# WORKING PAPERS Global and Area Studies 

www.duei.de/workingpapers

German Overseas Institute (DÜI)
Research Unit: Institute for Ibero-American Studies

Representing Different Constituencies: Electoral Rules in Bicameral Systems in Latin America and Their Impact on Political Representation

Detlef Nolte and Francisco Sánchez
$\mathbf{N}^{\circ} 11$
November 2005

## Working Papers Global and Area Studies

Edited by the German Overseas Institute (DÜI) in Hamburg.
The Working Papers Series serves to disseminate the research results of work in progress prior to publication to encourage the exchange of ideas and academic debate. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. Inclusion of a paper in the Working Paper Series does not constitute publication and should not limit publication in any other venue. Copyright remains with the authors. When Working Papers are eventually accepted by or published in a journal or book, the correct citation reference and, if possible, the corresponding link will then be included in the Working Papers website at:

## http://www.duei.de/workingpapers.

DÜI research unit responsible for this issue: Research Unit Institute for Ibero-American Studies.

Editor of the Working Paper Series: Bert Hoffmann [hoffmann@iik.duei.de](mailto:hoffmann@iik.duei.de) Copyright for this issue: © Detlef Nolte and Francisco Sánchez

Editorial assistant and production: Verena Kohler

All Working Papers Global and Area Studies are available online and free of charge at http://www.duei.de/workingpapers. Working Papers can also be ordered in print. For production and mailing a cover fee of $€ 5$ is charged. For orders or any requests please contact:
e-mail: workingpapers@duei.de
phone: ++49-40-42825548

Deutsches Übersee-Institut/German Overseas Institute
Neuer Jungfernstieg 21
D-20354 Hamburg
Germany
E-mail: duei@duei.de
Website: http://www.duei.de


# Representing Different Constituencies: Electoral Rules in Bicameral Systems in Latin America and Their Impact on Political Representation 


#### Abstract

This article analyzes the quantitative (mechanical) effects and qualitative (perceptions) effects on political representation of the election of two separate chambers in Latin America's bicameral systems. After discussing the spread and strength of bicameralism in Latin America, we compare the different electoral systems for lower chambers and Senates. Our study shows that in a region characterized by relatively high levels of malapportionment in the first chamber, the second chamber reinforces the malapportionment in parliament. Representation tends to be much more disproportional in the upper chamber than in the lower house. Moreover, the differences in the electoral systems and district magnitudes for both chambers make it more difficult for women to win a seat in the Senate.


Key Words: Latin America, Senates, bicameralism, electoral systems, malapportionment, gender quota

A first draft of this paper was presented in the workshop "Elections and democracy in Latin America" at the ECPR Joint Sessions of Workshops, Granada, 14-19 April 2005.

## Detlef Nolte

is Vice-director of the Institute for Ibero-American Studies and Professor of Political Science and Latin American Studies at the University of Hamburg.
Contact: nolte@iik.duei.de • Website: http://www.duei.de/iik/nolte

## Francisco Sánchez

is Doctor in Political Science and currently holds a researcher position at the Instituto Interuniversitario de Iberoamérica y Portugal (University of Salamanca). Between 2001-2004 he was a researcher at the Institute for Ibero-American Studies (Hamburg).

Contact: fsanchez@usal.es

## Zusammenfassung

Die Repräsentation unterschiedlicher Wählerschaften:
Wahlsysteme in lateinamerikanischen Zweikammersystemen und ihre Auswirkungen auf die politische Repräsentation

Die Studie analysiert die Auswirkungen auf die politische Repräsentation, die sich aufgrund der Wahl zweier getrennter Kammern in den bikameralen Systemen Lateinamerikas ergeben. Die Analyse umfasst mechanische (quantitative) und qualitative (Perzeptionen) Effekte. Nachdem wir Verbreitung und Stärke von bikameralen Systemen in Lateinamerika darstellen, werden die Wahlsysteme für das Unterhaus und die Senate verglichen. Die Untersuchung zeigt, dass in einer Region mit relativ starker Ungleichheit in der Repräsentation der Wahldistrikte (malapportionment) in der ersten Kammer die zweite Kammer diese ungleiche Repräsentation noch verstärkt. Die Repräsentation in den Senaten tendiert zu stärker Disproportionalität bei der Mandatsverteilung als in den Parlamenten. Die Unterschiede in den Wahlsystemen und die Größe der Wahldistrikte führen dazu, dass Frauen sehr viel schwerer einen Sitz im Senat als im Parlament gewinnen können.

## Article Outline

## 1. Introduction

2. Bicameralism and Representation in Latin American Parliaments
3. The Representation of Different Constituencies in the Perception of the Senators
4. The Anticipated (and Non-Anticipated) Consequences of Bicameral Representation
5. Gender Quotas in Bicameral Systems
6. Conclusions: Are Two Chambers Better Than One?

