



**TECHNIUM**  
SOCIAL SCIENCES JOURNAL

**Vol. 79/2026**  
**A New Decade for Social Changes**



**PLUS**  
**COMMUNICATION P**



International  
Communication & PR

## Political party development in Mongolia and an analysis of cartel-party patterns

**Bayarbaatar Bayarmagnai, Bumdari Dagva-Ochir**

National University of Mongolia, Department of Political Science

[bumdari@num.edu.mn](mailto:bumdari@num.edu.mn)

**Abstract.** In this article, building on theories and methodologies related to political parties, party finance, cartel parties, and party cartelization, we examine through quantitative analysis whether state funding of political parties can serve as a means of reducing party cartelization.

**Keywords.** Mongolian political parties, cartel-party, quantitative analysis of party development

### Background/Introduction:

Although systems of state financial support for political parties have been introduced in all democratic countries, they vary in the extent to which their regulations constrain parties' autonomy (Nassmacher, 2009). According to the cartel-party theory developed by Katz and Mair, cartel parties are less an organizational strategy than a form of inter-party cooperation; when parties succeed in establishing an effective cartel to secure state funding, public political participation declines while the parties continue to preserve and entrench their governing positions (Farrell & Webb, 2000). The relationship between cartel-party patterns and public funding has been widely studied by Katz and Mair (1992, 1994, 1995), Koole (1996), and Pierre (2000).

Most studies that discuss how state funding affects parties' characteristics and behavior argue that public support to political parties has a positive impact on controlling corruption, strengthening accountability, and improving party transparency (Roper, 2000, 2002, 2003; Protsyk, 2002; Nassmacher, 2004, 2009; Pinto-Duschinsky, 2002; Smilov & Toplak, 2007). On the other hand, other research examines how heavy dependence on state resources influences the development of party organizations and shifts internal power within formally independent parties (van Biezen, 2003). More recent studies consider the consequences of public funding for party development and for party systems more broadly (Knapp, 2004; Birnir, 2005; Casas-Zamora, 2005; Scarrow, 2006; Tavits, 2007; Spirova, 2007). These authors conclude that public party funding contains both positive and negative implications for encouraging strong party competition.

If parties receive no public funding, small parties with weak private resources face limited opportunities to compete in elections and enhance political equality. At the same time, studies extending cartelization theory (Katz & Mair, 1995) warn that state subsidies granted to

established parties may further “freeze” existing patterns of competition. The party-funding system has many dimensions—such as which parties receive money and how important such money is for each party—meaning it can generate multiple possible links between funding and party-system development.

Therefore, in order to test the hypothesis that state funding can reduce party cartelization, this work adopts quantitative analysis of party development and cartel-party patterns in Mongolia.

**Keywords:** Mongolian political parties, cartel-party, quantitative analysis of party development

### **1. Quantitative Analysis of Party Development and Cartel-Party Patterns in Mongolia**

Using indices that capture cartel-like party behavior, this section examines whether party cartelization has emerged in Mongolia. The hypotheses of the study are as follows:

**Hypothesis 1:** Party cartelization has emerged in Mongolia.

**Hypothesis 2:** State financial support to political parties increases their electoral competitiveness and reduces party cartelization.

**Hypothesis 3:** State financial support is effective when combined with a mixed electoral system.

**Hypothesis 4:** State financial support reduces seat concentration (HHI, the Herfindahl Index), increases the effective number of parties (ENP), and creates opportunities for new parties to enter parliament.

To test these hypotheses, a cartelization index is calculated using the following five variables:

- a. Effective Number of Parties (ENP);
- b. Herfindahl Index of seat-share concentration (HHI);
- c. Dummy variable indicating whether a new party entered parliament (dummy for party turnover);
- d. Combined dominance of the two largest parties (Top2\_Share);
- e. Public funding (Public Funding);
- f. Cartelization index.

Each variable is calculated as described below.

#### **A. Effective Number of Parties (ENP)**

In political science, one of the main indicators used to measure the form of a party system is the Effective Number of Parties (ENP). This concept was first developed in 1979 by political scientists Markku Laakso and Rein Taagepera. According to their definition, simply counting how many parties exist in a political system is not in itself a sufficient indicator; rather, the real influence and weight of those parties (for example, their share of parliamentary seats or share of votes) is more important. Therefore, instead of merely counting parties, it became necessary to measure the number of parties on the basis of their relative strength and impact.

