

Political Background of Economic Transition in the Czech Republic¹

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Abstract

This paper suggests a methodology for an analysis of the distribution of power in multi-party parliamentary bodies elected on the basis of a proportional electoral system. Concepts of the political spectrum and the power spectrum (based on game theoretical concepts of power indices) on a single left-right ideological dimension are used to analyze the situation in the Czech Republic after the 1992 general parliamentary election and after the separation of the former Czech and Slovak Federal Republic in 1993. The political and power spectrums in the Czech Republic are compared to analogical characteristics of the parliaments of the Slovak Republic, Poland and Russia.

Abstrakt

Práce navrhuje metodologii analýzy rozdělení moci a vlivu v parlamentech se zastoupením více politických stran, volených na základě proporcionálního volebního systému. Zavádí pojmy politického a mocenského spektra (založené na pojmech indexů moci, známých z kooperativní teorie her) na jednoduchém "levo-pravém" ideologickém rozměru a používá je k analýze situace v České republice po parlamentních volbách v r. 1992 a po rozdělení ČSFR v r. 1993. Porovnává politické a mocenské spektrum v České republice s analogickými charakteristikami parlamentů ve Slovenské republice, Polsku a Rusku.

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Introduction

Owing to communist rule most of the Eastern European countries had had no opportunity of free parliamentary elections since World War II (and some of them, e.g. the countries of the former USSR, have no experience with parliamentary democracy at all) until the collapse of this regime in 1989 - 1991. One of the outcomes of the changes was the possibility of organizing free parliamentary elections and establishing the first, truly legitimate, post war parliaments and governments.

Political democracy is a necessary condition of the transition from the command communist economy to the modern market economy. At the same time the speed and pattern of transition depend heavily on the political situation and on the distribution of power in newly established democracies.

In this paper we try to characterize the distribution of power in the Czech Republic after the last parliamentary election in June 1992 and to compare it with the situation in other East European countries where election were held during the last two years (Slovak Republic in June 1992, Poland in September 1993 and Russia in December 1993).

A game theoretical approach to the analysis of the distribution and concentration of power in committees is applied. The first part of the paper gives a short review of quantitative measures of power of distinct members of a committee system (so called power indices) that can be used for analyses and prognoses of power distribution both in political (parliaments) and economic (companies) bodies and for possible scenarios of future development. A modification of power indices in multi-cameral committees is discussed. Some amazing properties, called "paradoxes of power" are outlined which can affect committee behavior in a rather surprising way. A diagrammatic representation of a political profile and a power profile on a single "left-right" ideological dimension is suggested.

In the second part a short description is given of the results of the last parliamentary election in the Czech Republic from the point of view of primary power distribution among parliamentary parties, as well as "ideological" power distribution among left, right and centristic parliamentary subjects. In the third part the political and power spectrum in the Czech Republic is compared to the situation in the Slovak Republic, Poland and Russia.

The Appendix contains a list of all parties that participated in the last CSFR election with abbreviations used in the text and short characteristics.

1. Power Indices and a Distribution of Power

One of the interesting topics in the theory of public choice is an analysis of power distribution and concentration of power in committee systems including parliamentary bodies and shareholding companies. It is known that the distribution of votes among the groups in a committee is not a sufficient characteristic of their voting power or an influence. The so called power indices are used to estimate the influence of the members of a committee as a function of a voting rule and of a structure of the committee.

In 1954 Lloyd Shapley and Martin Shubik published a short paper in the American Political Science Review, proposing that the Shapley value for cooperative characteristic function games could serve as a measure of voting power in committees. In 1965 John Banzhaf and in 1971 John Coleman proposed a new index of voting power. Since then more than twenty new definitions (with more or less satisfactory theoretical justification) of so called power indices had been published.

In this section we give a short overview of the properties and intuitive justification of the Shapley-Shubik and Banzhaf-Coleman power indices as measures of voting power in committees with a "multiparty" structure and argue that it captures the critical features of parliamentary politics in proportional parliamentary bodies. We investigate the distribution of power in special committee structures, so called multi-cameral committees. Using power indices we introduce concepts of a political profile and a power profile as a tool for a comparative analysis.

1.1 Power Indices

We use the term committee for a group of formations called "parties" consisting of members called "deputies", who are making decisions by voting for or against some bills. By a quota we mean a minimal number of votes required to pass a bill in accordance to a voting rule. Speaking about a simple majority rule we mean that the quota is equal to 50% of all deputies in the committee plus one. Speaking about a qualified majority we mean that for passing a bill more than a simple majority is required (usually 60% or 66.67% of votes).

We shall assume that:

- a) Each deputy has one vote, hence the number of votes of each party is equal to the number of deputies.
- b) All deputies of the same party always vote together.
- c) If some parties vote together we say that they form a voting coalition. A voting coalition of several parties votes as one party.
- d) Any coalition of parties is possible and all coalitions are equally probable.

Remark 1.1

In multiparty parliaments elected on the basis of a proportional electoral system when voters vote not for a person, but for a party program and list, we can consider assumptions a) through c) to be an appropriate approximation of real parliamentary behavior (see also GAMBARELLI [1992]); any member of the parliament as a member of a party does not derive his decisive power from a personal confidence of some majority group of voters but from a party that nominated him and that got the confidence of voters, and therefore he is supposed to support an original party program and policy. Assumption d) may raise some questions about the "propensity" of some party to cooperate with another party, but real political life shows that a priori, very surprising short-time voting configurations can emerge from time to time in most European parliaments.

In the same framework we can consider decision making in share-holding companies and the distribution of economic power. Here the parties are the shareholders and votes are the shares.

The distribution of votes among the parties in a committee is not a sufficient characteristic of power or influence distribution. This can be clearly seen from a simple example of the committee with 3 parties and 100 deputies (see Table 1.1).

Table 1.1

Parties	Deputies
1	49
2	2
3	49

With respect to a 50% majority rule all three parties have the same position in the voting process (any two-party coalition is a winning one, no single party can win). In fact, under certain circumstances (if the two large parties 1 and 3 are on the opposite sides of the political spectrum) the role of party 2 could be essential. Quite a different situation can be observed for a qualified majority, say, 60%. In this case party 2 has no influence on the outcome of voting and the cooperation of parties 1 and 3 is needed for approving any bill.

We can see that it makes sense to look for some measures that express the actual distribution of power among the members of a committee better than the data about proportional representation. Such measures exist and are called "power indices" in the literature on public choice. In this paper we use two of the most well known measures of voting power - the so called Shapley-Shubik and Banzhaf-Coleman power indices.

Remark 1.2

Let $N = \{1, \dots, n\}$ be the set of members (parties) in a certain committee, and w_i ($i = 1, \dots, n$) be the (real, non-negative) weight of the i -th member of the committee (e.g. the number of votes of party i , or the ownership of i as a proportion of the total number of shares etc.). Let

$$t = \sum_{i=1}^n w_i$$

be the total weight of the committee (total number of deputies). Any vector of weights compatible with total weight t we shall call an allocation. Let q be so called majority quota, a real number such that

$$\frac{t}{2} < q \leq t$$

Any non-empty subset $S \subset N$ we shall call a *coalition*. Given an allocation \mathbf{w} and a majority quota q , we shall say that $S \subset N$ is a winning coalition, if

$$\sum_{i \in S} w_i \geq q$$

and a losing coalition if

$$\sum_{i \in S} w_i < q$$

(i.e. the coalition S is winning, if it has a required majority, otherwise it is losing). Clearly all allocations $\mathbf{w} = (w_1, \dots, w_n)$ in a committee belongs to the simplex

$$W = \left\{ \mathbf{w} = (w_1, \dots, w_n) : \sum_{i \in N} w_i = t, w_i \geq 0 \right\}$$

Let us denote by P the unit simplex

$$Z = \left\{ \mathbf{z} : \sum_{i \in N} z_i = 1, z_i \geq 0 \ (i=1, \dots, n) \right\}$$

A *power index* is a mapping

$$\pi : W \rightarrow Z$$

that represents a reasonable expectation of the share of decisional power among the various players, in relation to their strength in the game, given by the ability to create winning coalitions. We denote by $\pi_i(q, \mathbf{w})$ the share of power that the index π grants to the i -th member of a committee with allocation \mathbf{w} and quota q . Such a share is called a *power index of the i -th member*.

1.2 Shapley-Shubik and Banzhaf-Coleman Power Indices

To illustrate the reasoning behind Shapley and Shubik's voting power measure (SS-power index) consider a four-member committee characterized by *Table 1.2*.

The committee is faced with a series of motions or "bills", each of which the members will vote "Yes" or "No". Shapley and Shubik consider the process of building coalitional support for a particular bill. Let us suppose that a simple majority is required to pass the bill (51 votes in our case). The bill may be most enthusiastically supported by, say, party 2, second most enthusiastically by 4, next most by 1, and least by 3. Thus 2 would be the first party to join a coalition in support of the bill, followed by 4.

Table 1.2

Parties	Deputies
1	20
2	25
3	38
4	17

At this point the bill would still lose, and in fact it will be able to win only if the coalition can gain the support of the next most enthusiastic member 1. Gaining 1's support may require considerable modifications of the original bill, so that member 1 has considerable say over the form in which the bill will pass, if it passes. Member 1 has crucial power in this situation.

In an abstract setting, we would not have a priori knowledge about possible orders of coalition formation. Shapley and Shubik hence propose that to measure abstract voting power, we should consider all orders equally likely. For each order, one member will be pivotal in the sense as member 1 above: the losing coalition will become winning precisely when the pivotal member joins it. The pivotal member holds the power.

Table 1.3

Hence, as our measure of a member's voting power we use the probability that the member will be pivotal, assuming that all orders of coalition formation are equally likely.

123*4	213*4	31*24	412*3
124*3	214*3	31*42	413*2
13*24	23*14	32*14	421*3
13*42	23*41	32*41	423*1
142*3	241*3	34*12	43*12
143*2	243*1	34*21	43*21

Hence, as our measure of a member's voting power we use the probability that the member will be pivotal, assuming that all orders of coalition formation are equally likely.

For our four member committee from *Table 1.2* with simple majority rule, there are $4! = 24$ possible orders of forming the winning coalitions (see *Table 1.3*). We put an asterisk on the pivotal party in each order. Party 3 is pivotal in 12 of the 24 orders, while each of the other parties is pivotal only in 4 of the

orders. The Shapley-Shubik power indices of the members are thus 4 out of 24 for party 1, 4 out of the 24 for party 2, 12 out of the 24 for party 3 and 4 out of the 24 for party 4, so we can write

$$\boldsymbol{\pi} = (\pi_1, \pi_2, \pi_3, \pi_4) = \left(\frac{1}{6}, \frac{1}{6}, \frac{1}{2}, \frac{1}{6} \right)$$

Remark 1.3

Formally the *Shapley-Shubik power index* is derived from a model of bargaining which provides the forming of the whole coalition of all members through equiprobable additions of single members to all possible subcoalitions. It assigns to the *i*-th member of a committee with allocation **w** and quota *q* the share of power

$$\pi_i^{SS}(\mathbf{q}, \mathbf{w}) = \sum_{S \subseteq N} \frac{(\text{card}[S]-1)!(n-\text{card}[S])!}{n!}$$

where *card*(*S*) stands for cardinality of a coalition *S* and the sum is extended to all winning coalitions *S* for which the *i*-th member is essential in sense that the coalition is winning with him and losing without him. This definition is consistent with our intuitive interpretation.

SHAPLEY and SHUBIK [1954] applied a more general concept of the Shapley value for general cooperative characteristic function games with side payments (SHAPLEY [1953]) as a measure of voting power in committees. For a discussion of different aspects of the Shapley value and Shapley-Shubik power index see ROTH (ed.) [1988], for applications to various voting situations and interpretation see STRAFFIN [1980].

Many other power indices have been proposed after the first Shapley and Shubik paper from 1954 about measuring voting power (an overview see MERCIK 1990), but the only major competitor of the Shapley-Shubik power index is a voting power index due to John Banzhaf (Banzhaf [1965]) and John Coleman (COLEMAN [1986]). The Banzhaf-Coleman power index (BC power index) follows a slightly different logic. To calculate it we have to write down all the winning coalitions and in each of them to note the "swing" voters (if such exist), those who by changing their vote could change the coalition from winning to losing. For our committee from *Table 1.2* we enumerated all possible coalitions in *Table 2.4*. Since in each voting situation the committee splits into two parts: those who vote "yes" and those who vote "no" or abstain, we denote the "yes" coalitions by + and "not yes" coalitions by -. There exist exactly 2^{*n*} coalitions, 16 in our case.

Table 1.4

We denoted the "swing" members in winning coalitions by an asterisk. We can see, that party 1 is twice in the position of the "swing" member, party 2 also two times, party 3 six times and party 4 two times. There are exactly 12 possible "swings" in the committee. Supposing that in a large number of voting situations all possible coalitions are equally probable, we can evaluate the power of the members as a ratio of the number of swings the member can make to the total number of possible swings. Thus the BC-power indices of the members are

$$\pi^{BC} = \left(\frac{1}{6}, \frac{1}{6}, \frac{1}{2}, \frac{1}{6} \right)$$

(in our example the same as Shapley-Shubik indices).

1	2	3	4	51	
20	25	38	17	51	
+	+	+	+	100	W
+	+	+	-	83	W
+	+	-	+	62	W
+	+	-	-	45	L
+	-	+	+	75	W
+	-	+	-	58	W
+	-	-	+	37	L
+	-	-	-	20	L
-	+	+	+	80	W
-	+	+	-	63	W
-	+	-	+	42	L
-	+	-	-	25	L
-	-	+	+	55	W
-	-	+	-	38	L
-	-	-	+	17	L
-	-	-	-	0	L
2	2	6	2	12	

Remark 1.4

Formally, let us denote by $C_i(q, \mathbf{w})$ the set of all winning coalitions in a committee with quota q and allocation \mathbf{w} the member i swings in. The *Banzhaf-Coleman* power index assigns to each member the share of voting power proportional to the number of swings:

$$\pi_i^{BC}(q, \mathbf{w}) = \frac{\text{card}[C_i^-(q, \mathbf{w})]}{\sum_{k \in N} \text{card}[C_k^-(q, \mathbf{w})]}$$

To see that the BC power index can differ from the SS power index, let us consider a committee with a quota $q = 51$ and an allocation $\mathbf{w} = (50, 25, 25)$. For this committee

$$\pi^{SS} = \left(\frac{2}{3}, \frac{1}{6}, \frac{1}{6} \right)$$

while

$$\pi^{BC} = \left(\frac{3}{5}, \frac{1}{5}, \frac{1}{5} \right)$$

Remark 1.5

It can be seen from the simple examples given above that the computation of the SS and BC power indices is a combinatorial problem and outlined "naive" methods can help to understand the indices, but they are not efficient enough for computations. In our research we used very efficient algorithms suggested by GAMBARELLI [1990], that enable us to compute the SS and BC indices in reasonable time for committees with $n \leq 20$, which is enough for multi-partisan parliamentary bodies.

1.3 Power in Multi-Cameral Committees

In order to explore some particular parliamentary structures we now suppose that a committee consists of more subcommittees (houses, cameras) which vote separately and any bill must be approved by a majority in all subcommittees. We shall call such a system a *multi-cameral committee* (TURNOVEC, 1992). What are the power indices in such a committee?

Consider a 3-party committee consisting of 3 cameras as given in *Table 1.5*. Following the same reasoning as in the case of a one-camera committee, let us

Table 1.5

parties	camera 1	camera 2	camera 3	Σ
1	50	25	10	85
2	45	10	15	70
3	5	15	25	40
Σ	100	50	50	200

suppose that a simple majority is required to pass a bill (51 votes in camera 1, 26 votes in camera 2 and 26 votes in camera 3) and that a bill is most enthusiastically supported by party 1, second most enthusiastically by party 2 and least enthusiastically by party 3. Thus 1 would be the first party to join the coalition to support the bill, but having no majority in any cameras it will look for the support of

another party. Then party 2 will join the coalition. This coalition has a majority in camera 1 and camera 2, but the bill would still lose because of not having a majority in camera 3. It will be able to win only if the coalition can gain the support of party 3. So party 3 is pivotal in this case.

To derive an extension of the Shapley-Shubik power index in this case we should consider all the orders of a coalition formation and look for pivotal members in the sense showed above. The Shapley-Shubik power index of a member of the committee is given by the probability that the member will be pivotal, providing that all the orders of a coalition formation are equally probable.