## 1. Introduction

With the exception of countries where the second chamber is not elected by popular vote, the citizens in bicameral systems are privileged. ${ }^{1}$ They have the benefit of a diversified opportunity structure to elect their representatives to Parliament. That is to say, they are represented in two different ways. This double option may have a positive effect on the quality of democracy, because the electorate has more opportunities to elect its representatives. In this way bicameralism can be an instrument to integrate more groups into the political process, and it can also create special incentives for the empowerment of hitherto disadvantaged

[^0]groups. Alternatively, bicameralism may produce (negative) side effects, because the double option confers special benefits to some electors and generates disadvantages for others or even for the general electorate.
Democracy is in crisis in many Latin American countries (PNUD 2004; Valenzuela 2004). Citizens are discontented with the functioning of democracy and the performance of most of the political institutions. According to survey data, the institutions in which citizens place the least confidence are the legislatures and political parties (Corporación Latinobarómetro 2005). As a result, the reform of political institutions is a recurring topic of academic and public debate (Payne et al. 2002).
Does the diversification of representation in two chambers have an effect on the citizens' perception of the parliaments? In Latin America half of the democracies in the region have bicameral parliaments. But bicameralism is criticized in some countries, and in the 1990s in two cases (Peru, Venezuela) bicameral systems were abolished. If we look at the Latinobarómetro data - which is, we admit, a very crude indicator -, there is no great difference in the evaluation of unicameral and bicameral Parliaments (table 1). On average bicameral parliaments are marginally more trusted than their unicameral alternative. ${ }^{2}$ Two of the bicameral Parliaments receive the highest confidence values, whereas half of the bicameral parliaments are evaluated worse than the majority of the unicameral parliaments.

Prima facie, two chambers do not increase confidence in Parliament in a significant way. On balance, in many Latin American countries the citizens do not appreciate the advantages of double representation. Perhaps, they are dissatisfied with the way the Senates comply with their political functions, including the kind of political representation they offer.

[^1]Table 1: Confidence in Parliaments: unicameral and bicameral systems in Latin America (average percentage 1996-2001)*

| Country | Confidence in \% |
| :--- | :---: |
| Unicameral |  |
| El Salvador | 35 |
| Honduras | 33 |
| Costa Rica | 30 |
| Nicaragua | 28 |
| Peru | 27 |
| Panama | 25 |
| Guatemala | 24 |
| Ecuador | 17 |
| Average | 27.4 |
|  | Bicameral |
| Uruguay | 43 |
| Chile | 42 |
| Mexico | 30 |
| Paraguay | 29 |
| Argentina | 24 |
| Bolivia | 23 |
| Colombia | 23 |
| Brazil | 22 |
| Average | 29.5 |

* We did not include Venezuela, because the country changed from bicameralism to an unicameral Congress in 1999; for the Dominican Republic no survey data exist.
Source: Payne et al. (2002: 38).

Some thirty years ago Maurizio Cotta (1974) developed a theoretical framework for the comparative analysis of bicameral systems. Within this structural-functional framework, he created two opposite sets of hypothetical propositions concerning the possible impact of a second chamber for the different functions a parliament should perform. If we take a look at the representative function, which forms the topic of our study, the alternative hypotheses presented by Cotta (1974: 219-221) about the potential effects of second chambers are that in one perspective they provide the possibility of a richer and more complete representation and a greater diversity of parliamentary personnel. From another perspective second chambers are a deviation from the ideal model of representation and may raise problems with regard to the fairness of the representational weight given to the different components of the body politic. In our opinion these positions do not constitute alternative hypothesis, rather they refer to different principles of political representation that may possibly conflict with each other.

In this article we analyze the anticipated effects and the side effects of the principles of political representation which bicameral systems in Latin America embody. In the first section, we discuss theoretical justifications of second chambers in bicameral systems, with special
emphasis on the representation of different constituencies. We describe the spread of bicameralism and the electoral rules for the two chambers in Latin America. And we explore the strength and the different patterns of bicameralism in the region. Latin American Senates are strong and constitute a veto-player or veto-point in the political process. In the second section, we use a survey of 147 Senators in four South American countries to analyze their conceptions of representation and how they perceive their role. The self-perceptions of the South American senators indicate that the representation of diverse constituencies is an important difference between the two chambers. In the third section, we assess the impact of different electoral rules for the Senate and the Chamber of Deputies in Latin American bicameral systems on patterns of political representation in Congress. We explore the tension between different principles of representation. We take a special look at problems of malapportionment and disproportionality in bicameral systems. In the fourth section, we study the effects of gender quotas in bicameral systems. In general the electoral rules for the Latin American Senates do not favor the election of women to the Second Chambers. Therefore, gender quotas seem to have less influence on the representation of women in the second chamber. We conclude with some general reflections on electoral rules and their influence on representation patterns in Latin American bicameral systems.