Accordingly, the Effective Number of Parties introduced by Laakso and Taagepera (Laakso, 1979), building on Rae’s fractionalization index, calculates the effective party number in a given country by using either parliamentary seat shares or electoral vote shares.

Within the ENP index framework, a low effective number of parties indicates that the party system is highly concentrated.

#### **Formula used:**

- $P_i$  = the vote share or seat share of party  $i$ .

*Table 1. Data on the Number of Seats Won by Political Parties (1992–2020)*

Political Parties	1992	1996	2000	2004	2008	2012	2016	2020
MPP	70	25	72	36	45	26	65	62
DP	5	50	1	36	28	35	9	11
MPRP	-	-	-	-	-	10	1	1
HUN Party	-	-	-	-	-	-	-	1
Civil Will–Green Party	-	-	1	-	1	2	-	-
Mongolian United Party	-	1	-	-	-	-	-	-
Motherland Party	-	-	-	1	-	-	-	-
Mongolian Social Democratic Party	-	-	1	-	-	-	-	-
MNP (MNN)					1			
Independents	1	-	1	3	1	3	1	1
<b>Total</b>	<b>76</b>	<b>76</b>	<b>76</b>	<b>76</b>	<b>76</b>	<b>76</b>	<b>76</b>	<b>76</b>

*Source: Compiled by the author based on the General Election Commission (GEC) statistical data.*

When calculating the Effective Number of Parties in parliament, the ENP values for the eight State Great Khural (parliamentary) elections held between 1992 and 2020 range from **1.11 to 2.87**. In other words, across these eight elections, Mongolia’s party system has been concentrated around the dominance of **one to three parties** (the Mongolian People’s Party (MPP), Democratic Party (DP), and Mongolian People’s Revolutionary Party (MPRP)). More specifically, in **1992, 2000, 2016, and 2020**, the ENP index falls between **1.11 and 1.45**, indicating clear **one-party dominance**, led by the MPP. In **1996, 2004, and 2008**, ENP ranges from **2.06 to 2.23**, reflecting **two-party dominance** by the MPP and the DP. The highest ENP is observed in **2012** at **2.87**, suggesting a system dominated by **three parties** in parliament—the MPP, DP, and MPRP. Looking at the number of parties and coalitions that registered candidates with the General Election Commission across these eight elections, the smallest number was **6**, while the largest reached **17**. However, ENP calculations for parliamentary representation show that except for **2012**, the system remained highly concentrated around **one or two effective parties**.

*Table 2. Effective Number of Parties Index in the State Great Khural (Parliament)*

Election Year	Number of Nominating Parties/Coalitions	Effective Number of Parties ( ENP)
1992	10	1.17
1996	7	1.85
2000	16	1.11
2004	7	2.23
2008	12	2.06
2012	13	2.87
2016	15	1.3
2020	17	1.45

*Source: Compiled by the author.*

### **B. Herfindahl Index of Seat-Share Concentration (HHI)**

The Herfindahl Index of Seat Share (HHI) was originally developed by economist Orris C. Herfindahl and first introduced in his 1950 doctoral dissertation at Columbia University. The Herfindahl–Hirschman Index (HHI) was initially designed to measure market structure and the concentration of competition, but it is widely applied in political research to quantify the concentration of power within party systems, limits on political competition, and cartel-like characteristics.

Within the framework of the Herfindahl Index of seat share, parliamentary seat concentration is typically manifested through the persistent dominance of two or three major parties (Herfindahl, 1950). In political science, HHI is calculated using parties' shares of parliamentary seats. A high HHI value indicates that parliamentary power is concentrated in a small number of large parties. This suggests the possibility of a cartel-like system that restricts participation by new parties and measures the concentration of power among parties (Hirschman, 1945). In other words, when two or three parties dominate consistently and opportunities for new parties to enter parliament and compete are limited, this may indicate the emergence of cartel features. HHI is therefore an important indicator that allows the quantitative assessment of system competitiveness, balance of party representation, and the opportunities available to new parties, by measuring the concentration of power among parties (Hirschman, 1945).