There are $3! = 6$ possible orders of forming the winning coalitions in our case (see *Table 2.6*). We starred the pivotal members in every camera for simple majority considered only in this camera. It can easily be seen that a member pivotal for a given order of creating a winning coalition in a particular camera is pivotal in our three-cameral committee only if the coalition losing in at least one camera will become winning in all cameras precisely when the member joins it. Clearly this is the last starred member among members marked with an asterisk in all cameras. We can see that party 1 is pivotal in 3 of 6 orders, party 2 is not pivotal at all and party 3 is pivotal in 3 of 6 orders, so we can evaluate the power of the parties by the Shapley-Shubik power indices as

Table 1.6

camera 1	camera 2	camera 3	committee
12*3	12*3	123*	123*
13*2	13*2	13*2	13*2
21*3	21*3	213*	123*
231*	231*	23*1	23*1
31*2	31*2	31*2	31*2
321*	321*	32*1	31*1

$$\pi^{SS} = \left(\frac{1}{2}, 0, \frac{1}{2} \right)$$

By similar argumentation we can extend the concept of a swing and modify the Banzhaf-Coleman power index for multi-cameral committees. In our particular case we shall obtain the same values of the BC power indices as SS-power indices.

We received a rather surprising result: with respect to simple majority rule the power of party 3 (with only 22.5% of deputies) in our three-cameral committee is the same as the power of party 1 (with 42.5% of deputies), while party 2 (with 35% of deputies) has no voting power at all.

1.4 Paradoxes of power

We can observe several amazing properties of power indices which indicate some unexpected properties of power. Let us illustrate some of them on numerical examples (in the examples we use the Shapley-Shubik power indices and suppose single-camera committees).

a) Paradox of redistribution

Let us consider two allocations in a 3-member committee with the total weight $t = 100$ and quota $q = 70$:

$$\mathbf{w}^1 = (50, 25, 25)$$

and

$$\mathbf{w}^2 = (55, 35, 10)$$

The SS-indices for these allocations are

$$\pi^{SS}(70, \mathbf{w}^1) = \left(\frac{2}{3}, \frac{1}{6}, \frac{1}{6}\right)$$

$$\pi^{SS}(70, \mathbf{w}^2) = \left(\frac{1}{2}, \frac{1}{2}, 0\right)$$

so we can see that power indices are not usually monotonic. An increase of the weight of any member can lead to a decrease of his long-term power characteristic (and a decrease of weight to an increase of power), which is the case of the first member in our example. This phenomenon is quoted as the **paradox of redistribution** (see FISCHER and SCHOTTER [1978]).

b) Paradox of size

Let us consider two allocations in two committees with the same total weight $t = 7$ and the quota $q = 4$, but different size:

$$\mathbf{w}^1 = (3, 2, 2)$$

and

$$\mathbf{w}^2 = (1, 1, 1, 2, 2)$$

The SS-indices for these allocations are

$$\pi^{SS}(4, \mathbf{w}^1) = \left(\frac{1}{3}, \frac{1}{3}, \frac{1}{3}\right)$$

$$\pi^{SS}(4, \mathbf{w}^2) = \left(\frac{2}{15}, \frac{2}{15}, \frac{2}{15}, \frac{3}{10}, \frac{3}{10}\right)$$

so we can see that splitting one member (party) into more subjects can adversely affect the rest of the members. This phenomenon is quoted as the **paradox of size** (see BRAMS [1975]).

c) **Paradox of new members**

Let us consider two allocations in two committees with different total weights, different quotas and different size:

$$q^1 = 4, \quad w^1 = (3, 2, 2)$$

and

$$q_2 = 5, \quad w^2 = (3, 2, 2, 1)$$

A new member was accepted onto the committee with one vote and the absolute majority quota increased by one. The SS-indices for these allocations are

$$\pi^{SS}(4, w^1) = \left(\frac{1}{3}, \frac{1}{3}, \frac{1}{3}\right)$$

$$\pi^{SS}(5, w^2) = \left(\frac{5}{12}, \frac{1}{4}, \frac{1}{4}, \frac{1}{12}\right)$$

so we can see that adding one new member to the committee and increasing the majority quota can make some member better even if it leads to a decrease of his weight at the same time. This phenomenon is quoted as the **paradox of new members** (see BRAMS [1975]).

d) **Paradox of quarrelling members**

Let us consider the allocation in a 3-member committee with the total weight $t = 7$ and the quota $q = 5$:

$$w = (3, 2, 2)$$

The SS-indices for this allocation are

$$\pi^{SS}(5, w) = \left(\frac{2}{3}, \frac{1}{6}, \frac{1}{6}\right)$$

Let us suppose now that members 2 and 3 are not willing to cooperate and they will avoid participation in the same coalitions. We can then recalculate the SS-indices taking into account this constraint and we receive

$$\bar{\pi}^{SS}(5, w) = \left(\frac{1}{2}, \frac{1}{4}, \frac{1}{4}\right)$$

so we can see that the uncooperativeness of some members can make all of these members better. This phenomenon is quoted as the **paradox of quarrelling members** (see KILGOUR [1974]).

e) Paradox of threshold

In proportional representation systems institutional rules often appear in order to eliminate from the committees small parties gaining votes under certain percentage limit, called threshold (say, 5%). Let us consider two allocations in two committees of different size with the same total weight $t = 100$ and majority quota $q = 51$:

$$\mathbf{w}^1 = (49, 24, 23, 3, 1)$$

$$\mathbf{w}^2 = (51, 25, 24)$$

The committee with allocation \mathbf{w}^2 is obtained from the committee with allocation \mathbf{w}^1 by eliminating small parties with less than 5% of votes and redistributing the votes of these parties among the remaining parties approximately in proportion to their weights (so the largest party receives two extra votes and each of the two smaller parties one extra vote). The SS-power indices for these two allocations are:

$$\pi^{SS}(51, \mathbf{w}^1) = \left(\frac{33}{60}, \frac{8}{60}, \frac{8}{60}, \frac{8}{60}, \frac{3}{60} \right)$$

$$\pi^{SS}(51, \mathbf{w}^2) = (1, 0, 0)$$

We can see that in this case threshold means not only discrimination for the smallest parties 4 and 5, but it will bring the first party to an absolute majority and would damage also parties 2 and 3, in spite of increasing their weights in the committee (TURNOVEC [1992b]).

The problem is whether these paradoxes are properties of some particular definitions of power indices or whether they are properties of power as such. FISCHER and SCHOTTER [1978] proved that for the Shapley-Shubik and Banzhaf-Coleman power indices the paradox of redistribution can always occur in any committee with the number of members n being sufficiently large:

(i) for any allocation \mathbf{x} in the committee of the size $n > 3$ and the majority quota

$$q = \text{int}\left(\frac{t}{2}\right) + 1$$

there exists an allocation \mathbf{y} such that for at least one member of the committee the weight in \mathbf{x} is less than in \mathbf{y} and the values of both the Shapley-Shubik and Banzhaf-Coleman power indices are greater in \mathbf{x} than in \mathbf{y} ;

(ii) for any allocation \mathbf{x} in the committee of the size $n > 6$ and any quota there exists an allocation \mathbf{y} such that for at least one member of the committee the weight in \mathbf{x} is less than in \mathbf{y} and the values of both the Shapley-Shubik and Banzhaf-Coleman power indices are greater in \mathbf{x} than in \mathbf{y} .

1.5 Political Profile and Power Profile

In a democratic society committees are being elected. Let $i = 1, 2, \dots, n$ be parties taking part in the election. Suppose that the parties are ordered in a single left-right ideological dimension in such a way that they are numbered from left to right. Let us denote by v_i the number of votes for the party i in the election and by s_i the number of seats allocated to the party i after the election.

To characterize a political profile of the community and a power profile of the committee and to compare the situation in different countries, we shall use concepts of density distribution and cumulative distribution (of voters preferences in the society and power in the committee).

The political profile of a community may be characterized by the density function

$$f(i, \mathbf{v}) = \frac{v_i}{\sum_{k=1}^n v_k}$$

(proportions of votes for the parties) and by two cumulative distribution functions: LR-cumulative distribution function

$$F^{LR}(i, \mathbf{v}) = \sum_{k=1}^i f(k, \mathbf{v})$$

(total proportion of votes for all the parties at least as left as i including i), and RL-cumulative distribution function

$$F^{RL}(i, \mathbf{v}) = \sum_{k=i}^n f(k, \mathbf{v})$$

(total proportion of votes for all the parties at least as right as i including i).
Clearly

$$\sum_{i=1}^n f(i, \mathbf{v}) = 1, \quad f(i, \mathbf{v}) \geq 0$$

and

$$0 \leq F^{LR}(i, \mathbf{v}) \leq 1, \quad 0 \leq F^{RL}(i, \mathbf{v}) \leq 1$$

Since it is difficult to introduce a cardinal measure of a distance on an ideological line, but it is possible to locate a centre, we shall use a diagrammatic representation of density distribution and cumulative distribution. Let us explain an interpretation of diagrams in a single example.

Let us suppose that 3 parties participated in the election with votes obtained $v_1 = 30$, $v_2 = 30$, $v_3 = 15$. Party 1 is of left orientation, party 2 is centristic and party 3 is rightist. In this case density distribution is

$$f(1, \mathbf{v}) = 0.4, \quad f(2, \mathbf{v}) = 0.4, \quad f(3, \mathbf{v}) = 0.2$$

LR cumulative distribution is

$$F(1, \mathbf{v}) = 0.4, \quad F(2, \mathbf{v}) = 0.8, \quad F(3, \mathbf{v}) = 1$$

and RL cumulative distribution is

$$F^{RL}(1, \mathbf{v}) = 1, \quad F^{RL}(2, \mathbf{v}) = 0.6, \quad F^{RL}(3, \mathbf{v}) = 0.2$$

A political profile of the community is then given by the diagrams in *Fig. 1.1*. The diagrams clearly show the left-centristic orientation of the society: the density is declining from left to right and 80% of voters prefer left and centristic parties, while only 60% of voters prefer right and centristic parties. The pattern of the political profile is given by the intersection of the LR and RL cumulative distribution curves: if the intersection is left of centre, then we shall speak about the propensity to a left-centristic political profile, if the intersection is right of centre, we shall speak about the propensity to a right-centristic

political profile. If the intersection is in the centre, we shall speak about the propensity to a centrist political profile.

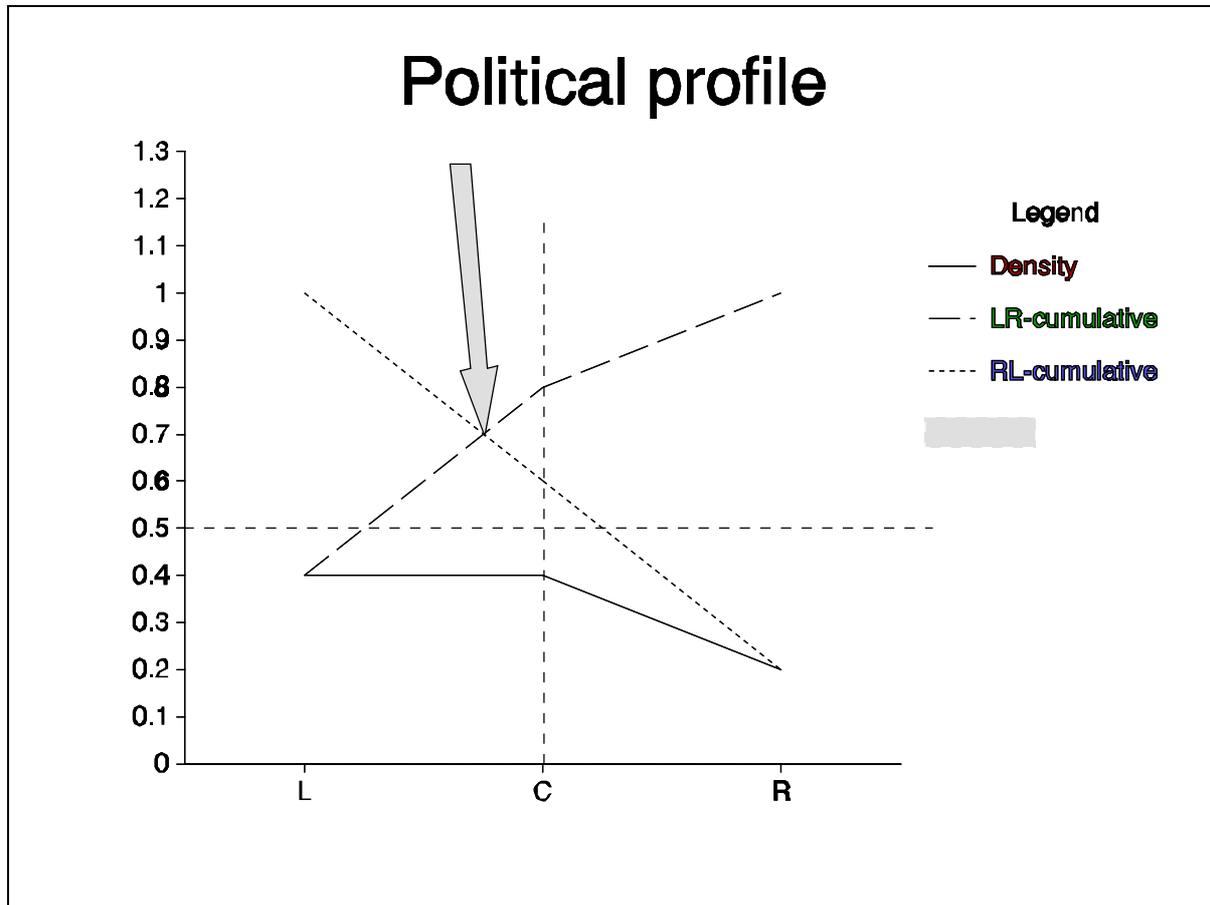


Fig. 1.1
Political profile

After the allocation of seats s_i we can compare a political profile of the community, based on the distribution of votes, with a political profile of parliament, based on the distribution of seats (they may differ due to a "political rounding" and to an eventual threshold).

We have shown before that the distribution of votes may not be identical with the distribution of power. Let us suppose that in our example the representation of the parties in the committee is strictly proportional, e.g. $s_1 = 6$, $s_2 = 6$ and $s_3 = 3$. The simple majority quota in this case is $q = 8$ and the SS and BC power indices are equal:

$$\pi^{SS} = \pi^{BC} = \left(\frac{1}{3}, \frac{1}{3}, \frac{1}{3} \right)$$

Using these indices we can characterize a power profile of the committee by density and the LR, RL cumulative distributions:

$$f(1,\pi) = \frac{1}{3}, \quad f(2,\pi) = \frac{1}{3}, \quad f(3,\pi) = \frac{1}{3}$$

and

$$F^{LR}(1,\pi) = \frac{1}{3}, \quad F^{LR}(2,\pi) = \frac{2}{3}, \quad F^{LR}(3,\pi) = 1$$

$$F^{RL}(1,\pi) = 1, \quad F^{RL}(2,\pi) = \frac{2}{3}, \quad F^{RL}(3,\pi) = \frac{1}{3}$$

In this case the power is distributed equally on an "ideological interval" among the left, centre and right (see *Fig. 1.2*). The intersection of the LR and RL cumulative distribution curves is in the centre, so the left and centre has the same power as the right and centre and in this sense the centre has a "pivotal" role. Comparing it to the political profile from *Fig. 1.1*, we can see that the power profile may differ from the political profile, even if the representation of the parties is strictly proportional (the same proportions of seats as votes).