## 2. Bicameralism and Representation in Latin American Parliaments

There are at least four basic justifications for the existence of a second chamber in bicameral systems. ${ }^{3}$ First, second chambers contribute to the system of checks and balances, dispersing and balancing political power. Second, the consecutive treatment of legislation in two independent chambers improves the quality of legislation. Third, second chambers contribute to the stability in legislative outcomes because it is more difficult to change the status quo in a legislative system formed by two bodies. Fourth, the two chambers represent different political interests and constituencies. In general bicameral systems are endorsed with reference to a mix of vindications, and they can be defended with reference to only one of the different justifications. In this paper we will not prove if all the justifications, which have been brought forward, reflect the political reality in Latin America. Instead we will focus on the fourth justification for bicameral parliaments.
Historically, in Europe, the different chambers of parliament represented diverse classes or estates. Like the House of Lords in Great Britain, the upper chamber represented the interests of the aristocracy and the lower chamber represented the "common" people. Later in

[^2]history, the United States set the example of a second chamber or Senate representing the interests of the member states of a federation. While in the House of Representatives the states are represented according to the number of inhabitants, in the Senate each state has the same weight (two seats), independent of the number of people living in its territory. Many federal states copy the bicameral system of the United States. But the same norm of representation can be applied as well to the second chamber in unitary states, if the Senate represents subnational units. However, there exists another model of bicameralism which, until now, has been less studied in political science. In some countries like Australia (Thompson 1999) or Uruguay, the upper chamber or Senate aggregates the interests of the citizens on a national scale, and the first chamber represents the local interests of the citizens. In addition, the second chamber represents the electorate in a more balanced way and corrects distortions in representation of the lower house. ${ }^{4}$ Latin American Senates reflect these different logics or principles of representation for the second chambers (table 3).

Today, in Latin America nine of eighteen democracies are bicameral systems (Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Mexico, Paraguay, and Uruguay). These are strong bicameral systems, because the powers of the two chambers are symmetric (separation of power). And at the same time the rules determining their composition promote incongruence ${ }^{5}$. This can produce different interests or a separation of purpose (Shugart \& Haggard 2001) among the members of both chambers.
Unlike European bicameral systems, with few exceptions ${ }^{6}$ all members of the Latin American Senates are elected by popular vote. While in Latin America the first chambers in general are elected by proportional representation, the electoral systems for the second chambers vary enormously.

[^3]Table 3: Electoral Systems for Deputies and Senators in Latin America

| Country | Electoral System <br> Deputies | Electoral System <br> Senators |  | District Size |  | Chamber Size |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dep | Sen | Dep | Sen |  |
| Argentina | proportional | plurality with minor- <br> ity representation | $5.4^{*}$ | 3 | 257 | 72 |  |
| Bolivia | personalized <br> proportional | plurality with minor- <br> ity representation | 1 and <br> $14.4^{*}$ | 3 | 130 | 27 |  |
| Brazil | proportional | plurality | $19^{*}$ | 1 or 2** | 513 | 81 |  |
| Chile | binominal | binominal | 2 | 2 | 120 | $48^{* * *}$ |  |
| Colombia | proportional | proportional | $4.9^{*}$ | 100 | 161 | 102 |  |
| Dom. Rep. | proportional | plurality | 5 | 1 | 150 | 32 |  |
|  | Mexico | segmented: plural- <br> ity/proportional | segmented: plurality <br> with minority repre- <br> sentation/ | 1 and | 30 | 3 and 32 |  |
| proportional | 500 | 128 |  |  |  |  |  |
| Paraguay | proportional | proportional | $4.4^{*}$ | 45 | 80 | 45 |  |
| Uruguay | proportional | proportional | $19 / 99^{\circ}$ | 30 | 99 | $31^{\circ \circ}$ |  |

* Average magnitude.
** In Brazil every state is represented by three senators. The Senate is renewed alternately one- or two-thirds every four years (in every district/state). When two-thirds of the Senate are up for election, the electors in every state have two votes for specific candidates who can be from different parties.
*** Including ten non elected senators.
- The Uruguayan electoral system comprises 19 districts of different sizes, but the formula for the allocation of seats is applied to the percentages of the aggregate national vote.
- In Uruguay the Vice-President is a member of the Senate with full voting rights.

Source: Payne et al. (2002) updated by Nolte/Sánchez.

In the classic cases of federal systems - Argentina, Brazil, and Mexico -, where the Senate represents the states of the federation, all territorial units (states) elect the same number of representatives independently of the number of electors/inhabitants. In the unitary states of Bolivia, Chile and the Dominican Republic the same logic of equal territorial representation applies. ${ }^{7}$ In the case of the Dominican Republic the national territory is divided in 30 districts, and each district elects one senator by plurality vote. In contrast to the afore mentioned countries, Senators are elected in a national list by proportional representation in Colombia, Paraguay and Uruguay. In these countries, the Senate represents the interests of a national electorate, while the lower chamber represents local or regional interests. The Mexican Senate is elected by two different electoral systems (segmented electoral system): 32 senators are elected on a national list by proportional representation, 92 senators are elected in three member districts by plurality vote. As in Argentina and Bolivia two senators repre-

[^4]sent the strongest party, one senator the first minority. In Brazil, three senators represent each state. They are elected alternately - one or two - every four years by plurality vote. In Chile, the senators are elected by plurality in two member circumscriptions (binominal): one for the first and one for the second majority. The first majority obtains both seats only if it gets two times the percentage of votes of the second majority. Below (section 4), we will take a look on the side effects of different electoral systems for Latin American Senates on the representation of women in parliament.