$$HHI = \sum_{i=1}^N s_i^2$$

Formula used:

- **S<sub>i</sub>** = seat share held by party *i*
- **N** = total number of parties

The Herfindahl Index of seat concentration ranges from 0 to 1. The higher the HHI value, the stronger the cartel-like character of the system (i.e., domination by a small number of major parties). According to the HHI calculations, the index reaches its highest values in 1992 and 2000 (0.852–0.899), while the lowest value appears in 2012 (0.351). In other words, out of the 76 parliamentary seats, the MPP won 70 seats in 1992 and 72 seats in 2000, demonstrating an extreme one-party concentration of seats. By contrast, in 2012, five parties gained representation in parliament, yet three of them (MPP, DP, and MPRP) still dominated seat concentration. For the 2012 and 2020 parliamentary elections, HHI values range from 0.351 to 0.687. That is, even though four parties in 2016 and five parties/coalitions in 2020 secured parliamentary seats, the MPP obtained an overwhelming majority, indicating that seat concentration remained strongly centered on one dominant party.

In the elections of 1996, 2004, and 2008, HHI values range from 0.541 to 0.488. Specifically, although three parties in 1996, four parties plus independents in 2004, and five parties plus independents in 2008 entered parliament, seat concentration was still dominated by the two largest parties—the MPP and DP. In summary, across the eight parliamentary elections from 1992 to 2020, between 6 and 17 parties/coalitions participated in each election, yet seat concentration consistently favored the two major parties, MPP and DP.

Table 3. Calculation of the Herfindahl Index

Election Year	Number of Nominating Parties/Coalitions	Herfindahl Index (HHI) of Seat Concentration
1992 OH	10	<b>0.852</b>
1996 OH	7	0.541
2000 OH	16	<b>0.899</b>
2004 OH	7	0.451
2008 OH	12	0.488
2012 OH	13	<b>0.351</b>
2016 OH	15	0.745
2020 OH	17	0.687

Source: Compiled by the author.

As shown in the table above, party concentration was high in **1992** and **2000**, meaning that parliamentary seat shares were dominated by a small number of parties. By contrast, the indicator declined in **2004** and **2012**, reflecting lower levels of seat concentration in those years.

### C. Dummy Variable Indicating the Entry of a New Party (Dummy for Party Turnover)

The dummy variable indicating whether a new party has entered parliament (*Dummy for party turnover*) is a commonly used measure in empirical political science. It is derived from standard statistical methodology and represents a typical application of a dummy variable in quantitative analysis. A key contribution linking new-party entry to institutional stability and party-system change is provided by Fernando Casal Bértoa (Casal Bértoa, 2017), who incorporates a dummy indicator to capture the participation of new parties as part of broader assessments of party-system stability and institutional continuity. In addition, scholars such as Zsolt Enyedi (Enyedi, 2014), Allan Sikk, and André Freire have emphasized the significance of new-party entry when analyzing party-system dynamics, particularly in post-communist contexts.

Within the scope of *Dummy for party turnover*, and consistent with the cartel party perspective, established parties may cooperate to exclude potential new competitors and to prevent their entry into electoral competition. In statistical terms, a dummy variable is a binary (logical) variable that takes two values—typically 0 and 1—to indicate whether a specific condition is present. In political science research, this indicator is widely used to operationalize and quantify concepts such as openness of the party system, institutional stability, and party-system turnover. Accordingly, in this study the dummy variable is coded as follows:

- **1 = Yes** (a new party entered parliament)
- **0 = No** (no new party entered parliament)

If this variable remains constantly 0 over time (i.e., new parties do not enter parliament), it suggests a closed party system and may be interpreted as evidence that cartelization has been effectively maintained.