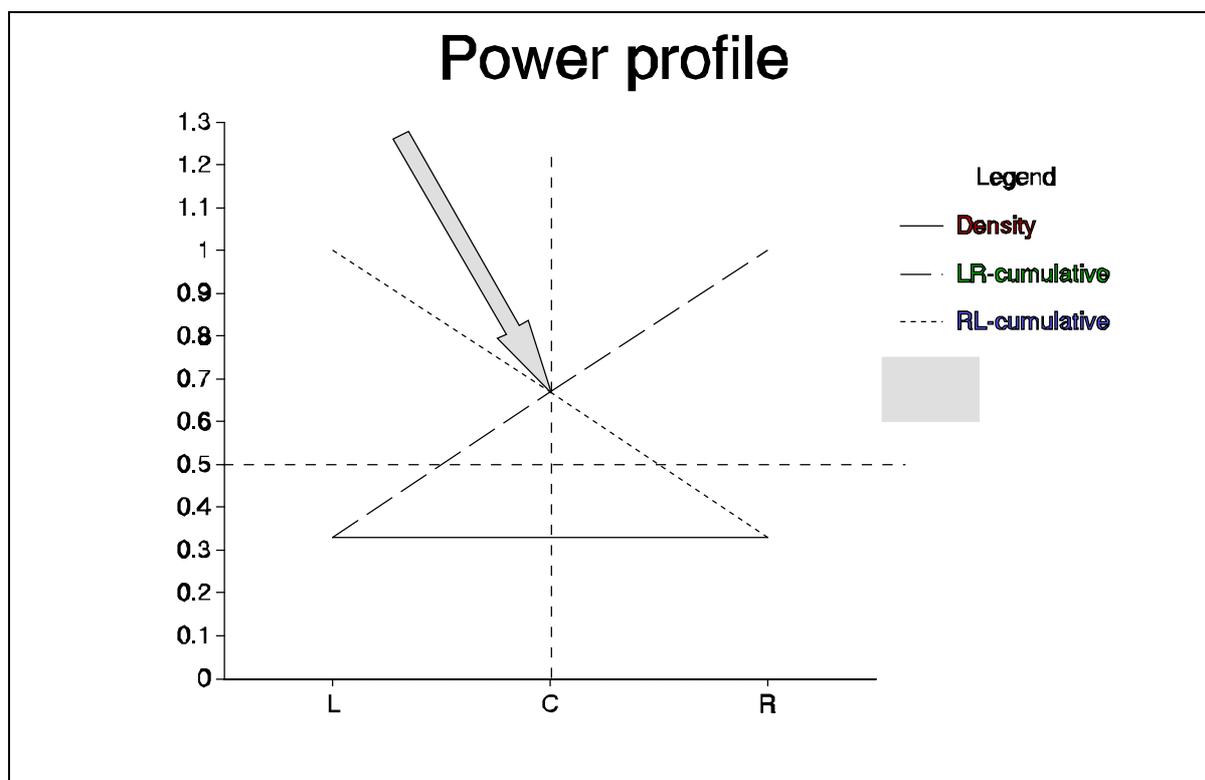


Fig. 1.2
Power profile

2. Distribution of Power in the Czech Republic

In this section we present a survey of the results of the last general parliamentary elections in the former Czechoslovakia. After separation and the creation of two states, the national parliaments in the Czech Republic and Slovak Republic, elected in 1992 in common state, became the parliaments of the newly created republics, so the data about the results of the election to the Czech National Council, the regional parliament of the Czech part of former Czechoslovakia, are relevant for an analysis of the political situation in the Czech Republic.

2.1 Electoral system

The studies of electoral systems have traditionally regarded Eastern Europe (including Soviet Union) as typical examples of no-choice elections, in which people can only approve or disapprove a candidate presented by the ruling party. One general feature of the changes made to electoral practices in Eastern Europe has been a shift away from majority allocation rule, which was a universal system under the non-competitive elections, towards more proportional procedures. This is no surprising trend, since proportional representation of parties would be obviously meaningless in a one-party system. Also one has to bear in mind that the elections in Eastern Europe before World War II were proportional and that nowadays only English-speaking and British influenced countries elect their parliaments on a plurality or majority basis.

Shortly after 1989 the East European states started to "invent" specific electoral systems different from each other, and none of them was a straight imitation of any western democratic polity. The end of the eighties and beginning of the nineties was the "time of elections" (3 parliamentary elections in Poland, 2 parliamentary elections in the former Czechoslovakia, 2 parliamentary elections in Romania, 2 parliamentary elections in Albania, 1 parliamentary election in Hungary, 2 elections in Bulgaria). First experience with the functioning of new political systems leads to some tendency to unify electoral systems in different countries.

Czechoslovakia had a bicameral Federal Parliament with the House of the People (150 seats) and the House of the Nations (150 seats) and two republic parliaments: the Czech National Council (200 seats) and the Slovak National Council (150 seats). 99 deputies of the House of the People were elected in the Czech Republic and 51 deputies in the Slovak Republic. There was a parity representation in the House of Nations: 75 deputies elected in the Czech

Republic and 75 in the Slovak Republic. The National Councils were elected on regional principle in the corresponding republics. The National Councils were converted into one-camera national parliaments after the separation.

The proportional electoral system was used with the discrimination of small parties and political formations: to enter the parliament a party had to collect at least 5% of the total number of valid votes on the national level (level of republics). A coalition of two or three parties had to collect at least 7% of valid votes and a coalition of more than three parties had to collect at least 10% of valid votes.

The country was divided into 12 voting districts (8 in the Czech Republic and 4 in the Slovak Republic) with multi-candidate lists presented by different parties. The number of seats for each district was proportional to the total number of valid votes in the district. Votes for the parties that did not overcome the 5% (or 7%, 10%) threshold were redistributed among parties that succeeded, approximately in proportion to the received votes. Within each political party the candidates received the seats allocated to the party according to the order printed on the ballot. However, if at least one tenth of the total of voters casting a valid vote for the respective party in the electoral district used the right to a preference vote, the candidates who receive a preference vote from more than 50% of those voters were moved to the top of the list. The voter was allowed to express preference to candidates by circling the numbers of a maximum of four candidates listed on the ballot (an application of approval voting, since the personal votes were of equal weight and not truly preferential).

The distribution of seats to parties started at the district level with a full quota allocation (quota is defined as the total number of valid votes received by parties with more than 5% and coalitions with more than 7 or 10% of votes in a district divided by the number of seats to be allocated plus one). The total number of votes for the party was divided by quota and the party received a number of seats equal to the integer part of this ratio. The remainder of seats were allocated on the national level (level of republics). The old "federal" electoral system remains unchanged in the Czech Republic and in the Slovak Republic.

2.2 Results of 1992 Election in the Czech and Slovak Federal Republic

Here we give the results of elections with ordering the parties on the "left-right" ideological line. We are aware of the fact that the clustering may be questionable. As a basic principle we used the attitude of the parties to the speed and intensity of economic transition (left - parties that emphasize the government engagement in economy, centrists - supporters of a "social

market economy", right - rapid economic transformation with a diminishing economic role of the state). There is an exception, however, in the case of extreme right parties, that usually do not present clear positions on the economic transformation and emphasize national and populist topics.

Czechoslovakia's first free general parliamentary election since 1946 was held on 8-9 June 1990. The same electoral system was applied like in 1992. In conditions of non-differentiated political spectrum it turned out to be more a referendum (the turnout was 96.3% of eligible voters) approving a new organization of society and expressing anti-totalitarian orientation of the majority of the Czech and Slovak citizens than a choice among alternative well defined policies of other development. An absolute majority in the Federal parliament won the broad coalition of the Czech and Slovak liberal civic movements, that played a crucial role during the 1989 turnover of power - Civic Forum in the Czech Republic and the Public Against Violence in the Slovak Republic. Only 6 political formations entered the Federal Parliament. Even less - 4 formation entered the Czech Parliament and 7 formations the Slovak parliament. In the Czech parliament the Civic forum had 63.5% of seats, enough for a qualified majority required for constitutional laws, in the Slovak Parliament the partner of the Civic Forum, the Public Against Violence won 32.5% of seats and together with Slovak Christian Democratic Movement with 20.67% of seats participated in the Federal government and formed the Slovak regional government. The Czech government was formed by Civic Forum only. However, the situation dramatically changed during 1991. Differentiation in former voting parties and coalitions led to fast diversification of political formations in all three parliaments. At the end of 1991 the number of factions in the Federal Parliament increased from 7 to 16, in the Czech Parliament from 4 to 11 and in the Slovak Parliament from 7 to 11. (Analysis of 1990 election see TURNOVEC [1992c]). The time of euphoria ended as the society approached the second parliamentary election in 1992.

In the 1992 June 5th and 6th general parliamentary election 35 political formations (parties and coalitions) competed for seats in the Federal Parliament, 19 formations for seats in the Czech National Council and 23 formations for seats in the Slovak National Council. About 85% of eligible voters took part in the election. About 26% of valid votes were redistributed (votes for political formations, that did not get more that 5%, 7% or 10%). Due to the discrimination of the small parties only the following 14 political formations entered the parliaments (some of them one house only):

The Czech parties (coalitions):

<i>LBL</i>	<i>Left Block, coalition of the Czech and Moravian Communist party and Democratic Left Movement,</i>
<i>CSSD</i>	<i>Czechoslovak Social Democratic Party (after separation Czech Social Democratic Party of the left orientation),</i>
<i>LSU</i>	<i>Liberal Social Union (left-centristic coalition),</i>
<i>HSD-SMS</i>	<i>Movement for Self-Administration Democracy - Society for Moravia and Silesia, a Moravian regional party,</i>
<i>KDU-ČSL</i>	<i>Christian and Democratic Union - Czechoslovak Peoples Party (pro-reform centristic party)</i>
<i>ODS-KDS</i>	<i>coalition of Civic Democratic Party and Christian Democratic Party (Mr. Klaus, pro-reform right-centre coalition),</i>
<i>ODA</i>	<i>Civic Democratic Alliance (pro-reform right-centre party),</i>
<i>SPR-RSČ</i>	<i>Alliance for Republic - Czechoslovak Republican Party (extreme rightist party).</i>

The Slovak parties (coalitions):

<i>SDL</i>	<i>Party of Democratic Left (former communist party with leftist social-democratic orientation),</i>
<i>SDSS</i>	<i>Slovak Social Democratic Party (Mr. Dubček).</i>
<i>HZDS</i>	<i>Movement for Democratic Slovakia (Mr. Mečiar),</i>
<i>SNS</i>	<i>Slovak National Party, the only parliamentary party with explicit program of separation of Slovakia,</i>
<i>KDH</i>	<i>Christian Democratic Movement, centristic pro-reform party,</i>
<i>MKDH-ESWS</i>	<i>Coalition of Hungarian parties of right orientation.</i>

In *Table 2.1* we give the results of election to the Federal Parliament: number of seats, proportional representation and Banzhaf-Coleman power indices in percentage expression for 50% and 60% majority voting rules (60% majority required for constitutional laws). The power indices are calculated taking into account "multi-cameral" voting rules in the Federal Parliament: to pass any law all the three parts of the Federal Parliament (the House of the People, the Czech part of the House of Nations and the Slovak part of the House of Nations) had to independently agree to it. We can see the strong dominance of the two leading political powers - the Czech Civic Democratic Party and the Movement for Democratic Slovakia.

Table 2.1

Primary distribution of power in the Federal Parliament of CSFR after 1992 election

Federal Parliament of CSFR	House of the People		House of Nations				total		Power indices	
			Slovak part		Czech part					
party, movement, coalition	seats	%	seats	%	seats	%	seats	%	BC50	BC60
Slovak parties										
SDL	10	6.67	13	17.33	0	0.00	23	7.67	2.54	6.95
SDSS	0	0.00	5	6.67	0	0.00	5	1.67	2.46	2.32
HZDS	24	16.00	33	44.00	0	0.00	57	19.00	37.49	30.10
SNS	6	4.00	9	12.00	0	0.00	15	5.00	2.54	4.63
KDH	6	4.00	8	10.67	0	0.00	14	4.67	2.54	4.63
MKDH-ESWS	5	3.33	7	9.33	0	0.00	12	4.00	2.54	2.32
Czech parties										
LBL	19	12.67	0	0.00	15	20.00	34	11.33	2.46	5.57
CSSD	10	6.67	0	0.00	6	8.00	16	5.33	2.46	3.34
LSU	7	4.67	0	0.00	5	6.67	12	4.00	2.46	3.34
KDU	7	4.67	0	0.00	6	8.00	13	4.33	2.46	3.34
ODS-KDS	48	32.00	0	0.00	37	49.33	85	28.33	37.57	30.10
SPR-RSČ	8	5.33	0	0.00	6	8.00	14	4.67	2.46	3.34
total	150	100.0	75	100.0	75	100.0	300	100.0	100.0	100.0

From *Table 2.1* we can see that a distribution of power substantially differs from the distribution of seats: e.g. small Slovak Social Democratic Party with 1.67% representation had 2.46% of power by simple majority rule Banzhaf-Coleman power index, the same as the Left Block with 11.33% of seats. The Movement of Democratic Slovakia with 19% representation had 37.49% of power, the same as the coalition of Civic Democratic Party and Christian Democratic Party in the Czech Republic with 28.33% of seats.

In *Fig. 2.1* we give a diagrammatical representation of a political profile of the Federal parliament, in *Fig. 2.2* a power profile. We use the following left-right ordering of the parties irrespectively to their national background: LBL, SDL, SDSS, CSSD, HZDS, LSU, SNS, KDU, KDH, ODS-KDS, MKDH-ESWS, SPR-RSC (ordering in *Table 2.1* follows the national principle, within national groups the parties are ordered from left to right). Christian democratic parties (KDU and KDH) have been selected as representative of the centre.

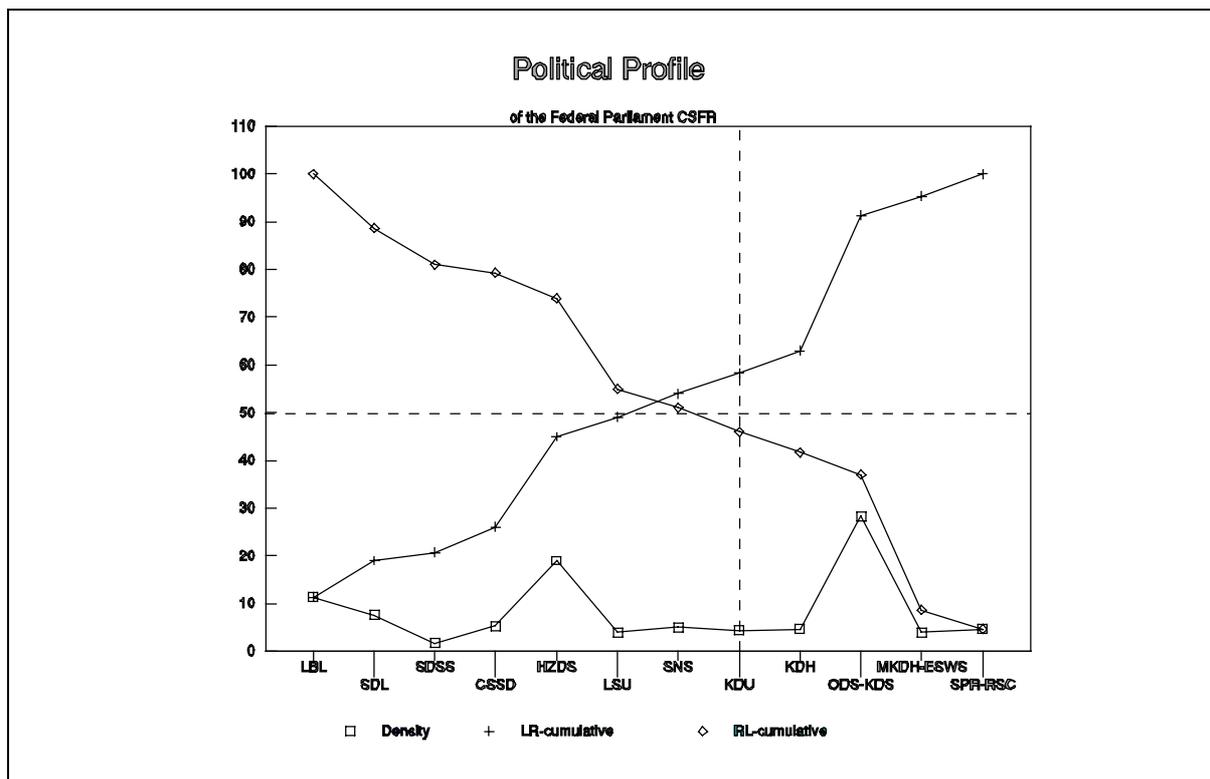


Fig. 2.1
Political profile of the CSFR Federal Parliament

We can see that the political profile of the last Federal Parliament of the CSFR shows the propensity to the left centre (the point of intersection of the LR and RL cumulative distribution curve in the upper left part of the diagram). At the same time we can clearly see the bimodal pattern of density distribution of parliamentary representation (two peaks - one in the left part of the spectrum and the second in the right part).

In *Fig. 2.2* we give the corresponding power profile (determined by Banzhaf-Coleman power indices for 50% majority rule). We can see, that compared to the political profile the power profile of the Federal parliament has the same pattern, so the result of the last parliamentary election in the CSFR the left centre Federal parliament was established. The bimodal character of density distribution of power is even more transparent than in the case political profile.