## 3. The Representation of Different Constituencies in the Perception of the Senators

In Latin American bicameral systems there is great difference with regard to the districts that constitute the basis for the election of the two chambers (table 3): In general senators and deputies represent different constituencies. That fact can create diverging interests in the lower and the upper house (separation of purpose). However, is this assumption correct? What do Latin American senators perceive their role to be? How do they perceive the main differences between the two chambers?

To answer these questions we use data from a 2002 survey of 147 senators in four South American countries. ${ }^{8}$ The questionnaire included open and closed questions on the topic of political representation. At the beginning, we asked (open questions) the senators about their perceptions of the main differences between the Senate and the Lower House. We received diverse answers, which we subsequently grouped in different categories (table 5). In both federal systems - Argentina and Brazil -, the senators mentioned the representation of different districts or circumscriptions as the main difference between the chambers. The Uruguayan senators also perceived the different constituencies of both chambers as a major factor of differentiation, because they represent a national electorate and not a specific circumscription (departamento).

[^5]Table 5: Main differences between the Lower Chamber and Senate in the perception of the Senators (2002)

|  |  | Argentina | Brazil | Chile | Uruguay | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Districts/circumscriptions they represent | N | 41 | 13 | 3 | 10 | 67 |
|  | $\%$ | 46.6 | 28.9 | 4.4 | 19.6 | 26.6 |
| Size of the chambers | N | 16 | 1 | 4 | 13 | 34 |
|  | $\%$ | 18.2 | 2.2 | 5.9 | 25.5 | 13.5 |
| Different tasks | N | 9 | 6 | 10 | 3 | 28 |
|  | $\%$ | 10.2 | 13.3 | 14.7 | 5.9 | 11.1 |
| Senators are elected for a longer period | N | 1 | --- | 5 | --- | 6 |
|  | $\%$ | 1.1 | --- | 7.4 | --- | 2.4 |
| Major age and experience in the Senate | N | 3 | 5 | 8 | 4 | 20 |
|  | $\%$ | 3.4 | 11.1 | 11.8 | 7.8 | 7.9 |
| Senate is the chamber of revision | N | 3 | 7 | 4 | 1 | 15 |
|  | $\%$ | 3.4 | 15.6 | 5.9 | 2.0 | 6.0 |
| Characteristics of functioning | N | 11 | 7 | 21 | 7 | 46 |
|  | $\%$ | 12.5 | 15.6 | 30.9 | 13.7 | 18.3 |
| Other | N | 3 | 3 | 8 | 1 | 15 |
|  | $\%$ | 3.4 | 6.7 | 11.8 | 2.0 | 6.0 |
| There are no differences | N | 1 | --- | --- | --- | 1 |
|  | $\%$ | 1.1 | --- | --- | --- | 0.4 |
| In the Senate are the political leaders | N | --- | 1 | 5 | 12 | 18 |
|  | $\%$ | --- | 2.2 | 7.4 | 23.5 | 7.1 |
| The Senate is conservative | N | --- | 2 | --- | --- | 2 |
|  | $\%$ | --- | 4.4 | --- | --- | 0.8 |

The open question to the Senators was: What, is your view, is the main difference between the Senate and the Chamber of Deputies?

Source: Based on survey data of the project "Senates in South American bicameral systems", Institute for IberoAmerican Studies, Hamburg. See statistical appendix in Sánchez, Nolte \& Llanos (2005).

In another set of questions, we presented several items related to the topic of representation (table 6). Most of these items were not included in the Uruguayan questionnaire, because Uruguayan Senators do not represent competing districts. Both the Argentine and the Brazilian Senators concede more importance to the representation of the interests of the provinces/states than to the representation of the nation. In addition, in the Argentine Senate the interests of the Senators' province are an important factor in determining the integration of legislative commissions. The Senators of Argentina, Brazil and Chile give more importance to the citizens of their province/state/region when they take political decisions. In Argentina and Chile we have comparative data for the Chamber of Deputies. If we take the category "much influence" the deputies in both countries perceive more pressure from their electorate than the senators. In Argentina and slightly less so in Brazil, the governors of the provinces as well have great influence on the Senators. In contrast, in Chile, the regional authori-
ties have little or no influence on the political decisions of the Senators. They are not elected by popular vote, but rather designated by the president, and they have no independent political mandate.

