanoi, 14 April 2025. In Vietnamese (2025)

Trinh, M., Lu, W.W.: Institutional ambiguity enables successful centralization: Evidence from China and Vietnam. Comparative Political Studies **59**(7), 1493–1531 (2026) https://doi.org/10.1177/00104140251381737

Tyrefors Hinnerich, B.: Do merging local governments free ride on their counterparts when facing boundary reform? Journal of Public Economics **93**(5-6), 721–728 (2009) https://doi.org/10.1016/j.jpubeco.2009.01.003

Venzon, D.J., Moolgavkar, S.H.: A method for computing profile-likelihood-based confidence intervals. Journal of the Royal Statistical Society: Series C (Applied Statistics) **37**(1), 87–94 (1988) https://doi.org/10.2307/2347496

Weese, E.: Political mergers as coalition formation: An analysis of the Heisei municipal amalgamations. Quantitative Economics **6**(2), 257–307 (2015) https://doi.org/10.3982/QE442

White, H.: A reality check for data snooping. Econometrica **68**(5), 1097–1126 (2000) https://doi.org/10.1111/1468-0262.00152

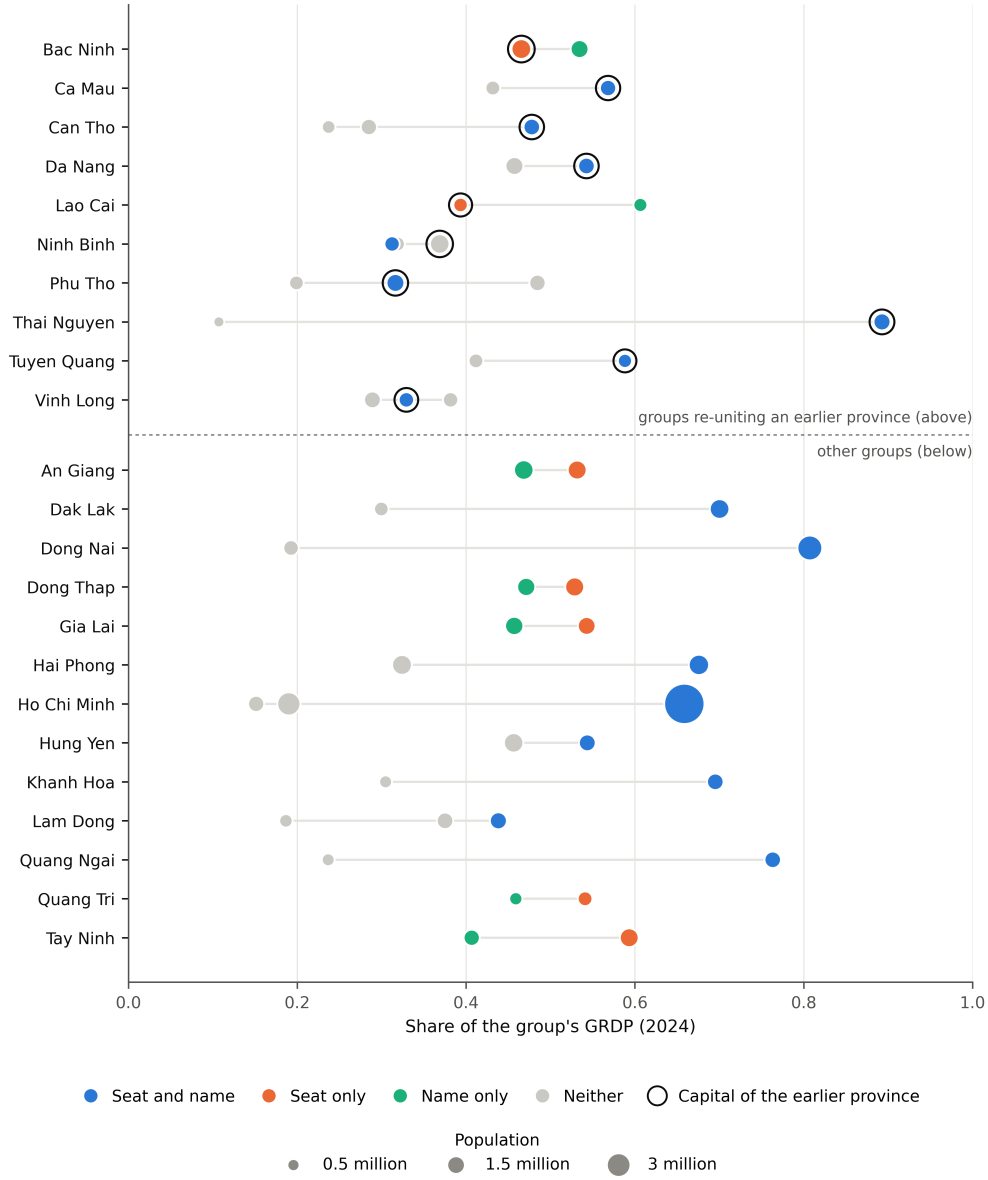


Fig. 2 Members of the 23 merged groups by share of the group's GRDP in 2024. Colour indicates which member received the seat, the name, both or neither; marker size is proportional to population; black rings mark the capital of an earlier province re-united by the merger.