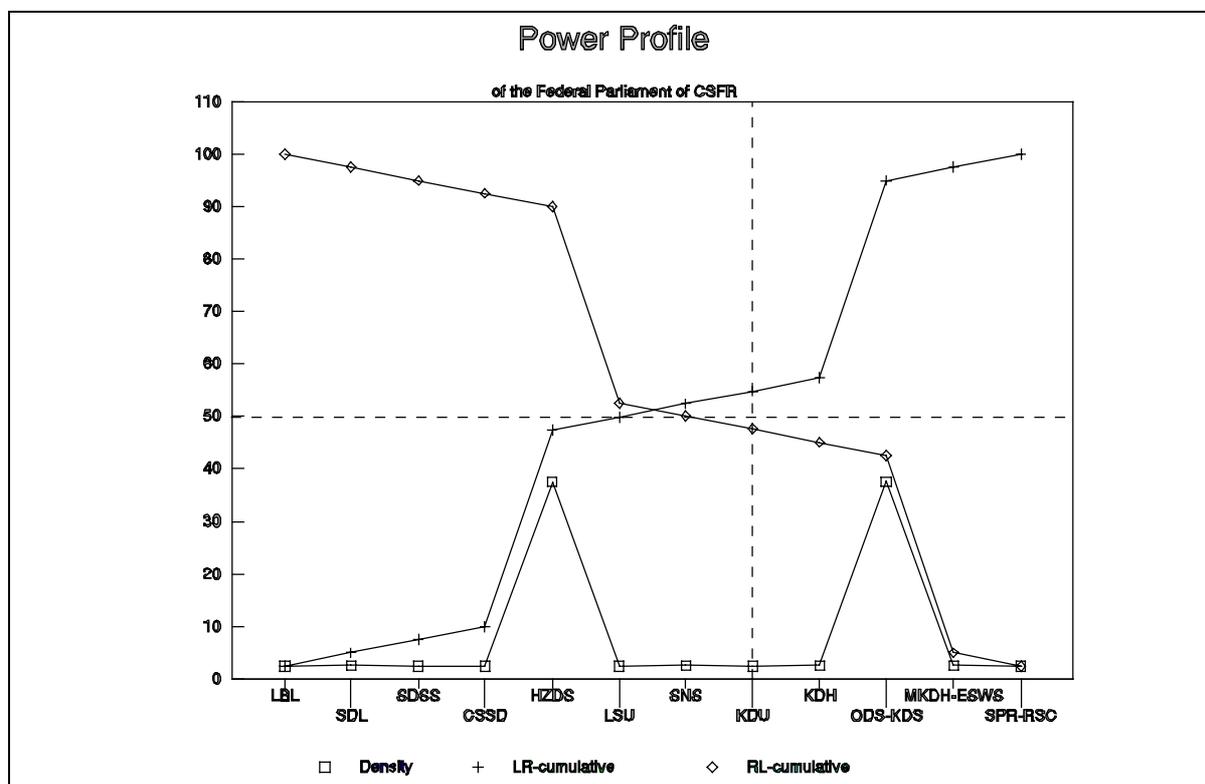


Fig. 2.2
Power Profile of the CSFR Federal Parliament

In *Fig. 2.3* we compare political profiles of the Czech part and the Slovak part of the Federal parliament. Political inconsistency of the Czech and Slovak representation in the Federal parliament of the CSFR, expressing different preferences of the citizens of the Czech Republic and the Slovak republic, is clearly visible from the picture.

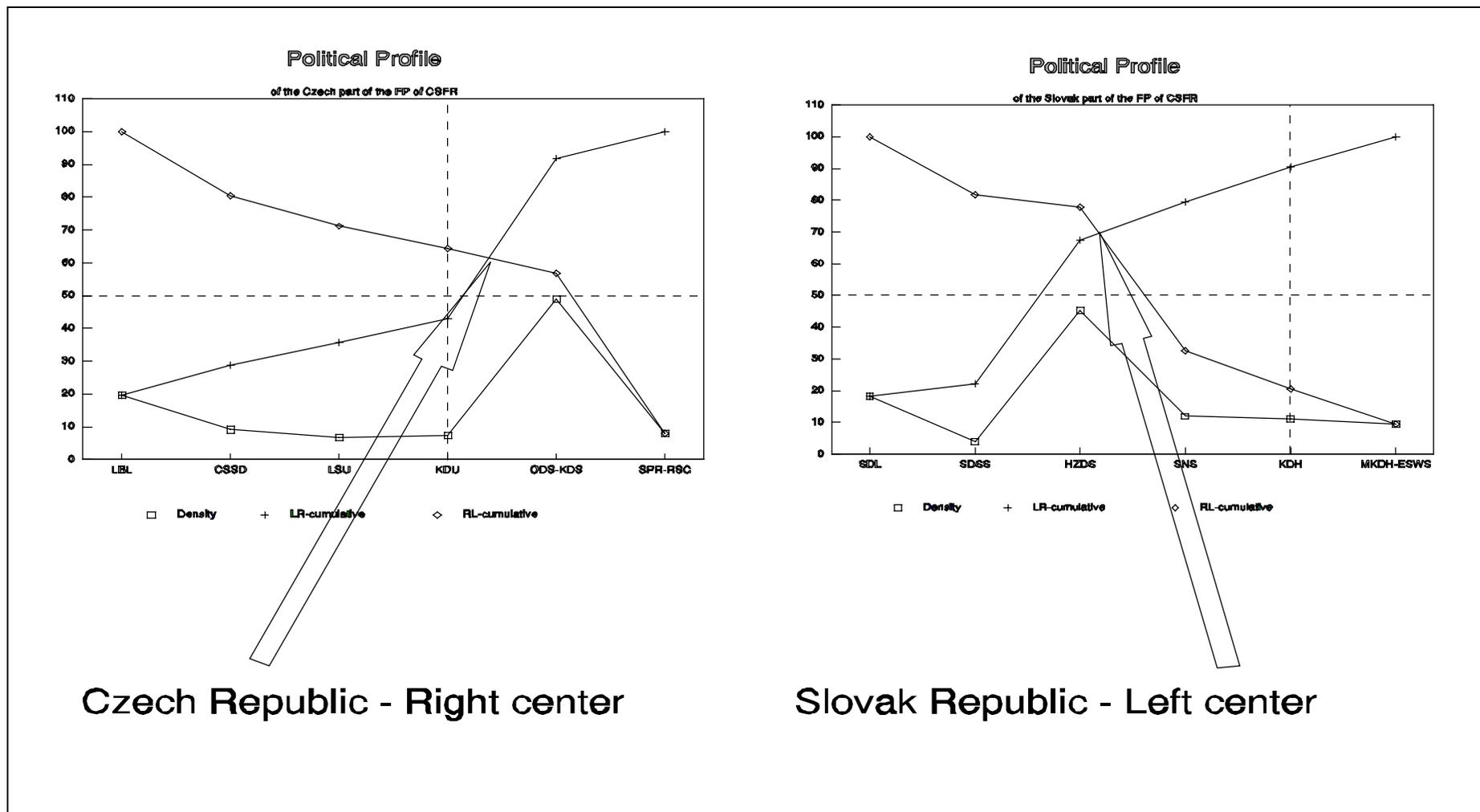


Fig. 2.3
Political spectrum of the Czech representation and the Slovak representation in the Federal parliament of CSFR

The Federal Parliament of Czechoslovakia is a subject of history now, so we shall not discuss it more deeply here. One can conclude from the data and the graphical analysis above that substantial differences in the political profile of the Czech and Slovak political representation, expressing differences in the priorities of the Czech and Slovak societies together with the lack of political experience and not enough will on the both sides to seek mutually acceptable compromise contributed to the peaceful separation of the country after 74 years of coexistence in the common state.

2.3 Czech Parliament before the Separation

In *Table 2.2* we give the results of election to the Czech National Council (present parliament of the Czech Republic). Not all of the parties qualified to the parliament (because of the 5%, 7% and 10% threshold for parties and coalitions). Parties are ordered in "left-right" political dimension, however some marginal parties with no clear economic and political program at all, are omitted (such as a "party of friends of beer" and a "new erotic initiative"). (For the list of all parties and abbreviations with a short characterization of their political profile see in Appendix.)

In *Fig. 2.4* we give a graphical characteristic of a political profile of the Czech society by the results of parliamentary election to the Czech Parliament. We can see, that the point of intersection of LR and RL cumulative distribution is almost in the centre.

Only 7 parties succeeded to enter the Czech Parliament. In *Table 2.3* we give a distribution of seats and Shapley-Shubik and Banzhaf-Coleman power indices for 50% and 60% majority rule.

Table 2.2
Results of election to the Parliament of CR

Political profile of the Czech society			
party	% votes	LR	RL
Left Block (LBL)	14.05	14.05	97.33
Mov. of seniors (HDZJ)	3.77	17.82	83.28
Social Democrats (CSSD)	6.53	24.35	79.51
Movement for Social Equality (HSS)	1.08	25.43	72.98
Liberal-Social Union (LSU)	6.52	31.95	71.9
Democrats 92 (D92)	0.58	32.53	65.38
Civic Movement (OH)	4.59	37.12	64.8
Moravian Movement (HSD-SMS)	5.87	42.99	60.21
Rome's Civic Initiative (RI)	0.26	43.25	54.34
Christian Democratic Union (CDU)	6.28	49.53	54.08
Civic-Democratic Party+CHDP (ODS/KDS)	29.73	79.26	47.8
Civic Democratic Alliance (ODA)	5.93	85.19	18.07
Party of Businessmen (SCP)	3.15	88.34	12.14
National-Social Party (NSS)	0.15	88.49	8.99
Club of non-party (KAN)	2.69	91.18	8.84
National Democrats (SRNDJ)	0.17	91.35	6.15
Republicans (SPR-RSC)	5.98	97.33	5.98
	97.33		

To compare a political profile of the parliament (see *Fig. 2.5*) with a political profile of the society we use the same format of the ideological interval with the parties outside the parliament just having zero entries.

We can see that the threshold did not move the political profile of the parliament compared to the political profile of the society. The structure of the parliament on the left-right ideological interval reflects the structure of the voters preferences.

Political Profile of CR

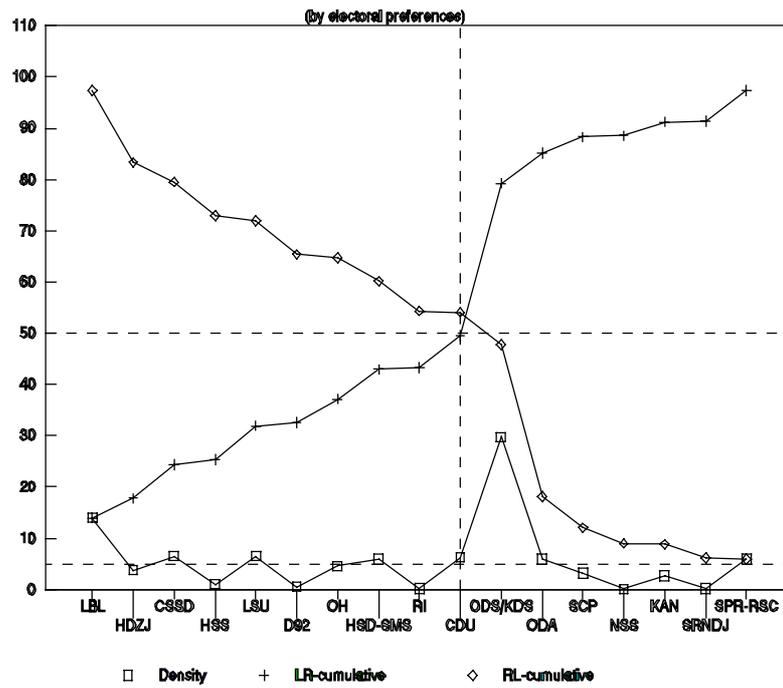


Fig. 2.4
Political profile of the Czech society as given by electoral preferences

Political Profile of the Parliament

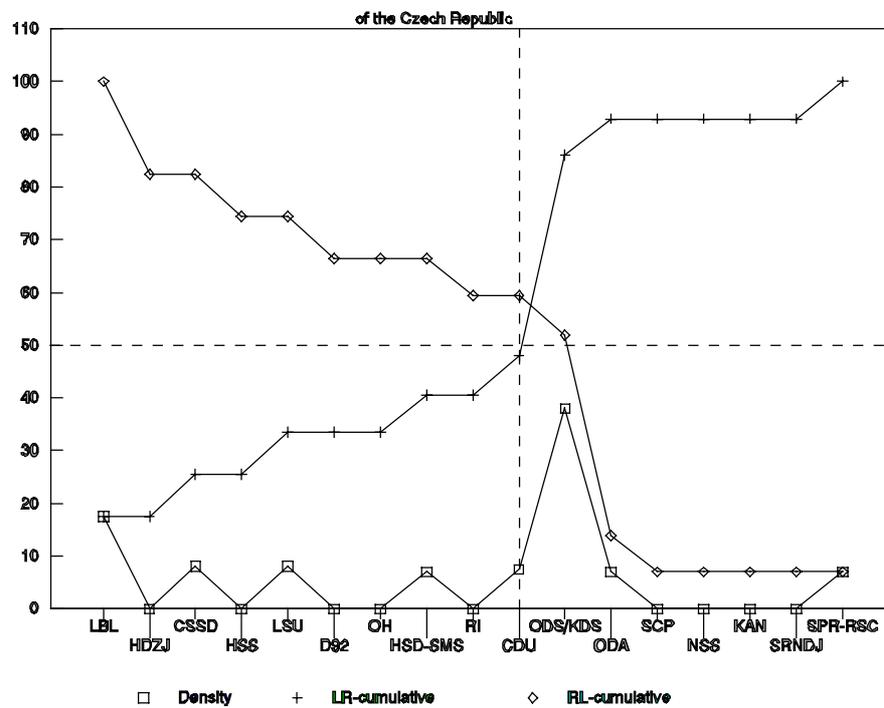


Fig. 2.5
Political profile of the Czech Parliament in 1992

Table 2.3

Primary distribution of power in the Czech National Council after 1992 election

Czech National Council						
party, movement, coalition	number of seats	proportional representation (%)	SS50	SS60	BC50	BC60
LBL	35	17.50	10.71	12.14	7.45	16.16
CSSD	16	8.00	5.95	7.38	5.32	8.08
LSU	16	8.00	5.95	7.38	5.32	8.08
HSD-SMS	14	7.00	5.95	5.24	5.32	4.04
KDU	15	7.50	5.95	5.24	5.32	8.08
ODS-KDS	76	38.00	53.57	52.14	60.64	47.47
ODA	14	7.00	5.95	5.24	5.32	4.04
SPR-RSČ	14	7.00	5.95	5.24	5.32	4.04
total	200	100.00			100.01	99.99

In Fig. 2.6 we show a power profile of the Czech parliament measured by SS-power index (for 50% majority voting), in Fig. 2.7 we used BC-index. In both cases we can see a slight shift to the right compared to the political profile of the society and the political profile of the parliament.

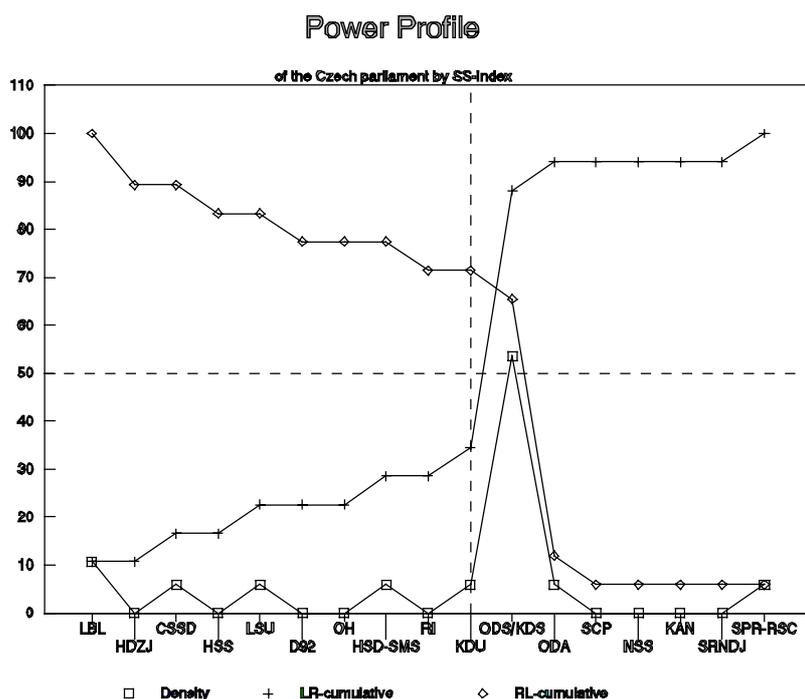


Fig. 2.6
Power profile of the Czech Parliament by SS-index

Less than 50% of power in the Czech Parliament is left of the centre. Again, to be able to compare our diagrams, we preserve the format of ideological interval considering also the parties with zero power (outside the parliament). We can see that measures of power (both by SS-indices and BC-indices) are less than data about proportional representation for all parties except of coalition ODS/KDS. This underlines its pivotal position in the political life of the Czech Republic and corresponds to the real influence this electoral coalition of the two parties had immediately after the election. It was natural that the core of government coalition after the election was created by this coalition.