Table 6: Representing special interest in the Senate (in \%)*

|  | Argentina | Brazil | Chile** |
| :---: | :---: | :---: | :---: |
| Importance of different functions in the work of the Senators |  |  |  |
| a ) To represent the nation |  |  |  |
| No importance | 7.2 | 1.6 | 2.6 |
| Little importance | 18.1 | 18.3 | 16.5 |
| Quite a lot of importance | 36.9 | 36.2 | 47.1 |
| Much importance | 31.8 | 38.2 | 30.5 |
| Don't know/no answer | 5.9 | 5.7 | 3.4 |
| Total | 100.0 | 100.0 | 100.0 |
| N | 52 | 35 | 37 |
| b) To represent the interests of the province, state or region |  |  |  |
| No importance | --- | --- | --- |
| Little importance | --- | 5.0 | 16.3 |
| Quite a lot of importance | 21.5 | 34.9 | 41.1 |
| Much importance | 78.5 | 57.6 | 42.6 |
| Don't know/no answer | --- | 2.5 | --- |
| Total | 100.0 | 100.0 | 100 |
| N | 52 | 35 | 37 |

Importance of different criteria for the integration of Senate commissions - the interests of the province, state or region of the Senator

| No importance | --- | 8.0 | 12.0 |
| :--- | :---: | :---: | :---: |
| Little importance | 4.0 | 33.8 | 29.6 |
| Quite a lot of importance | 25.1 | 42.3 | 33.8 |
| Much importance | 70.9 | 13.4 | 24.6 |
| Don't know/no answer | --- | 2.5 | --- |
| Total | 100.0 | 100.0 | 100.0 |
| N | 52 | 37 | 37 |

Influence on the political decisions of Senators
a) Citizens of province, state or region of the Deputy/Senator

|  | Deputies | Senators |  | Deputies | Senators |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No influence | --- | 1.7 | 3.2 | --- | --- |
| Little influence | 7.5 | 5.9 | 16.8 | 2.2 | 7.8 |
| Quite a lot of influence | 22.5 | 30.3 | 61.7 | 26.5 | 35.9 |
| Much influence | 70.0 | 59.9 | 15.8 | 71.3 | 50.0 |
| Don't know/no answer | --- | 2.1 | 2.5 | --- | 6.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| N |  | 52 | 35 |  | 37 |
| b |  |  |  |  |  |

b) Government of province, state or region of the Senator

| No influence | 4.2 | 3.2 | 14.5 |
| :--- | :---: | :---: | :---: |
| Little influence | 9.5 | 29.5 | 49.6 |
| Quite a lot of influence | 31.9 | 39.8 | 28.4 |
| Much influence | 52.7 | 25.0 | 5.5 |


| Don't know/no answer | 1.7 | 2.5 | 2.1 |
| :--- | :---: | :---: | :---: |
| Total | 100.0 | 100.0 | 100.0 |
| N | 52 | 35 | 37 |

* Because the Uruguayan Senators are elected in one national district, these questions were not included in the Uruguayan survey.
** We included the designated Senators in Chile because the question refers to the Senators in general and not to the personal position of the interviewed Senator.
** The questions and options for the answers were:
With regard to the role of the Senators, what degree of importance do they give to the following functions?
- Representing the nation/-Representing the interest of the provinces, states or regions.

In your view, how important are the following criteria for the composition of Senate Committees?

- The interest of the senator's province, state or region.

In your view, what importance does the senators of your country give to the following groups, people or institutions when making political decisions?

- The citizens of their province, state, or region.
- The government of their province, state, or region.

Source: Based on survey data of the project "Senates in South American bicameral systems", Institut für Iberoamerika-Kunde, Hamburg. For deputies project "Elites Parlamentarias Latinoamericanas", Instituto Interuniversitario de Iberoamerica y Portugal. Universidad de Salamanca.

The senators of all three countries confer great importance to the activity of obtaining funds for their circumscription (table 7). There is not much difference between the federal states, Argentina and Brazil, and the non-federal state (Chile). If there exists a conflict between the needs of the province/state/region and the party position the great majority of the Senators (and deputies) would vote for the interests of their electorate (table 8). It is interesting that the Argentine senators are more inclined to give "much importance" to the activity of obtaining funds for their electoral constituency.

Table 7: Importance to obtain funds for your state/province/region/district* (in \%)**

|  | Argentina |  | Brazil | Chile** $^{*}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Deputies | Senators | Senators | Deputies | Senators |
| No importance | 2.6 | 1.7 | 1.6 | 1.1 | 3.1 |
| Little importance | 11.3 | 9.0 | 5.4 | 10.3 | 16.7 |
| Quite a lot of importance | 32.9 | 23.2 | 45.5 | 28.3 | 31.3 |
| Much importance | 53.2 | 66.1 | 45.0 | 60.3 | 49.0 |
| Don't know/no answer | --- | --- | 2.5 |  | --- |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| N |  | 52 | 35 |  | 29 |

Question: In your parliamentary role, how important is it, in your view, to obtain recourses for your province, state, region or district?