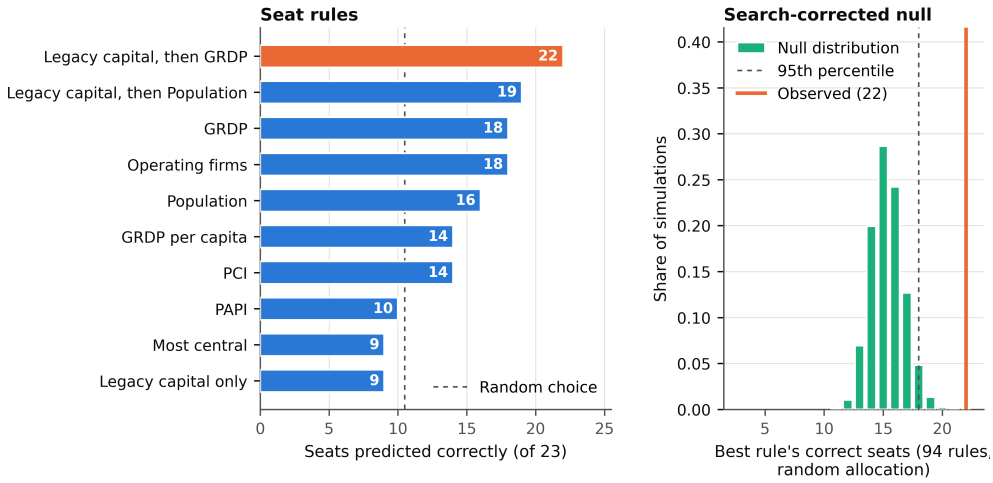


Fig. 3 Left: seats predicted correctly by selected allocation rules, against the random-choice benchmark. Right: distribution of the best rule's accuracy among 94 candidate rules under 20,000 random allocations, with its 95th percentile and the observed accuracy of the legacy then GRDP rule.

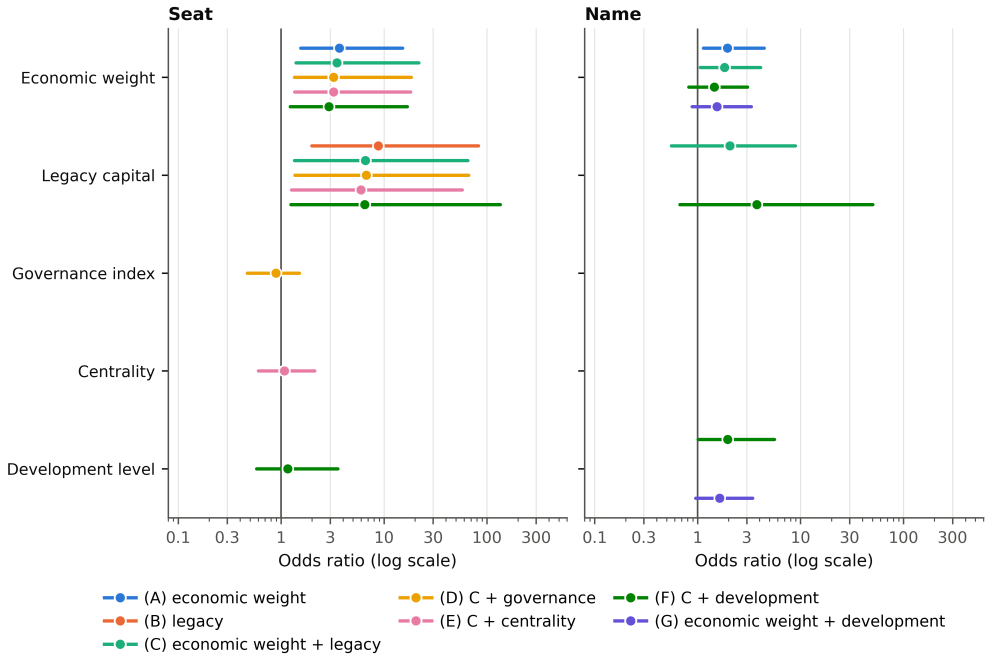


Fig. 4 Odds ratios and 95% profile penalised likelihood intervals for the seat (left) and the name (right) across model specifications. The vertical line marks an odds ratio of one; the horizontal axis is logarithmic.