The government coalition in the Czech Republic was formed by four right-centristic parties: *Civic Democratic Party* of Mr. Klaus, its coalitional partner *Christian Democratic Party*, *Civic Democratic Alliance* and *Christian Democratic Union*. Characteristics of this coalition (its standing against opposition under assumption that opposition has no binding coalitional agreement) are given in *Table 2.4* (distribution of votes and distribution of power by SS and BC indices).

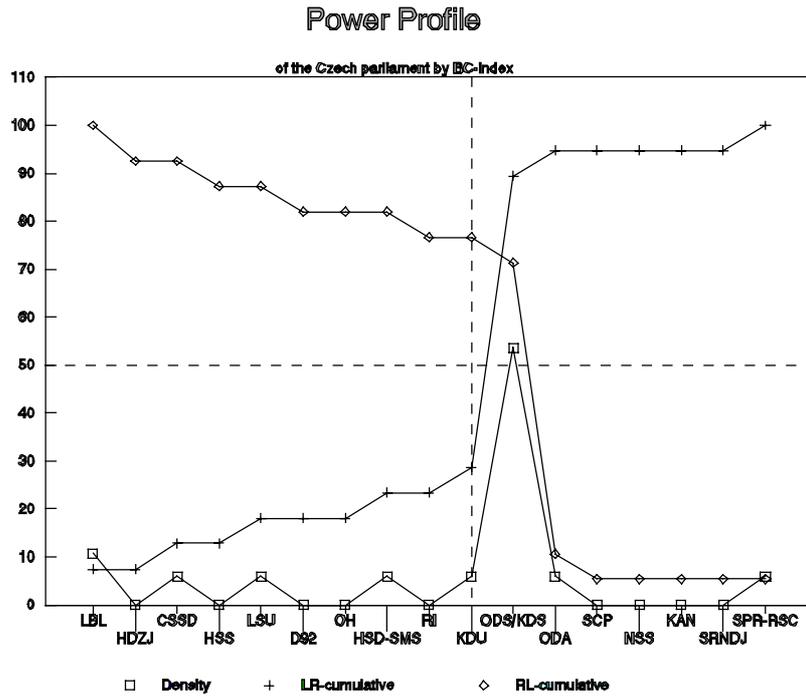


Fig. 2.7
Power Profile of the Czech Parliament by BC-index

Table 2.4
Government Coalition vs. Opposition

Czech National Council - Government Coalition						
	votes	%	SS50	SS60	BC50	BC60
LBL	35	17.5	0	6.67	0	7.5
CSSD	16	8	0	6.67	0	7.5
LSU	16	8	0	6.67	0	7.5
HSD-SMS	14	7	0	1.67	0	2.5
GC	105	52.5	100	76.67	100	72.5
SPR-RSC	14	7	0	1.67	0	2.5
total	200	100	100	100.02	100	100

Since the government coalition (GC) has not enough votes for 60% majority (120 votes) required for constitutional bills, it has to seek support and to cooperate from issue to issue with different oppositional parties.

2.4 Redistribution of Power After Separation

There were no new elections after dividing the country in January 1993. In spite of that the political scene in the Czech Parliament has changed. We are giving here two "snapshots" of a distribution of power in the Czech Parliament - in beginning of 1993 and beginning of 1994.

In *Table 2.5* we give the characteristic of a new situation in the parliament of the Czech Republic in the beginning of 1993. The number of parliamentary factions has increased from 8 (just after election) to 11 (tendency to diversification is a characteristic feature of the Czech political life after 1989).

In *Table 2.5* NLK stands for "New Liberal Club" and indep. for "independents", formations created by part of members of parliament from quarrelling oppositional parties (LSU, HSD-SMS and SPR-RSC). Former election coalition of ODS and KDS created distinct factions in the parliament. Comparing the results with the primary distribution of power after the election (*Table 2.2*), we can observe a decrease of both Shapley-Shubik and Banzhaf-Coleman power indices of original electoral coalition of ODS and KDS from 53.57 to 43.31 (ODS) and 4.50 (KDS) in the case of 50% SS-index and from 60.64% to 45.3% (ODS) and 4.7% (KDS) for 50% BC-index. The same phenomena is observed for 60% majority rule. The redistribution in parliamentary factions increased the value of power indices of the left opposition parties LBL (having the same number of deputies as before, the parliamentary influenced of LBL increased from 10.71% to 15.45% as measured by Shapley-Shubik 50% index) and CSSD and within the government coalition parties the power of KDU-CSL.

Table 2.5

New distribution of power in the Czech parliament in the beginning of 1993

Distribution of power in the Czech Parliament (1993)						
party	seats	%	Shapley-Shubik		Banzhaf-Coleman	
			0.5	0.6	0.5	0.6
LBL	35	17.5	15.45	14.42	11.01	16.25
CSSD	16	8.0	6.88	7.31	7.27	7.09
LSU	14	7.0	5.65	5.45	5.95	5.95
HSD-SMS	10	5.0	4.50	4.10	4.73	4.35
NLK	5	2.5	1.65	2.83	1.76	2.63
KDU-CSL	15	7.5	6.25	6.99	6.61	6.64
KDS	10	5.0	4.50	4.10	4.73	4.35
ODS	66	33.0	43.31	42.95	45.37	40.16
ODA	14	7.0	5.65	5.45	5.95	5.95
indep.	4	2.0	1.17	1.72	1.32	1.72
SPR-RSC	11	5.5	4.98	4.69	5.29	4.92
total	200	100.0	99.99	100.01	100.00	100.00

In *Table 2.6* we give the power indices for government coalition. The government coalition in the Czech Republic stays stable (ODS, KDS, ODA and KDU-CSL) with no transfers among parliamentary factions.

Table 2.6
Government Coalition vs. Opposition in 1993

Power of government coalition in the Czech Parliament (1993)						
party	deputies	%				
			SS50	SS60	BC50	BC60
LBL	35	17.5	0.00	5.48	0.00	5.06
CSSD	16	8.0	0.00	5.48	0.00	5.06
LSU	14	7.0	0.00	3.10	0.00	3.80
HSD-SMS	10	5.0	0.00	2.14	0.00	2.53
NLK	5	2.5	0.00	2.14	0.00	2.53
GC	105	52.5	100.00	77.38	100.00	75.95
indep.	4	2.0	0.00	1.19	0.00	1.27
SPR-RSC	11	5.5	0.00	3.10	0.00	3.80
total	200	100.0	100.00	100.00	100.00	100.00

Comparing the data with those from *Table 2.4* we can see that the power of coalition government is slightly increased: SS-power index for 60% voting from 76.67% to 77.38% and BC-power index for 60% voting from 72.5% to 75.95%. On the other hand we can see a surprising development in position of SPR-RSC: the parliamentary faction of this party decreased from 14 to 11 deputies, but its power in games "opposition vs. coalition" increased: SS-index for 60% majority from 1.67% to 3.1% and BC-index for 60% majority from 2.5% to 3.8%. On the other hand an influence of left opposition parties (LBL and CSSD) in standing against government coalition in the case of 60% voting decreases in spite of that no changes in their parliamentary factions took place (so some paradoxes of power, mentioned in the first part of this paper, can occur not only in artificial numerical examples and may be supported by real data).

The second "snapshot" describes the situation in the beginning of 1994. Dissipation of parliamentary structure continued during 1993 and instead of 11

factions in the beginning of 1993 there are 13 factions in 1994. See the changed situation in *Table 2.7*.

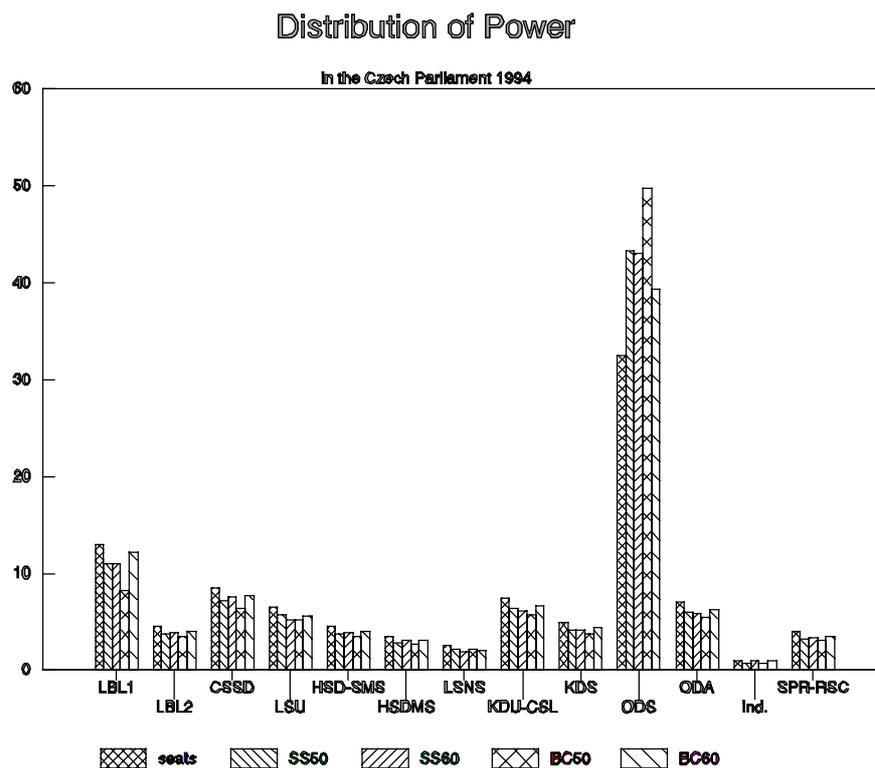
Table 2.7

New distribution of power in the Czech Parliament in the beginning of 1994

Distribution of power in the Czech Parliament (1994)						
party	seats	%	SS50	SS60	BC50	BC60
LBL1	26	13	11.03	10.96	8.18	12.18
LBL2	9	4.5	3.74	3.91	3.49	4.06
CSSD	17	8.5	7.14	7.56	6.36	7.64
LSU	13	6.5	5.70	5.17	5.14	5.60
HSD-SMS	9	4.5	3.74	3.91	3.49	4.06
HSDMS	7	3.5	2.77	3.09	2.72	3.13
LSNS	5	2.5	2.15	1.92	2.12	2.10
KDU-CSL	15	7.5	6.33	6.13	5.74	6.70
KDS	10	5	4.19	4.20	3.80	4.46
ODS	65	32.5	43.22	42.98	49.69	39.27
ODA	14	7	6.03	5.83	5.45	6.28
ind.	2	1	0.77	0.97	0.73	0.97
SPR-RSC	8	4	3.20	3.37	3.09	3.54
	200	100	100.01	100	100	99.99

The names of newly established parties (not existing in the time of general election and not getting an explicit support from the voters) are getting more and more fuzzy and say practically nothing about the political curriculum, so we shall restrict ourselves to an approximate "left-right" ordering of labels. Graphical representation of the data see in the bar-diagram in *Fig. 2.8*.

Comparing to the primary distribution power (*Table 2.3*) it is interesting that the total influence of the two factions (LBL1 and LBL2) created from former Left Block coalition, as measured by all power indices, increased (10.71% for LBL in 1992 by SS50, 11.03% for LBL1 and 3.74% for LBL2 in 1994 by SS50), which provides more support data for the "paradoxes of power" mentioned before.



*Fig. 2.8
Distribution of power in the Czech Parliament in the beginning of 1994*

*Table 2.8
Government coalition vs. opposition in 1994*

Power of government coalition in the Czech Parliament (1994)						
party	seats	%	SS50	SS60	BC50	BC60
LBL1	26	13.0	0	4.52	0	3.44
LBL2	9	4.5	0	2.34	0	2.46
CSSD	17	8.5	0	4.52	0	3.44
LSU	13	6.5	0	2.74	0	2.78
HSD-SMS	9	4.5	0	2.34	0	2.46
HSDMS	7	3.5	0	1.75	0	1.80
LSNS	5	2.5	0	0.75	0	0.82
GC	104	52.0	100	78.93	100	80.50
ind.	2	1.0	0	0.36	0	0.50
SPR-RSC	8	4.0	0	1.75	0	1.80
	200	100.0	100	100.00	100	100.00

Comparing the data from 1992, 1993 and 1994 we can see the stable position of government parties in the parliamentary spectrum. In the games "government coalition vs. opposition" the power of coalition government is increasing each year: in 1992 the SS and BC power indices for 60% majority voting assigned 76.67% and 72.5% of power to the government coalition, in the beginning of 1993 it was 77.38% and 75.95% and in the beginning of 1994 (see *Table 2.8*) even 78.93% and 80.5%.

3. Comparisons to the Slovak Republic, Poland and Russia

In this section we compare a political profile and a power profile in the Czech Republic with those in the Slovak Republic, Poland and Russia.

3.1 The Slovak Republic

In *Table 3.1* we give the results of election to the Slovak National Council (present parliament of the Slovak Republic) in June 1992.

Table 3.1 - Results of the 1992 election to the parliament of SR

party	% votes	LR	RL
Communists 91 (KSS91)	0.75	0.75	99.71
Party of Labour (SPI)	0.96	1.71	98.96
Party of Democratic Left (SDL)	14.7	16.41	98
Social Democrats (SDSS)	4	20.41	83.3
Movement for Democratic Slovakia (HZDS)	37.26	57.67	79.3
Movement for Self-administrative Democracy (HSD)	0.12	57.79	42.04
Slovak National Party (SNS)	7.93	65.72	41.92
Movement for Freedom of Expression (HSP)	0.06	65.78	33.99
Movement for Liberation of Slovakia (HOS)	0.23	66.01	33.93
Party of Freedom (SS-SNZ)	0.3	66.31	33.7
Slovak Peoples Party (SLS)	0.29	66.6	33.4
Slovak Christian Democrats (SKDH)	3.05	70.24	32.52
Rome's Civic Initiative (ROI)	0.59	67.19	33.11
Slovak Green Party (SZS)	2.14	73.46	28.39
Green Party (SZ)	1.08	71.32	29.47
Christian Democratic Movement (KDH)	8.88	84.63	23.96
Hungarian Civic Party (MOS)	2.29	75.75	26.25
Civic Democratic Union (ODU)	4.03	88.66	15.08
Democratic Party - Civic Democratic Party (DS)	3.31	91.97	11.05
Hungarian coalition (MKDH-ESWS)	7.42	99.39	7.74
Republicans (ZPR)	0.32	99.71	0.32
	99.71		

Source: *Hospodářské noviny*, 11.6.1992.

The characteristic feature of the Slovak political spectrum is a rather overcrowded left centre with several marginal parties of national socialistic orientation. A graphical characteristic of a political profile of the Slovak society is given in Fig. 3.1. As a representative of the centre we choose a standard Christian Democratic Party (KDH). We can observe that the intersection of the LR-cumulative distribution and RL-cumulative distribution is shifted rather left of the centrum. It is interesting that the parties with an explicit separation program (except of the Slovak National party, SNS) were not able to enter the parliament. On the their side, the Slovak Social Democrats (SDSS), leftist, but pro-federal, were also too weak to qualify for the Slovak National Council.