* Because Uruguayan Senators are elected on a national list, this question was not asked in Uruguay
** We asked for the district in the case of the deputies. The wording in the questionnaire for senators depended on the names of the subnational territorial units.
*** Chile only valid \%, because the designated Senators did not answer the question.
Source: Based on survey data of the project "Senates in South American bicameral systems", Institute for IberoAmerican Studies, Hamburg. For deputies project "Elites Parlamentarias Latinoamericanas", Instituto Interuniversitario de Iberoamerica y Portugal. Universidad de Salamanca.

Table 8: Voting pattern if there is a conflict between the requirements of the province/ state/region and the political party*

|  | Argentina |  | Brazil | Chile** $^{*}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Deputies | Senators | Senators | Deputies | Senators |
| Always with the party | 5.4 | 5.9 | 12.7 | 3.9 | 3.3 |
| Always with the needs of <br> the province/state/ <br> region/district*** | 83.1 | 80.4 |  |  |  |
| Abstention**** | --- | --- | 25.4 | 73.3 | 78.7 |
| It depends on the <br> topic*** | 5.8 | 9.7 | 26.2 | 1.4 | --- |
| Don't know/no answer | 5.8 | 4.0 | 3.2 | 20.2 | 18.1 |
| Total | 100.0 | 100.0 | 100.0 | 1.3 | --- |
| N |  | 52 | 35 | 100.0 | 100.0 |

Question: In the case of a conflict between the needs of your region and the position of your political party how would you vote?

* Because Uruguayan Senators are elected on a national list, this question was not asked in Uruguay
** Chile only valid \%, because the designated Senators did not answer the question.
*** Question for the deputies.
**** The options "abstention" and "it depends on the topic" have not been presented by the interviewer, spontaneous answers
Source: Based on survey data of the project "Senates in South American bicameral systems", Institute for IberoAmerican Studies, Hamburg. For deputies project "Elites Parlamentarias Latinoamericanas", Instituto Interuniversitario de Iberoamerica y Portugal. Universidad de Salamanca.

The self-perceptions of the South American senators - and deputies - indicate that the representation of diverse constituencies is an important difference between the two chambers. This is especially true in federal systems like Argentina and Brazil. Nevertheless, in an unitary state as the Chilean the senators also demonstrate a strong dedication to serve their circumscription.

## 4. The Anticipated (and Non-Anticipated) Consequences of Bicameral Representation

Because in Latin America both chambers possess almost equal powers, the mechanisms that produce a congruent or incongruent composition of the lower and the upper house may have an influence on political outcomes (separation of purpose). Among the institutional features that define the congruent or incongruent composition of the two chambers (see Llanos \& Nolte 2003: 63) at least three have a direct impact on patterns of political representation. First, the territorial representation in the second chamber; second, the difference in
size of the two chambers; ${ }^{9}$ third, different electoral formulas or districts (including the district magnitude) for the two chambers. We will analyze the anticipated and perhaps not anticipated effects of the principle of territorial representation and different electoral formula for the representation patterns in Latin American bicameral systems.

In Latin America six out of nine bicameral systems combine the representation by population (one person, one vote) in the lower chamber, with the representation by territory in Senate, where each state (province, department or electoral district) receives the same number of representatives regardless of its population. This is a political decision that can be justified with different arguments. Dispersed political power has some advantages, and the interests of the periphery possibly will be better protected. Moreover, strong bicameral systems should differ in the composition of their chambers, senators and deputies should represent different constituencies. If both chambers are similar in their composition, it will be more difficult to justify a second chamber. ${ }^{10}$ However, there exists the possibility of some tensions/frictions between the different principles of political representation that characterize bicameral systems. More precisely, one principle of democratic representation ("one man, one vote" $)^{11}$ may be used to criticize the composition and the subsistence of second chambers ${ }^{12}$.

For example, in his comparative study on federalism, Stepan (2004a, 2004b) refers to the "demos-constraining" characteristics of many territorial chambers, where the less populous states are over represented and the more populous states are underrepresented. Other authors (Samuels \& Snyder 2001; Snyder \& Samuels 2001, 2004) have recently dealt with the

[^6]topic of malapportionment. Based on one principle of political representation ${ }^{13}$ they use the concept for a critical view on second chambers. In political science the term malapportionment refers to the seats that are allocated to districts which would not receive those extraseats if the seats would be assigned with reference to the number of voters in each district. Malapportionment is not restricted to federal systems ${ }^{14}$ or second chambers. Nevertheless, in general malapportionment is much higher in second chambers (Samuels \& Snyder 2001).

We will not analyze the possible political effects of malapportionment. These effects will depend on the political constellation and the actor configuration. In our opinion malapportionment is part of the logic of a certain type of second chambers in bicameral systems. We take a look at the magnitude of malapportionment in Latin American bicameral systems. We expect that second chambers with a territorial basis of representation (same weight for the territorial units) will display higher indices of malapportionment than second chambers that are elected in a nationwide district.