*Table 4. Entry of New Parties into Parliament (Party Turnover)*

<b>Election Year</b>	<b>Number of Nominating Parties/Coalitions</b>	<b>Entry of New Parties into Parliament (Party_Turnover)</b>
1992	10	1
1996	7	1
2000	16	1
2004	7	1
2008	12	1
2012	13	1
2016	15	0
2020	17	1

*Source: Compiled by the author.*

Based on the results of the eight parliamentary elections held between 1992 and 2020, a new party entered parliament in every election year except 2016. Prior to 1992, Mongolia operated under a one-party system in which the Mongolian People’s Revolutionary Party (MPRP) held state power. Following the first democratic election in 1992, new political actors entered parliament: the Democratic Party (DP) won five seats and one seat was secured by an independent candidate, indicating an initial instance of party turnover. In subsequent elections, additional new parties gained parliamentary representation: the Mongolian United Party (MUNP) in 1996, the Mongolian Social Democratic Party (MSDP) in 2000, the Motherland Party in 2004, the Mongolian National Party (MNP) in 2008, and in 2012 the MPRP (following the MPRP’s renaming to the MPP and an internal split in which a faction retained the former name), as well as the Civil Will–Green Party. In 2020, the Right Person Electorate Coalition (including the HUN Party) entered parliament for the first time.

Methodologically, the dummy variable is interpreted such that if it remains consistently at 0 (i.e., no new parties enter parliament), the party system can be classified as closed and cartelization may be considered successfully maintained. The descriptive results presented above show that from 1992 to 2020, only the 2016 election produced a value of 0, whereas seven of the eight elections resulted in the entry of at least one new party. This pattern suggests that, in a strict sense, cartelization cannot be inferred from the absence of party turnover. However, it is important to note that the number of seats obtained by newly entering parties has generally been very limited—on average, no more than three seats—indicating a marginal weight in parliamentary composition. In practice, despite the repeated entry of new parties, the two dominant parties, the MPP and the DP, have continued to secure the overwhelming majority of seats. This sustained dominance may be interpreted as indicative of a degree of cartelization in the Mongolian party system.

#### **D. Overall Dominance of the Two Largest Parties (Top2\_Share)**

The overall dominance of the two largest parties (Top2\_Share)—measured as the combined percentage of parliamentary seats held by the top two parties—is widely used in empirical political science. This indicator is commonly applied to assess the degree of concentration, dominance, and cartelization within a party system, and it builds on established analytical practices and quantitative measures used across comparative electoral research. Substantively,

identifying the Top2\_Share helps determine whether a party system is highly concentrated, how stable two-party predominance remains over time, and whether political competition is expanding or contracting. Although the broader idea of measuring party dominance through seat distributions has long been part of the electoral analysis tradition, the specific operationalization of Top2\_Share has become widely used in contemporary empirical research, particularly through recurring applications by several scholars. For example:

- Fernando Casal Bértoa has applied this indicator in analyses of party-system institutionalization and cartelization in countries emerging from authoritarian rule (Casal Bértoa & Enyedi, 2021).
- Zsolt Enyedi has employed comparable measures in studies of party-system structure and stability.
- Sarah Birch uses dominance indicators to examine the effects of electoral systems on party competition (Birch, 2003).
- Thomas Poguntke, among others, has used related indicators when analyzing party–state linkages and the organization of dominant parties (Poguntke, 2006).

In this study, Top2\_Share is interpreted such that values closer to 1 indicate a higher level of combined dominance by the two largest parties. From a theoretical perspective, if the top two parties control approximately 70–80% or more of total seats, the party system can be considered highly concentrated and political competition relatively constrained. Conversely, if Top2\_Share falls below 50%, this is typically taken as evidence of a more competitive multiparty system.

**Formula used:**

$$Top2\_Share_t = \frac{Seats\ of\ 1st\ Party_t + Seats\ of\ 2nd\ Party_t}{Total\ Seats_t}$$

*Table 5. Combined Seat Share of the Two Largest Parties (Top2\_Share)*

Election Year	Number of Nominating Parties/Coalitions	Combined Seat Share of the Two Largest Parties
1992	10	0.987
1996	7	0.987
2000	16	0.961
2004	7	0.947
2008	12	0.961
2012	13	<b>0.803</b>
2016	15	0.974
2020	17	0.961

*Source: Compiled by the author.*

Based on the results above, the combined dominance of the two largest parties (Top2\_Share) was lowest in 2012, at **0.803**, whereas in all other election years it remained very high, ranging from **0.947 to 0.987**. In other words, across the eight parliamentary elections held between 1992 and 2020, **Top2\_Share** consistently indicates strong two-party dominance. The decline

observed in 2012 suggests that the entry of the MPRP contributed to a modest reduction in the combined dominance of the MPP and the DP. More specifically, in 2012 the MPP and the DP together held **61 of the 76 seats** in parliament. By contrast, they held **75 seats** in 1992 and 1996, and **72–74 seats** in 2000, 2004, 2008, 2016, and 2020, thereby maintaining a dominant position in parliamentary seat distribution.