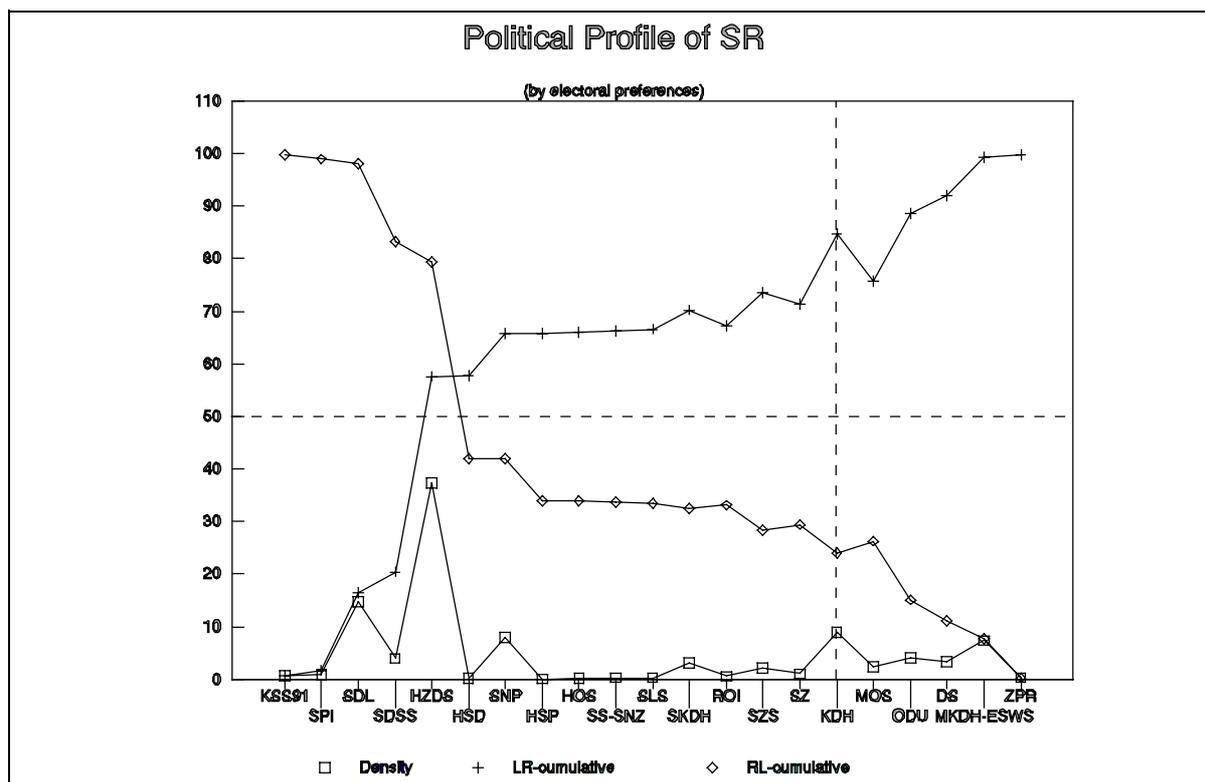


Fig. 3.1
Political profile of the Slovak society as given by electoral preferences

In Table 3.2 we give the distribution of seats in the Slovak Parliament together with Shapley-Shubik and Banzhaf-Coleman power indices for 50% and 60% majority rule.

Table 3.2
 Primary distribution of power in the Slovak National Council after 1992 election

Slovak National Council - June 92						
	seats	%	SS50	SS60	BC50	BC60
SDL	29	19.33	10.00	11.67	9.09	14.29
HZDS	74	49.33	60.00	70.00	63.64	61.90
SNS	15	10.00	10.00	3.33	9.09	4.76
KDH	18	12.00	10.00	11.67	9.09	14.29
MKDH-ESWS	14	9.33	10.00	3.33	9.09	4.76
total	150	100.00	100.00	100.00	100.00	100.00

In Fig. 3.2 we show a power profile of the Slovak parliament measured by SS-power index (for 50% majority voting) on the same scale we used for political profile in Fig. 3.1. The strong dominance of the Movement for Democratic Slovakia is transparent.

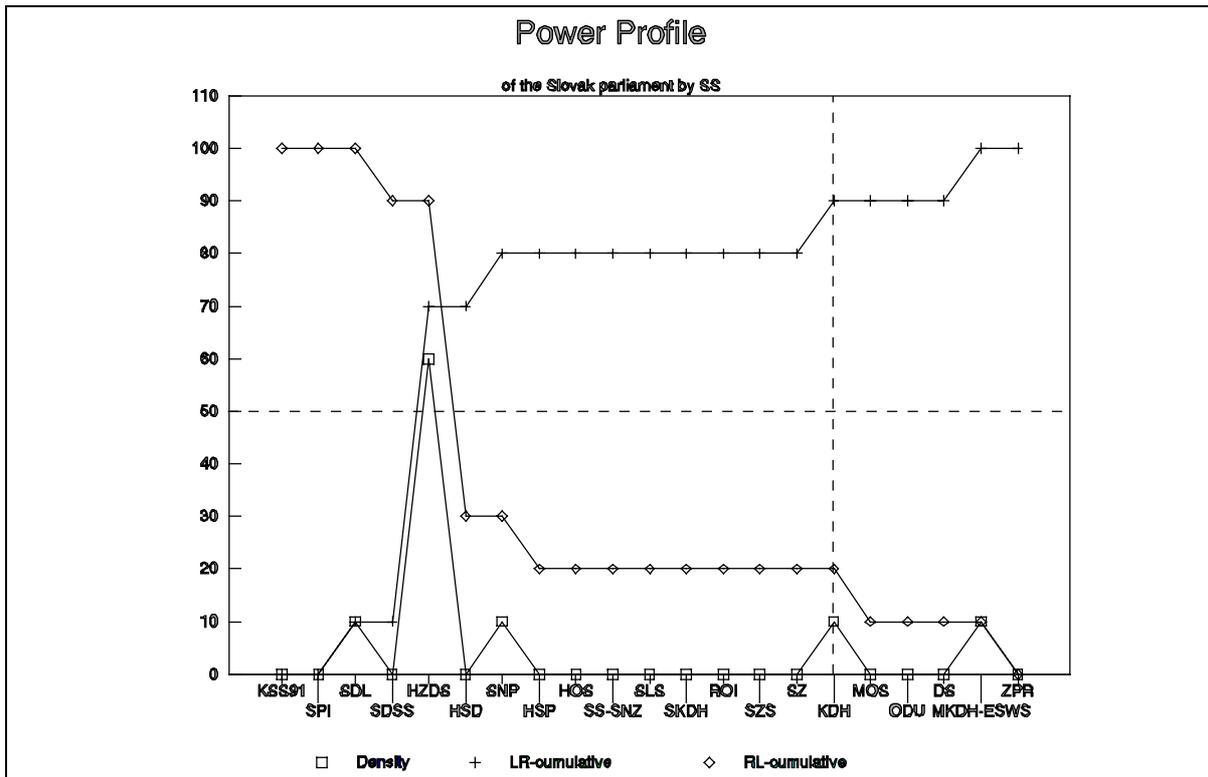


Fig. 3.2
 Power profile of the Slovak Parliament by SS

The government coalition in the Slovak Republic was formed by left-centristic parties: *Movement for Democratic Slovakia* of Mr. Mečiar and its silent coalitional partner *Slovak National Party*. Table 3.3 contains data about the strength of the government coalition (distribution of votes and distribution of power by SS and BC power indices).

Table 3.3
Government Coalition vs. Opposition

Slovak National Council - Government coalition 92						
	votes	%	SS50	SS60	BC50	BC60
SDL	29	19.33	0.00	8.33	0.00	10.00
GC (HZDS+SNS)	89	59.33	100.00	75.00	100.00	70.00
KDH	18	12.00	0.00	8.33	0.00	10.00
MKDH-ESWS	14	9.33	0.00	8.33	0.00	10.00
total	150	100.00	100.00	99.99	100.00	100.00

There were no new elections after dividing the country in January 1993. In spite of that, substantial shifts in distribution of power can be observed in the Slovak Republic.

In Table 3.4 we give the characteristic of the new power distribution in the National Council of the Slovak Republic in the beginning of 1993. After the first months of independence two important political shifts changed the power structure in Bratislava. The first of them was the withdrawal of the Slovak National Party from the silent coalition with the Movement for Democratic Slovakia and its shift to the right. The second was the conflict in HZDS resulting in departure of 8 former deputies from the parliamentary club of HZDS and the creation of a new faction in the Slovak parliament.

In Table 3.4 AD stands for Association of Democrats, a new parliamentary faction of right centre orientation, that withdrew from HZDS. Comparing it with Table 3.2 we can again observe an evidence of "paradoxes of power". In spite of losing 8 deputies, for 50% majority rule both the Shapley-Shubik power index and Banzhaf-Coleman power index of HZDS as parliamentary party increased (from 60% to 61.9% for SS, from 63.64% to 67.44% for BC). Long-run measure of parliamentary power of Mr. Mečiar's party in standard voting situations is in this case even greater than before. The situation has changed in the case of 60% majority rule. Here we can see the decrease of the

Shapley-Shubik from 70% to 68.1% and Banzhaf-Coleman from 61.9% to 57.7%.

Table 3.4

New distribution of power in the Slovak parliament (1993)

Distribution of power in the Slovak Parliament (1993)						
party	seats	%				
			SS50	SS60	BC50	BC60
SDL	28	18.67	8.57	11.43	6.98	13.33
HZDS	66	44.00	61.90	68.10	67.44	57.78
SNS	14	9.33	8.57	4.76	6.98	6.67
indep.	2	1.33	1.90	1.43	2.33	2.22
KDH	18	12.00	8.57	6.43	6.98	8.89
AD	8	5.33	1.90	3.10	2.32	4.44
MKDH-ESWS	14	9.33	8.57	4.76	6.97	6.67
total	200	100.0	99.99	100.01	100.00	100.01

As the withdrawal of SNS from government HZDS created a single party government coalition, *Table 3.4* also describes the situation for a government coalition. Here we can see the different picture. From 100% of power in 50% majority voting for government coalition after the creating government in June 1992 the value of Shapley-Shubik of HZDS as a single government party decreased to 61.9% and the value of Banzhaf-Coleman power index to 67.4%. For 60% majority voting we can observe a decrease from 75% to 68.1% (Shapley-Shubik) and from 70% to 57.7% (Banzhaf-Coleman).

After several attempts of HZDS to create a new majority government coalition with either SNS or SDL the situation dramatically changed again in the beginning of 1994 (see *Table 3.5*).

Table 3.5
New distribution of power in the Slovak parliament (1994)

Distribution of power in the Slovak Parliament (1994)						
party	seats	%	SS50	SS60	BC50	BC60
SDL	28	18.67	13.41	14.25	10.90	16.08
HZDS	57	38.00	49.60	49.96	52.00	47.24
SNS	8	5.33	4.01	4.84	4.42	4.52
indep.	2	1.33	1.39	1.03	1.48	1.51
NDS	6	4.00	2.94	4.13	3.00	3.52
APR	9	6.00	4.37	5.56	4.90	5.53
KDH	18	12.00	11.63	9.13	10.30	10.55
AD	8	5.33	4.01	4.84	4.42	4.52
MKDH-ESWS	14	9.33	8.65	6.27	8.25	6.53
total	150	100.00	100.01	100.01	99.67	100.00

New parliamentary factions emerged: *Alternative of Political Realism* (APR) - a group of former deputies of HZDS of centristic orientation, and *National Democratic Party* (NDS) - a group of former deputies of SNP, left centristic orientation. Only 38% of parliamentary representation, even with the support of 5.33% of votes of what remained from SNS after creating NDS faction, made impossible to control the parliament for Mr. Meciar's HZDS and united oppositional parties voted no confidence for HZDS government. New "disconnected" left-right government coalition was formed of SDL, NDS, AR, KDH and AD in March 1994, supported by the Hungarian coalition MKDH-ESWS and independents, having conditional support of 56.67% of deputies. HZDS as an oppositional party still keep sufficient parliamentary position - 38% of seats and almost 50% of power as measured by Shapley-Shubik. A solution for a deep political crisis in Slovakia is expected with new general elections in September 1994.

3.2 Poland

The first Polish election in June 1989 was a result of the round table talks between the communist authorities and outlawed Solidarity followed the following electoral system: 65 % of the seats in the Sejm were restricted to candidates from the then ruling Polish United Worker's Party and from its traditional coalition partners, the United Peasants' Party and the Democratic Party, or from three small Roman Catholic organizations; the remaining 35 % were contested by candidates from opposition or independent groups, and were all won by the Solidarity Citizen's Committee (the electoral platform of the recently relegalized Solidarity trade union). The Senate seats were all filled by completely free balloting, and all but one were won by Solidarity candidates. Poland's first fully free parliamentary election on October 27, 1991 witnessed a remarkable proliferation of parties. A total of 29 groups received seats in Sejm (see MERCIK [1992]). The fragmentation of the parliament led to several governmental crises and to new election in 1993 with changed electoral system, introducing the threshold.

A Polish general parliamentary election on September 19, 1993 led to the shift of power from centristic government to the left post-communist coalition. 26 parties and formations participated in the competition. A proportional electoral system was used. Due to new electoral rule, introducing 5% threshold for a single party and 7% threshold for a coalition, only 7 formation entered the Lower House of Polish parliament - Sejm (we give the list of parliamentary parties ordered from left to right):

Democratic Left Alliance (DLA) - coalition of post-communist parties with left social-democratic orientation.

Polish Peasant Party (PPP) - leftist party, representing interests of small private farmers, former ally of communists in totalitarian Polish government.

Labour Union (LU) - leftist party, representing interest of urban workers, faction of former Solidarity Movement.

Democratic Union (DU) - centristic party of former premiers Mazowiecki and Suchocka with Christian democratic orientation.

No Party Block to Support Reform (NPB) - new political party, created by president Walesa shortly before election, right-centristic orientation.

German Minorities (GM) - association of German parties, representing national minorities in the Sejm (were elected without threshold restriction).

Confederation for Independent Poland (CIP) - rightist party with populist program.

In *Table 3.6* we give the results of the election (proportion of votes including the parties that did not qualify into the Sejm, ordered in "left-right" political dimension, LR and RL cumulative distribution of votes).

Table 3.6
Results of election to the Polish Sejm

Political profile of the Polish society			
parties	% votes	LR cumul.	RL cumul.
DLA	20.41	20.41	100
PPP	15.4	35.81	79.59
LU	7.28	43.09	64.19
PPP-MU	2.37	45.46	56.91
LS	4.9	50.36	54.54
PS	4.42	54.78	49.64
DU	10.59	65.37	45.22
NPB	5.41	70.78	34.63
LDC	3.99	74.77	29.22
GM	0.44	75.21	25.23
URP	3.18	78.39	24.79
CIP	5.77	84.16	21.61
CR	2.7	86.86	15.84
SL	2.78	89.64	13.14
XP	2.47	92.11	10.36
other	7.89	100	7.89
total	100		

Source: *Rzeczpospolita*, 27.9.1993.

In *Fig. 3.3* we give the distribution of voter's preferences with respect to the parties on the left-right ideological line without specifying the names and programs of the small parties (mostly right oriented and quarrelling), to characterize a contemporary political spectrum of the Polish society. As a representation of centre we use the Democratic Union (DU) with traditional

Christian-democratic orientation. The left centristic character of society preferences is apparent from the picture.