Malapportionment is not the only factor that has an effect on the incongruent (in comparison with the lower chamber) composition of the second chamber in bicameral systems. In addition, the electoral formula (plurality or proportional) and the district magnitude (number of representatives to be elected in one district) determine how votes are converted into seats. Both variables have an influence on the number of parties represented in parliament as well as on the proportionality of representation. While malapportionment refers to the discrepancy between the shares of population and the shares of legislative seats held by different districts, disproportionality refers to the discrepancy between the percentage of the national votes and the percentage of seats of different parties in Parliament. We expect that second chambers with a territorial basis of representation (same weight for the territorial units), small district magnitude and majority voting systems - in general these three characteristics combine - feature less parties than the first chamber and that they are much more disproportional in their composition.
(a) Malapportionment: If we look at Latin America, malapportionment displays some special traits. First, in Latin America's history, malapportionment has a long tradition (Samuels \& Snyder 2004). Second, malapportionment is higher in Latin America than in other world regions (Samuels \& Snyder 2001). ${ }^{15}$ Third, in Latin America malapportionment is not re-

[^7]stricted to the second chambers. In their groundbreaking study on malapportionment Samuels \& Snyder (2001: 150) calculated the percentage of seats not apportioned according to the principle of "one person, one vote". While a score of 0.00 would indicate no distortion, a score of 0.50 would indicate that $50 \%$ of the seats are malapportioned. ${ }^{16}$ These seats are allocated to districts which would not receive those seats if every vote would count equally.

Table 9: Malapportionment in Latin America, 1999

| Country | Lower Chamber | Senate | Mean |
| :--- | :---: | :---: | :---: |
| Argentina | 0.14 | 0.49 | 0.315 |
| Bolivia | 0.17 | 0.38 | 0.275 |
| Brazil | 0.09 | 0.40 | 0.250 |
| Chile | 0.15 | 0.31 | 0.230 |
| Colombia | 0.13 | 0.00 | 0.065 |
| Dom. Rep. | 0.08 | 0.38 | 0.230 |
| Mexico | 0.06 | 0.23 | 0.145 |
| Paraguay | 0.04 | 0.00 | 0.020 |
| Uruguay | 0.03 | 0.00 | 0.015 |
| LA Average | 0.08 | 0.25 | 0.165 |
| United States | 0.01 | 0.36 | 0.185 |
| World Average without <br> Latin America | 0.06 | 0.18 | 0.120 |

Note: A score of 0.00 would indicate perfect apportionment; a score of 0.50 would indicate a score of 0.50 would indicate that $50 \%$ of the seats are malapportioned.
Source: Samuels \& Snyder (2001: 148).

As expected, the Senates of Argentina and Brazil - as well as the US-Senate - show high levels of malapportionment, but the same is also true for the second chambers in Bolivia and the Dominican Republic. In a worldwide sample these four Latin American countries rank first as having the most malapportioned chambers (Samuels \& Snyder 2001). The malapportionment is minor but still high ( $31 \%$ ) in Chile. Among the federal systems Mexico has the lowest percentage of malapportioned seats, because one quarter of the Senate seats are elected with a national list (proportional representation). The cases of Colombia, Paraguay and Uruguay need no explanation, because all the Senate seats are distributed on a national base (by proportional representation).
If we include the lower chambers in our analysis ${ }^{17}$, we can identify four groups of countries (graphic 1).

[^8]- Uruguay and Paraguay demonstrate an almost perfect apportionment for both chambers. Colombia shares this characteristic for the Senate, but not for the lower chamber.
- Mexico stands alone with a small distortion for the lower chamber, and a medium malapportionment (about one quarter of the seats) for the Senate.
- The third group is composed of Bolivia, Brazil, Chile and the Dominican Republic. These countries share a low or moderate distortion for the lower chamber and a high malapportionment for the Senate.
- Argentina possesses the highest malapportionment for the Senate (about $50 \%$ of the seats) and a moderate distortion for the lower chamber.


## Graphic 1: Malapportionment in the Lower Chamber and the Senate (1999)


(b) Number of parties represented in parliament: In a next step we analyze the effects of the different electoral systems for the lower and upper house on political representation in Latin American parliaments. We use several standard indicators to give an answer to this question. In addition to the real number of parties represented in parliament, we calculate the effective number of parliamentary parties. This is a measure that statistically weights the strengths of the parliamentary parties. ${ }^{18}$ In countries with partial renewal of the Senate (Ar-

[^9]gentina, Brazil, Chile) ${ }^{19}$ or Lower Chamber (Argentina) we include only the newly elected Senators/Deputies in our calculations.