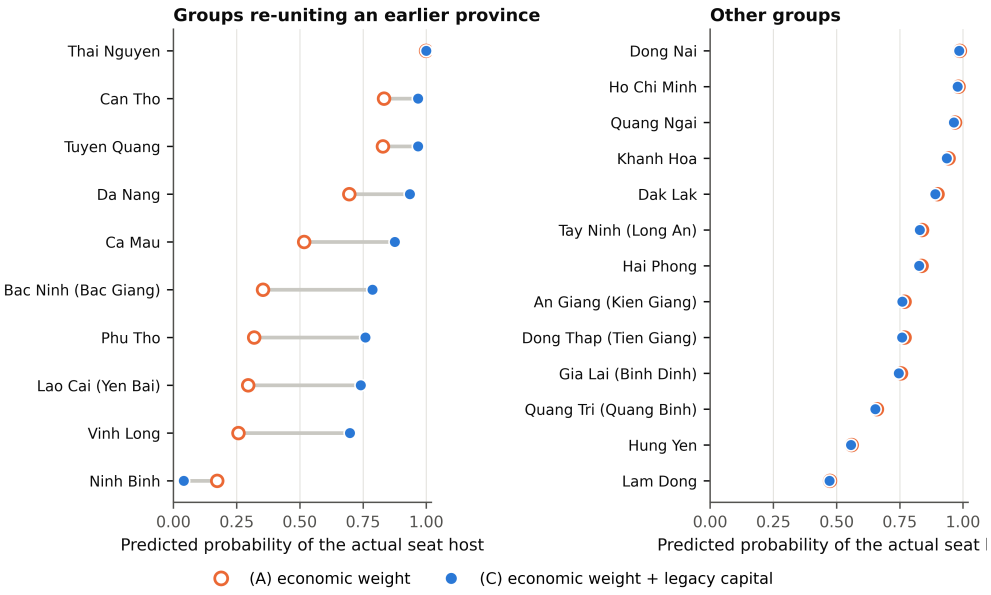


Fig. 5 Predicted probability that the actual seat host receives the seat under model A (economic weight) and model C (economic weight and legacy capital), for groups that re-unite an earlier province (left) and other groups (right). Labels give the 2025 unit and, where different, the seat host.

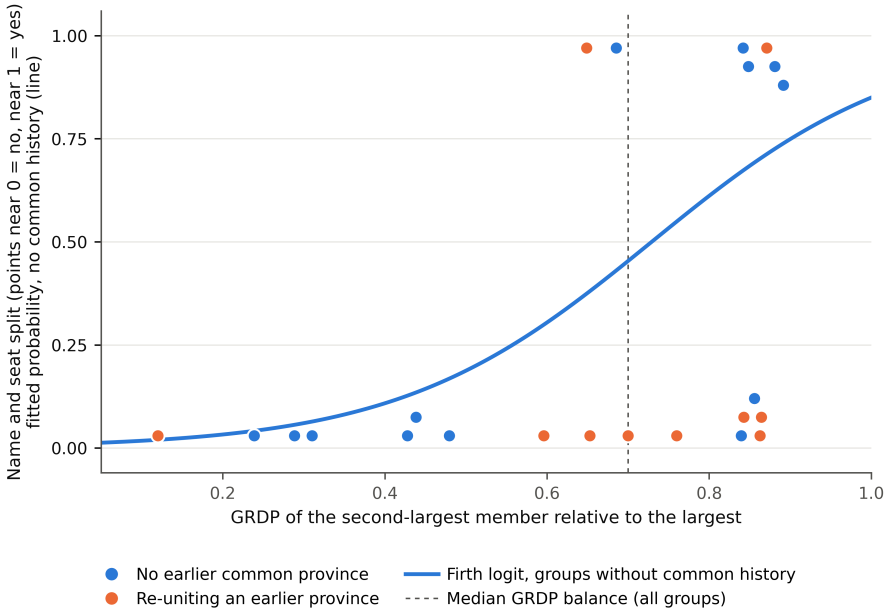


Fig. 6 Whether seat and name were split, by the GRDP of the second-largest member relative to the largest. Points are groups, coloured by whether the merger re-unites an earlier province; the line is the fitted Firth logit for groups without a common history; the dashed line marks the median balance.