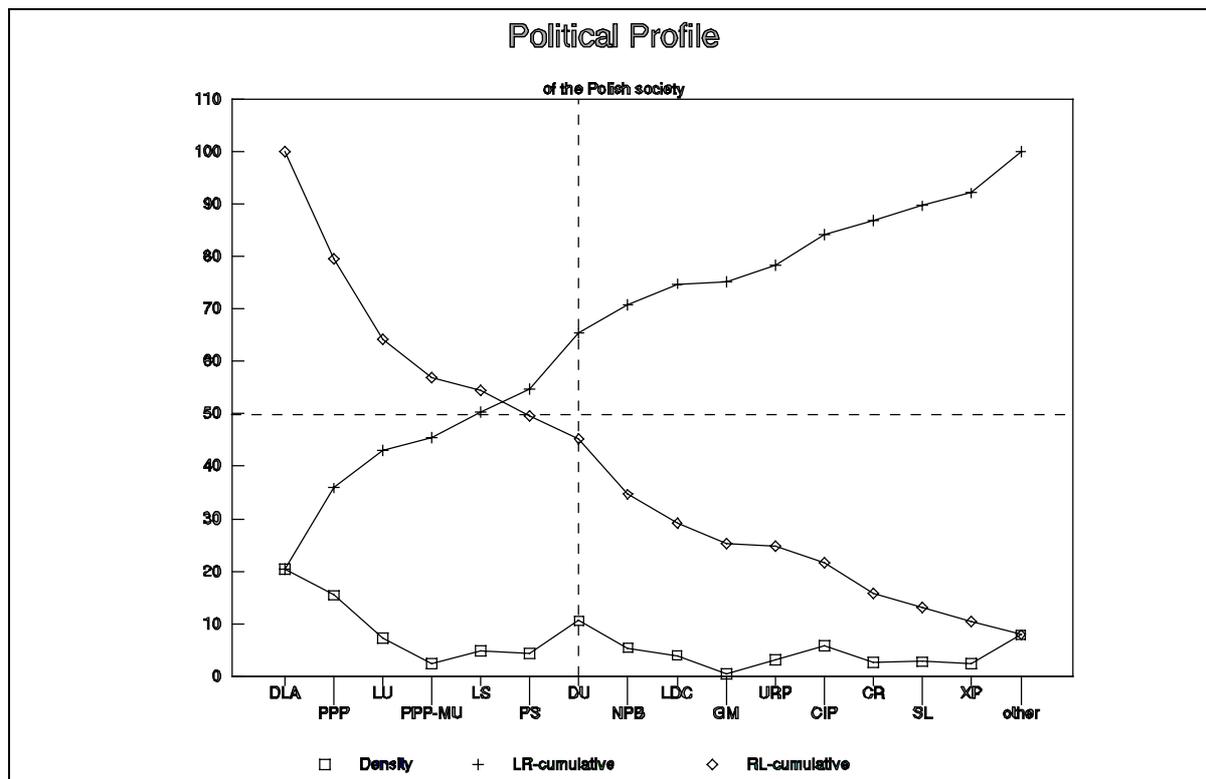


Fig. 3.3
Political profile of the Polish society as given by electoral preferences

The distribution of power in the Polish Sejm is presented in *Table 3.7*, containing the proportion of votes for each parliamentary party, number and proportion of seats and Banzhaf power indices for 50% and 66.67% (qualified majority) majority voting.

In *Fig. 3.4* we give a power profile of the Polish Sejm measured by SS-power index for 50% majority voting. We can observe a shift to the left compared to the political profile (*Fig. 3.3*), expressing a strong position of left parties in the Sejm, a similar pattern as in the Slovak Republic.

Table 3.7

Primary distribution of power in Polish Sejm after 1993 election

Primary power distribution in Polish Sejm 1993							
	% votes	seats	% seats	SS50	SS66	BC50	BC66
DLA	20.4	173	37.60	43.33	52.62	42.31	42.17
PPP	15.4	128	27.83	20.00	24.29	19.23	30.12
LU	7.2	42	9.13	10.00	7.62	11.54	8.43
DU	10.6	69	15.00	20.00	7.62	19.23	8.43
NPB	5.4	20	4.35	3.33	2.62	3.84	3.62
GM		4	0.87	0.00	0.95	0	1.21
CIP	5.8	24	5.23	3.33	4.29	3.85	6.02
total	64.8	460	100.00	100.00	100.00	100.00	100

Source: *Rzeczpospolita*, 27.9.1993.

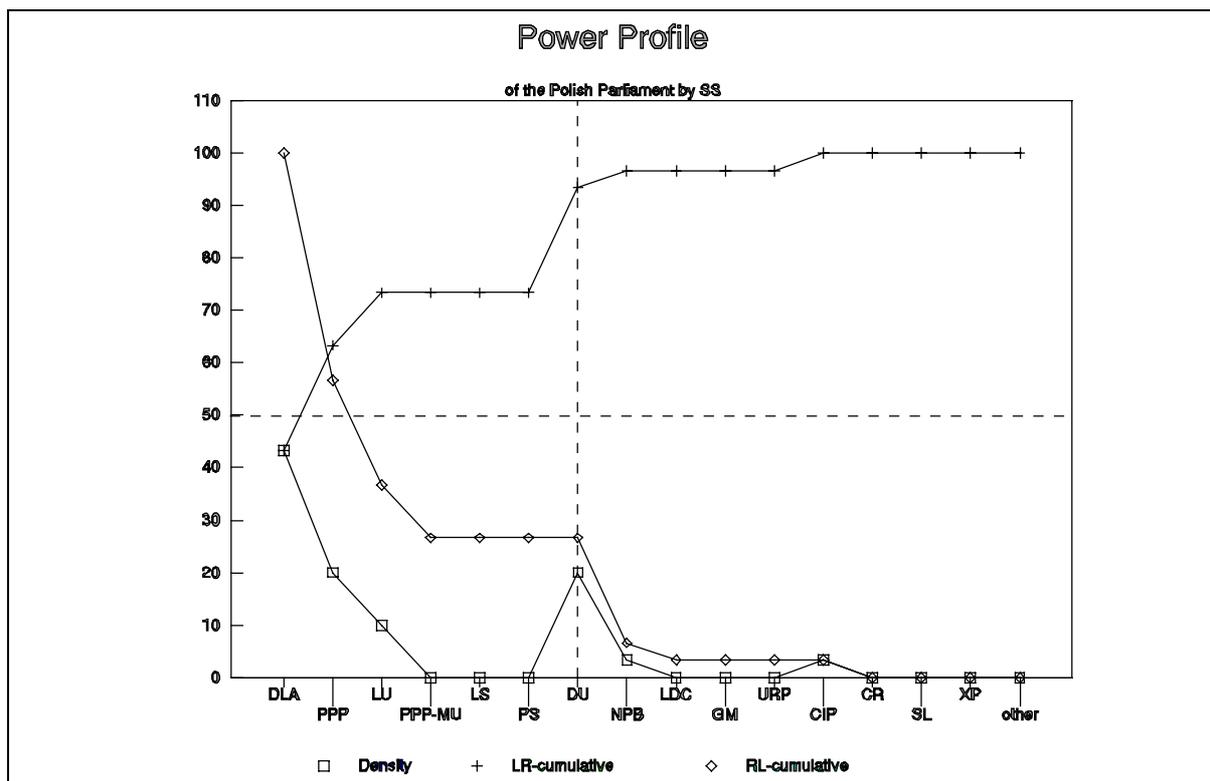


Fig. 3.4

Power profile of the Polish Sejm by SS

The government coalition in Poland was formed by the Democratic Left Alliance (DLA) and Polish Peasant Party (PPP) with conditional support of the Labour Union (LU), allowing president Walesa to assign his men to foreign affairs, interior and defence ministries. The position of coalitional government is very strong, with the support of the Labour Union it controls the 2/3 majority, required for constitutional laws. It is interesting, that in the leftist government the post-communist DLA alliance is more pro-reform than the rather populist Polish Peasant Party.

3.3 Russia

The first experiment with competitive elections in the Soviet Union was made at the local elections of 1987, in which more than one candidate was presented to the voter in about 1 percent of constituencies. President Mikhail Gorbachev found the effects of the experiment so beneficial that he recommended a substantial renewal of the electoral system.

The new electoral law was a part of the constitutional reconstruction of the Soviet Union. It was approved on December 1, 1988 to be used on 26 March 1989 for electing the Soviet Union's restyled parliament. The balloting required a voter to indicate a preference by crossing out the names of candidates he or she did not favor; in cases where only one name was on the ballot, crossing it out indicated a vote against the sole candidate. Each voter cast votes on separate ballots for two candidates, one of whom stood in one of 750 "territorial" constituencies organized to represent roughly equal numbers of voters, and the other in one of 750 "national-territorial" constituencies organized to give representation to all the Soviet Union's numerous ethnic groups. The remaining 750 deputies were elected during March by 32 all union "social organizations", including the Communist Party, trade unions, cooperative organizations and professional unions.

In the Russian parliament, fighting with president Yeltsin and dissolution in September 1993, were products of this strange electoral system.

The first Russian free democratic parliamentary election in December 11, 1993 followed the bloody October events in Moscow. In the world the results of the Russian election were met with mixed feelings.

The following major parties entered the competition (we order them on the left-right scale using the ranking published in *The Economist*, Dec. 4th-10th, 1993, p. 56):

Communist Party (CP) - extreme leftist post-communist party with an almost traditional socialist program.

Agrarian Party (AP) - anti-reformist post-communist party backing collective agricultural farms.

Civic Union (CU) - left-centrist party, representing former soviet state managers, basically anti-reformist.

Dignity and Charity (DaCH) - left-centrist anti-reformist party.

Democratic Party of Russia (DPR) - left-centrist party with restricted support of economic reform.

Russian Unity and Accord (RUA) - centristic party basically supporting economic reform.

Women of Russia (WR) - centristic party, representing the women's movement, basically supporting economic reform.

Movement for Democratic Reforms (MDR) - right-centristic party supporting rapid political and economic reforms.

Yavlinski-Boldyrev-Lukin Block (YBL) - right-centristic party supporting rapid economic reform.

Russia's Choice (RCH) - right party supporting rapid economic reform (Mr. Gaidar).

Liberal-Democratic Party (LDP) - extreme right populist party with nationalist program and no clear attitude to economic transformation (Mr. Zhirinovsky).

About 25 other, less important parties, mostly of the extreme right or extreme left orientation participated in the election.

In *Table 3.8* we give the results of the December 11, 1993 election to the Russian State Duma (450 members). Each voter could use two votes - one for a party list and one for single member constituencies. In single-member constituencies, the so called "independent" candidates together with party candidates could participate. (In *Table 3.8* the number of all seats does not add up to 450 because in six constituencies the election was declared illegal).

In *Fig. 3.5* we show a political profile of Russian society expressed by electoral preferences for parties (party votes only, not taking into consideration single-member constituencies). We consider the Russian Unity and Accord party to represent the centre here. "Other" parties are positioned at the extreme right wing of the spectrum.

Table 3.8
Primary distribution of votes in the Russian 1993 parliamentary election

Primary distribution of votes in Russia (1993)					
	% votes	seats	constit.	total	% seats
CP	12.35	32	16	48	10.67
AP	7.90	21	12	33	7.33
CU	1.92	0	1	1	0.22
DaCH	0.70	0	2	2	0.44
DPR	5.50	14	0	14	3.11
RUA	6.76	18	1	19	4.22
WR	8.10	21	2	23	5.11
MDR	4.06	0	4	4	0.89
YBL	7.83	20	3	23	5.11
RCH	15.83	40	30	70	15.56
Other	6.26	0	14	14	3.11
LDP	22.79	59	5	64	14.22
Ind.		0	129	129	28.67
total	100.00	225	219	444	98.67

Source: *The Economist*, January 8th-14th 1994.

One can see the general shift of Russian society to the right, but with a strong standing of the extreme right of Zhirinovsky's profile against the democratic right-centristic parties. A right orientation of the political profile here does not mean an acceptance of a radical economic reform by Russian society, but it is influenced by strong display of extreme right tendencies in Russian political life, represented by Mr. Zhirinovsky's party and some other marginal, but numerous political movements. Right and left probably means something else in Russia than in other European countries. Support for extreme rightist parties reflects an imperial nostalgia and strong national feelings. Pro-reform parties have the support of only about 42% of voters, considering by direct votes for the party lists. Still, assuming ideological incompatibility of extreme right and extreme left on many issues, the democratic pro-reform segment of Russian society (centristic and right-centristic parties) remains to prevail on plurality basis in voters preferences.

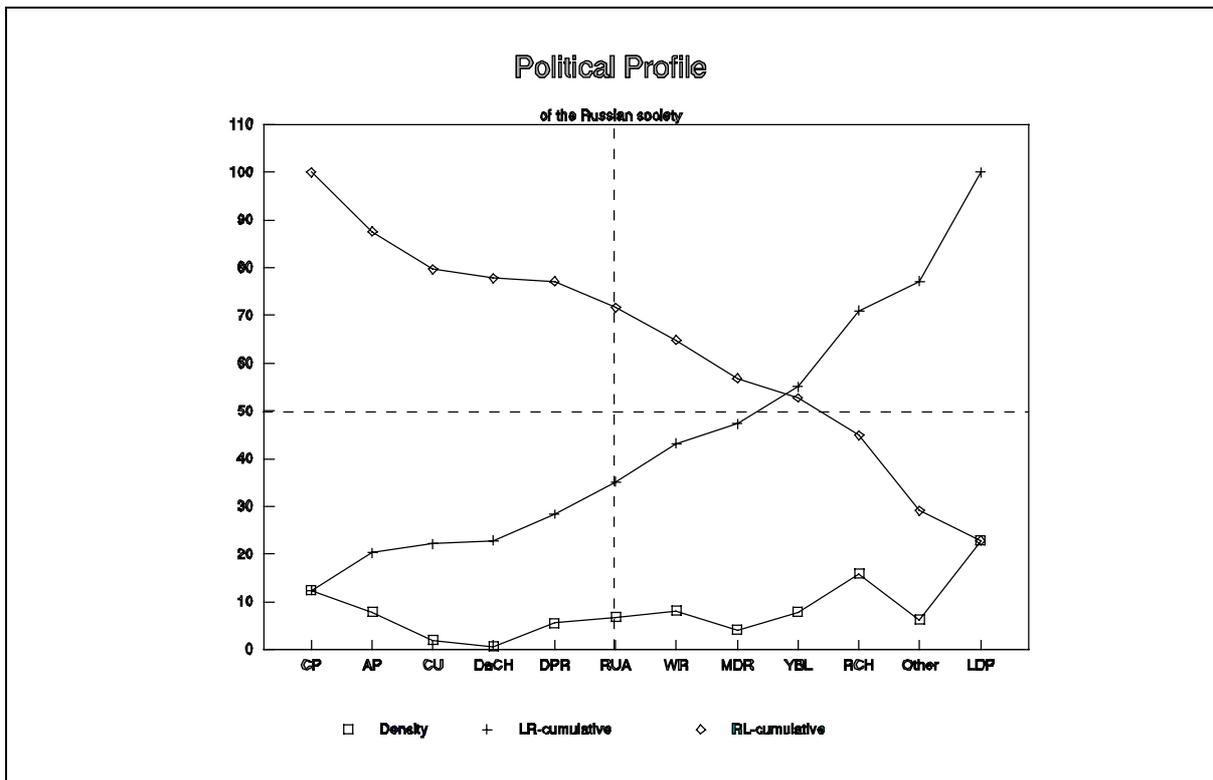


Fig. 3.5
Political profile of the Russian society as given by electoral preferences

Proportional representation in the Duma differs from the party preferences distribution: A 5% threshold keeps out the party lists that were supported by less than 5% of the votes and with the exception of that, half of the deputies were elected in single-member constituencies.

A "fuzzy" group of independent deputies elected in single-member constituencies complicates an analysis of power in the Russian State Duma. Our analysis rests on the hypothesis that the political positions of 129 independent members of the Duma are distributed in the same way as the voters preferences for party lists. In *Table 3.9* we give our estimation of a distribution of power based on this hypothesis (the supposed numbers of deputies accepting principal positions of established political parties, a supposed proportional representation of political groups, SS and BC power indices for 50% and 66.67% majority voting). We can see that a game-theoretical distribution of power measured by power indices does not differ very much from the hypothetical proportional representation calculated on the basis of the adapted number of seats for each political group. The power measure of two major political groups, represented by the Russian's Choice party of Mr. Gaidar and the Liberal-Democratic Party of Mr. Zhirinovsky is almost the same.

*Table 3.9
Hypothetical distribution of power in Russian State Duma*

Hypothetical distribution of power in Russia 1993											
	% votes	seats	constit.	total seats not adapted	% of not adapted seats	total seats adapted	% of adapted seats	SS50	SS66	BC50	BC66
CP	12.35	32	16	48	10.67	64	14.22	14.56	14.48	14.86	13.69
AP	7.90	21	12	33	7.33	43	9.56	8.66	9.83	9.51	8.97
CU	1.92	0	1	1	0.22	3	0.67	0.79	0.62	0.77	0.73
DaCH	0.70	0	2	2	0.44	2	0.44	0.36	0.51	0.39	0.60
DPR	5.50	14	0	14	3.11	21	4.67	3.92	4.51	4.05	4.92
RUA	6.76	18	1	19	4.22	27	6.00	5.35	5.67	5.56	6.11
WR	8.10	21	2	23	5.11	34	7.56	7.25	7.28	7.43	7.57
MDR	4.06	0	4	4	0.89	9	2.00	2.06	1.61	2.15	1.93
YBL	7.83	20	3	23	5.11	33	7.33	6.86	7.16	7.07	7.44
RCH	15.83	40	30	70	15.56	91	20.22	21.59	21.84	21.06	21.13
Other	6.26	0	14	14	3.11	22	4.89	4.24	4.63	4.44	5.05
LDP	22.79	59	5	64	14.22	95	21.11	23.20	23.04	22.71	21.86
Ind.		0	129	129	28.67	0					
total	100.00	225	219	444	98.67	444	98.67	99.99	99.99	100.00	100.00

In Fig. 3.6 we give a graphical representation of the hypothetical power profile of the Russian State Duma measured by the SS-power index for 50% majority voting. The estimated power profile follows the same pattern as a political profile of the Russian society (Fig. 3.5) measured by voters preferences for political parties.