**E. Allocation of Public Funding (Public Funding)**

To calculate the cartelization index, it is necessary to operationalize the allocation of public funding as a numerical variable. For the purposes of this analysis, it is coded as follows:

- **1 = Public funding allocated in that year**
- **0 = No public funding allocated in that year**

In Mongolia, state financial support for political parties began under the 2005 Law on Political Parties. Specifically, the law introduced a provision stating that the state budget would allocate funds to parties that won seats in the State Great Khural (Parliament) in order to support their operational expenses. Under this provision, parties represented in parliament became eligible to receive public funding on an annual basis. Following the 2019 amendments, the distribution of public funding was further specified to be based on indicators such as the number of seats won in parliament and the share of votes received.

However, since the parliamentary elections after 2008, the MPP and the DP have repeatedly emerged as dominant parties and have consequently received the largest share of public party funding. This pattern suggests that the legal and institutional framework has not effectively ensured meaningful financial support for smaller parties—particularly those with few parliamentary seats or those without parliamentary representation—thereby limiting the extent to which public funding contributes to a more level playing field in party competition.

*Table 6. Public Funding Allocated to Political Parties (1992–2020)*

<b>Election Year</b>	<b>Number of Nominating Parties/Coalitions</b>	<b>Public Funding</b>
1992	10	0
1996	7	0
2000	16	0
2004	7	0
2008	12	1
2012	13	1
2016	15	1
2020	17	1

*Source: Compiled by the author.*

As noted above, the post-2005 rules for allocating public funding to political parties—primarily on the basis of **parliamentary seats won** and **vote share**—have tended to advantage the parties commonly regarded as Mongolia’s “major parties,” namely the **MPP** and the **DP**. Under the revised **2023 Law on Political Parties**, public funding is now provided to parties that receive at least **1 percent of the total vote**, a threshold that, in practice, continues to produce a clear

structural advantage for larger parties and may help them preserve their organizational dominance and political power. For smaller parties, access to public funding can create a more stable and predictable financial base for sustaining routine operations and may contribute to institutional development. Nevertheless, many observers argue that the amount of support remains insufficient to function as meaningful equalization in party competition. At the same time, party representatives emphasize that it is still too early to assess the effects of the 2023 legal framework, and therefore it is not yet possible to draw definitive conclusions about its outcomes.

In addition, although the Law on Political Parties includes provisions intended to ensure financial transparency, party representatives continue to express concerns that key issues remain unclear. These include whether public funds are being spent strictly within legally defined purposes, what additional sources of funding parties may be receiving beyond public subsidies, and how parties finance their activities during non-election periods.

#### F. Cartelization index

In this section, we use the results from the previous analysis to compute the cartelization index.

$$CI = \frac{HHI_n + Top2_n + (1 - ENP_n) + (1 - Turnover) + (1 - PF)}{5}$$

Table 7. Cartelization index (1992–2020)

Election year	Public funding	Turnover	Top2_Share	HHI	ENP	CI (5-variable)
1992	0	0	0.9868	0.8528	1.1726	<b>0.9767</b>
1996	0	1	0.9868	0.5412	1.8477	<b>0.5864</b>
2000	0	1	0.9605	0.8982	1.1133	<b>0.7714</b>
2004	0	1	0.9474	0.4505	2.2198	<b>0.4681</b>
2008	1	1	0.9605	0.4868	2.0541	<b>0.3145</b>
2012	1	1	0.8026	0.3487	2.8679	<b>0.0000</b>
2016	1	0	0.9737	0.7458	1.3408	<b>0.7043</b>
2020	1	1	0.9605	0.6870	1.4556	<b>0.4555</b>

Source: Compiled by the author.

Overall, the results suggest that while the entry of new parties is theoretically expected to mitigate cartelization, in practice it does not appear to be the strongest institutional mechanism driving change in Mongolia’s party system. By contrast, the **type of electoral system** (e.g., mixed or proportional arrangements) and **party-system diversity (ENP)** demonstrate stronger and more systemic associations with cartelization. Consequently, party turnover remains an important “de-cartelizing” indicator, but the findings imply that its potential effect is more likely to be sustained when supported by complementary institutional conditions—such as effective financial support mechanisms and a stable electoral design that enables smaller parties to develop and compete over time.