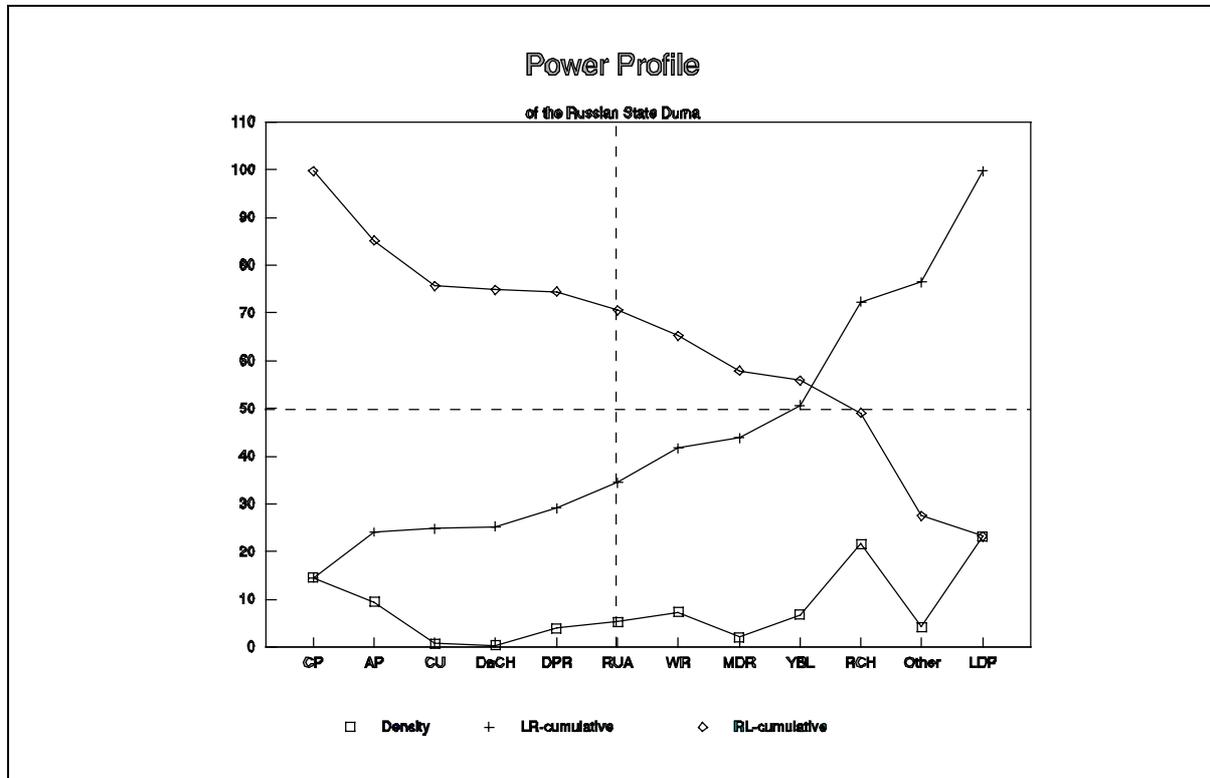


Fig. 3.6
Power Profile of the Russian State Duma by SS

3.4 Comparisons

To compare the power structure in the four different East European societies from the point of view of economic transformation tendencies we tried to "normalize" the left-right spectrum as follows:

a) **Extreme left (EL)**, former communist parties in strong opposition to rapid economic transformation to the standard market economies (they are present in all countries in question, but not necessarily represented in the parliaments).

b) **Democratic left and left centre (LC)**, parties of social democratic orientation, supporting transformation to market economy, but opposing "shock therapies" and favouring more government involvement in the economy.

c) **Democratic right and right centre (RC)**, parties with Christian-democratic, liberal and conservative orientation, that basically support a rapid economic transformation.

e) **Extreme right (ER)**, nationalistic and populist parties, supporting authoritarian methods of societal organization and having no consequent position to economic transition.

In *Table 3.10* we provide comparative data according to this classification (numbers of seats, proportional representation, SS and BC power indices for 50% and qualified majority voting).

Table 3.10

Comparison of parliamentary power in the Czech Republic, Slovak Republic, Poland and Russia

Czech Republic	seats	%	B 50	B QM
EL	35	17.50	0	20
LC	46	23.00	0	20
RC	105	52.50	100	60
ER	14	7.00	0	0
total	200	100.00	100.00	100.00
Slovak Republic				
EL	0	0.00	0	0
LC	118	78.67	100	100
RC	32	21.33	0	0
ER	0	0.00	0	0
total	150	100.00	100.00	100.00
Poland				
EL	0	0.00	0	0
LC	343	74.57	100	100
RC	93	20.22	0	0
ER	24	5.22	0	0
total	460	100.00	100.00	100.00
Russia				
EL	107	23.78	33.33	20
LC	26	5.78	0	0
RC	194	43.11	33.33	60
ER	117	26.00	33.33	20
total	444	98.67	99.99	100.00

Fig. 3.7 shows differences in political profiles measured by proportional representation on normalized left-right ideological intervals in the Czech, Slovak, Polish and Russian parliaments.

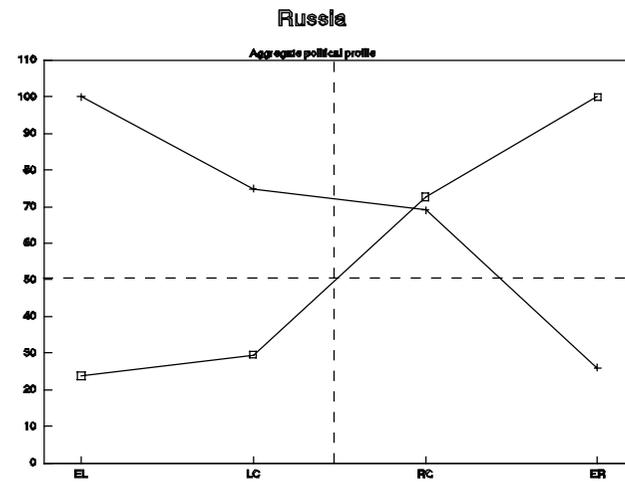
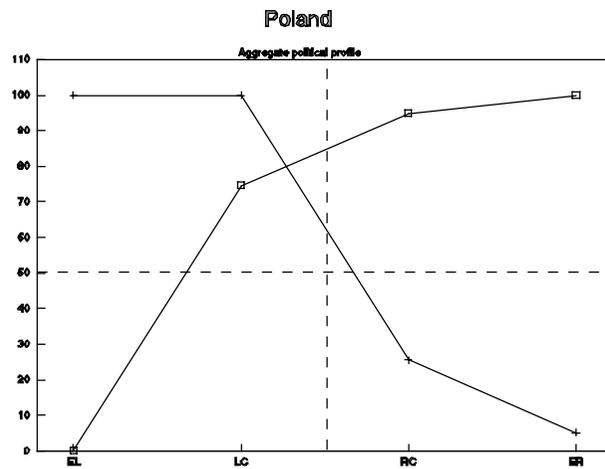
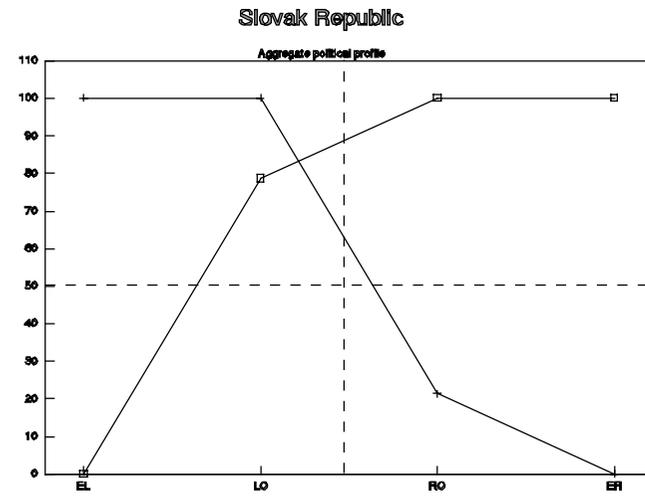
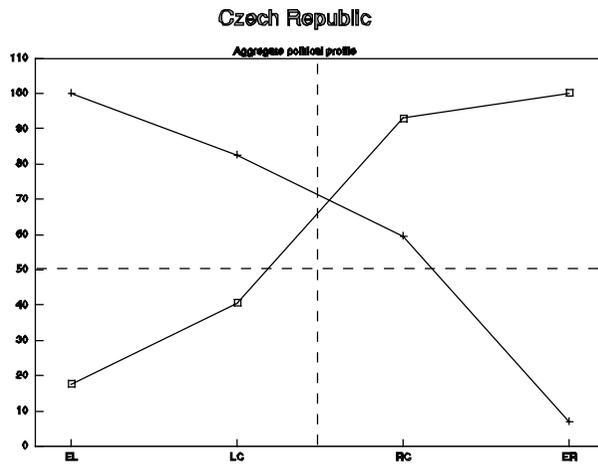


Fig. 3.7 Comparison of political profiles on normalized ideological intervals

No extreme left parties are represented in the parliaments of the Slovak Republic and Poland. Left centre with more "social" design of economic reform dominates in the Slovak Republic and Poland. The only country with a domination of right centre is the Czech Republic. Russia's pro reform parties failed to win a majority in the Russian Duma. The strong position of the extreme right in Russia is not shared by extreme right parties in the other three countries (in fact, there is no extreme right party represented in the Slovak parliament).

Appendix

Parties, Movements and Coalitions in the 1992 CSFR Elections

Civic Democratic Alliance (Občanská demokratická aliance) - **ODA**. Right oriented party, balloted in the Czech Republic.

Czechoslovak Social Democratic Party (Československá sociální demokracie) - **ČSSD**. Left social democrats, balloted in the Czech Republic.

Movement for Selfadministrative Democracy - Society for Moravia and Silesia (Hnutí za samosprávnou demokracii - Společnost pro Moravu a Slezsko) - **HSD-SMS**. Left centristic movement, balloted both in the Czech and in the Slovak Republic.

Movement of pensioners for life security (Hnutí důchodců za životní jistoty) - **HDZJ**. Left centristic movement, balloted in the Czech Republic.

Coalition Movement for Freedom of expression - Slovak Republican Union (Koalícia Hnutie za slobodu prejavu - Slovenská republikánská únia) - **HSP-SRU**. Balloted in the Slovak Republic.

Movement for Democratic Slovakia (Hnutie za demokratické Slovensko) - **HZDS**. Left centristic nationally oriented movement, balloted in the Slovak Republic.

Party of Democratic Left (Strana demokratickej ľavice) - **SDĽ**. Left Slovak post-communist party, balloted in the Slovak Republic.

Party of Labour and Security (Strana práce a istoty) - **SPI**. Left oriented Slovak party, balloted both in the Czech and Slovak Republic.

National Social Party - Czechoslovak Party of National Socialists (Národně sociální strana - Čs. strana národně socialistická) - **NSS-ČSNS**. Czech centristic party, balloted in the Czech Republic.

Movement for Liberation of Slovakia (Hnutie za oslobodenie Slovenska) - **HZOS**. Nationally oriented Slovak movement, balloted in the Slovak Republic.

Party of Freedom - Party of National Unification (Strana slobody - Strana národného zjednotenia) - **SS-SNS**. Nationally oriented Slovak party, balloted in the Slovak Republic.

Democrats 92 for Common State (Demokraté 92 za spoločný štát) - **D92**. Centristic movement for preserving the common state and European integration. Balloted in the Czech Republic.

Party of Republican and National-Democratic Unity (Strana republikánské a národně demokratické jednoty) - **SRNDJ**. Right oriented party, accenting the preservation of the common state. Balloted in the Czech Republic.

Coalition Hungarian Christian Democratic Movement - Coexistence - Hungarian Peoples Party (Koalícia Maďarské kresťanskodemokratické hnutie - Polužitie - Maďarská ľudová strana) - **MKDH-ESWS**. Koalícia maďarských strán, accenting preservation of common state. Balloted both in the Czech and Slovak Republic.

Slovak Christian Democratic Movement (Slovenské kresťansko-demokratické hnutie) - **SKDH**. Nationally oriented Slovak Movement, balloted in the Slovak Republic.

Christian and Democratic Union - Czechoslovak Peoples Party (Křesťanská a demokratická unie - Československá strana lidová) - **KDU-ČSL**. Right centristic party, balloted in the Czech Republic.

Communist Association of Slovakia (Zväz komunistov Slovenska) - **ZKS**. Post communist Slovak party, balloted in the Slovak Republic.

Party of Czechoslovak Enterpreuners, Businessmen and Farmers (Strana československých podnikatelů, živnostníků a rolníků) - **SČPŽR**. Right centristic party, balloted in the Czech Republic.

Movement for Social Equity (Hnutí za sociální spravedlnost) - **HSS**. Left oriented party, balloted in the Czech Republic.

Liberal Social Union (Liberálně sociální unie) - **LSU**. Left centristic movement, balloted in the Czech Republic.

Party of greens (Strana zelených) - **SZ**. Slovak part of the Federal Green Party, accenting preservation of the common state. Balloted in the Slovak Republic.

Civic Movement (Občanské hnutí) - **OH**. Centristic liberal movement. Balloted in the Czech Republic.

Christian Democratic Movement (Kresťansko-demokratické hnutie) - **KDH**. Slovak centristic movement, accenting preservation of the common state, balloted in the Slovak Republic.

Civic Democratic Union (Občianská demokratické únia) - **ODU**. Right centristic liberal movement, accenting the preservation of the common state, balloted in the Slovak Republic.

Association for Republic - Republican Party of Czechoslovakia (Sdružení pro republiku - Republikánská strana Československa) - **SPR-RSČ**. Radical rightist party, accenting preservation of common state, balloted both in the Czech and Slovak Republic.

National Liberals (Národní liberáli) - **NL**. Right centristic nationally oriented Slovak party, balloted in the Slovak Republic.

Party of Greens in Slovakia (Strana zelených na Slovensku) - **SZS**. Nationally oriented Slovak ecological party, balloted in the Slovak Republic.

Club of engaged non-party members (Klub angažovaných nestraníků) - **KAN**. Radical right movement, balloted in the Czech Republic.

Rom Civic Initiative (Romská občanská iniciativa) - **ROI**. Ethnic movement of Roms, balloted both in the Czech Republic and Slovak Republic.

Left Block (Levý blok) - **LBL**. Coalition of post-communist left parties, accenting preservation of the common state. Balloted in the Czech Republic.

Social Democratic Party at Slovakia (Sociálne demokratická strana na Slovensku) - **SDSS**. Slovak left social democratic party, accenting preservation of the common state, balloted in the Slovak Republic.

Communist Party of Slovakia 91 (Komunistická strana Slovenska 91) - **KSS 91**. Slovak communist party, accenting preservation of the common state, balloted in the Slovak republic.

Coalition of Democratic Party and Civic Democratic Party (Koalícia Demokratickej strany a Občianskej demokratickej strany) - **DS-ODS**. Slovak rightist coalition, accenting preservation of the common state, balloted in the Slovak Republic.

Slovak National Party (Slovenská národná strana) - **SNS**. Radical Slovak nationally oriented party, balloted in the Slovak Republic.

Party of Friends of Beer (Strana přátel piva) - **SPP**. Czech liberal party, balloted in the Czech Republic.

Slovak Peoples Party (Slovenská ľudová strana) - **SLS**. Radical Slovak nationally oriented party, balloted in the Sloval Republic.

Hungarian Civic Party (Maďarská občianska strana) - **MOS**. Liberal Hungarian party, accenting preserving of common state, balloted in the Slovak Republic.

Independent Iniciative (Nezávislá iniciativa) - **NEI**. Liberal Czech party (originally Independent Erotic Iniciative), balloted in the Czech Republic.

Coalition of Civic Democratic Party and Cristian Democratic Party (Koalice Občanské demokratické strany a Křesťanskodemokratické strany) - **ODS-KDS**. Coalition of Czech right conservative parties, balloted in the Czech Republic.

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