In sum, across Mongolia’s parliamentary elections between **1992 and 2020**, the analysis indicates that the **design of the electoral system** constitutes the most powerful institutional lever associated with lower cartelization. While **public funding** may contribute to moderating cartelization to some extent, it does not appear to function as a foundational driver of systemic change. By contrast, the **electoral-system design—especially the mixed system—emerges as**

**the most effective mechanism** linked to reducing dominant-party control and facilitating greater opportunities for new parties to gain parliamentary representation.

### Works Cited

- [1] Farrell, D. M., & Webb, P. (2000). Political parties as campaign organizations. In R. J. Dalton, & M. P. Wattenberg, *Parties without partisans: Political change in advanced industrial democracies* (pp. 115-139). Oxford University Press.
- [2] Koole, R. (1996). Cadre, catch-all or cartel? A comment on the notion of the cartel party. *Party Politics*, 507-523.
- [3] Katz, R. S., & Mair, P. (2018). *Cartel parties and the crisis: Political change and ideological stasis in advanced democracies*. Oxford University Press.
- [4] Roper, S. (2000). The influence of Romanian campaign finance laws on party system development and corruption. *Party Politics*, 175-192.
- [5] Nassmacher, K.-H. (2009). *The funding of party competition*. Baden-Baden: Nomos.
- [6] Pinto-Duschinsky, M. (2002). Financing politics: A global view. *Journal of Democracy*, 69-86.
- [7] Smilov, D., & Toplak, J. (2007). *Political finance and corruption in Eastern Europe*. Aldershot: Ashgate.
- [8] van Biezen, I. (2003). *Political parties in new democracies: Party organization in Southern and East-Central Europe*. Basingstoke: Palgrave Macmillan.
- [9] Knapp, A. (2004). *Parties and the party system in France: A disconnected democracy?* Basingstoke: Palgrave Macmillan.
- [10] Birnir, J. K. (2005). *Party system stabilization in new democracies*. Oxford : Oxford University Press.
- [11] Casas-Zamora, K. (2005). *Paying for democracy: Political finance and state funding for parties*. ECPR Press (European Consortium for Political Research Press).
- [12] Scarrow, S. (2006). *Party subsidies and the freezing of party competition: Do cartel mechanisms work? West European Politics*.
- [13] Tavits, M. (2007). *Party systems in the making: The emergence and success of new parties in new democracies*. British Journal of Political Science.
- [14] Spirova, M. (2007). *Political parties in post-communist societies: Formation, persistence and change*. Palgrave Macmillan.
- [15] Laakso, M. &. (1979). Effective number of parties: A measure with application to West Europe. *Comparative Political Studies*, 3-27.
- [16] Herfindahl, O. C. (1950). *Concentration in the U.S. steel industry*. New York.
- [17] Hirschman, A. O. (1945). *National power and the structure of foreign trade*. Berkeley: University of California Press.
- [18] Hirschman, A. O. (1945). *National power and the structure of foreign trade*. Berkeley: University of California Press.
- [19] Casal Bértoa, F. (2017). Political parties or party systems? Assessing the ‘cartel party’ concept in post-communist Europe. *Assessing the ‘myth’ of institutionalisation and democracy*, 40(2), 402–429.
- [20] Enyedi, Z. (2014). *The discreet charm of political parties*.
- [21] Casal Bértoa, F., & Enyedi, Z. (2021). *Party system closure: Party alliances, government alternatives, and democracy in Europe*. Oxford : Oxford University Press.
- [22] Birch, S. (2003). *Electoral systems and political transformation in post-communist Europe*. Palgrave Macmillan.

- [23] Poguntke, T. (2006). Party organizational linkage: Parties without firm social roots? In R. S. Katz, *Handbook of party politics* (pp. 392-403). SAGE Publications.
- [24] Casal Bértoa, F., & Enyedi, Z. (2021). *Party system closure: Party alliances, government alternatives, and democracy in Europe*. Oxford : Oxford University Press.