In all the cases in which the Senate is elected by plurality vote (Argentina, Bolivia, Brazil, Dominican Republic, Mexico prior to 1997), both the number of parties and the effective number of parties in the upper chamber are smaller than in the lower chamber (table 10; graphic 2). This effect is very strong in Brazil, Bolivia and in the Dominican Republic. However, in countries with virtually the same systems for both chambers (Chile, Uruguay) there is no significant difference or clear trend. In the Chilean case, it is the difference in the size of the chambers and the partial renewal of the Senate, which probably explain the lower number of parties represented in the Senate in three out of four elections. ${ }^{20}$ In the cases of Paraguay and Colombia, where the Senate is elected on a national list, the number of parties represented in the Senate is higher than in the lower house.

Table 10: Number of parties in the lower and the upper chambers

| Country | Election year | Number of parties |  | Effective number of <br> parliamentary parties |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Deputies | Senate | Deputies | Senate |
| Argentina | 2001 | 18 | 7 | 3.06 | 2.32 |
|  | 2003 | 26 | 8 | 3.99 | 3.43 |
| Bolivia | 1985 | 10 | 3 | 4.31 | 2.04 |
|  | 1989 | 5 | 4 | 3.92 | 2.99 |
|  | 1993 | 8 | 4 | 3.71 | 2.05 |
|  | 1997 | 7 | 5 | 5.36 | 3.74 |
|  | 2002 | 8 | 5 | 4.96 | 3.45 |
| Brazil $^{*}$ | 1986 | 12 | 9 | 2.83 | 1.66 |
|  | 1990 | 19 | 13 | 8.69 | 5.97 |
|  | 1994 | 18 | 11 | 8.16 | 6.31 |
|  | 1998 | 18 | 8 | 7.13 | 3.66 |
|  | 2002 | 19 | 10 | 8.49 | 6.27 |
| Chile $^{*}$ | 1989 | 10 | 7 | 5.08 | 4.06 |
|  | 1993 | 8 | 8 | 4.86 | 5.40 |
|  | 1997 | 8 | 7 | 5.02 | 2.99 |
|  | 2001 | 6 | 5 | 5.91 | 5.59 |

[^10]| Colombia | 1982 | 4 | 5 | 1.98 | 2.37 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1986 | 5 | 5 | 2.47 | 2.46 |
|  | 1990 | 5 | 5 | 2.17 | 2.22 |
|  | 1994 | 16 | 18 | 2.75 | 2.82 |
|  | 1998 | 20 | 22 | 3.16 | 2.96 |
|  | 2002 | 39 | 42 | 6.63 | 9.42 |
| Dominican Rep. | 1986 | 3 | 3 | 2.53 | 1.82 |
|  | 1990 | 4 | 3 | 3.05 | 2.23 |
|  | 1994 | 3 | 3 | 2.43 | 2.13 |
|  | 1998 | 3 | 3 | 2.32 | 1.51 |
|  | 2002 | 3 | 3 | 2.71 | 1.22 |
| Mexico | 1988 | 3 | 2 | 3.04 | 1.14 |
|  | 1991 | 6 | 2 | 2.21 | 1.10 |
|  | 1994 | 4 | 3 | 2.29 | 1.69 |
|  | 1997 | 5 | 5 | 2.86 | 2.25 |
|  | 2000 | 3 | 4 | 2.55 | 2.75 |
| Paraguay | 1989 | 4 | 3 | 1.89 | 1.86 |
|  | 1993 | 3 | 3 | 2.45 | 2.69 |
|  | 1998 | 3 | 4 | 1.97 | 2.08 |
|  | 2003 | 5 | 6 | 3.18 | 4.03 |
| Uruguay | 1984 | 4 | 3 | 2.92 | 2.76 |
|  | 1989 | 4 | 4 | 3.33 | 3.24 |
|  | 1994 | 4 | 4 | 3.30 | 3.19 |
|  | 1999 | 4 | 4 | 3.07 | 2.86 |
|  | 2004 | 4 | 3 | 2.39 | 2.33 |

* Argentina, Brazil, Chile: Only the newly elected senators (or deputies).

Sources: Political database of the Americas (http://www.georgetown.edu/pdba/english.html); Payne et al. (2002) and national electoral statistics.

Graphic 2: Effective number of parties in the lower and the upper chambers

(c) Proportionality/Disproportionality of representation: Disproportionality refers to the deviation of the seat shares of political parties from their vote shares. We use three standard measures of proportionality/disproportionality. ${ }^{21}$ The first measure is the Loosemore-Hanby index ${ }^{22}$. This index tends to exaggerate the disproportionality of multiparty systems as the number of parties increases (e.g. Argentina, Bolivia, Brazil, Chile and Colombia). The second measure we use is the Rae index ${ }^{23}$, which tends to understate the disproportionality of highly fragmented party systems, as for example Colombia after 1994. The Gallagher index or least-squares index ${ }^{24}$ tries to correct some of the problems associated with the other two indexes. It gives more weight to larger deviations between the vote shares and seat shares of specific parties.

As expected, the proportionality/disproportionality indexes of Loosemore-Hanby and Rae exhibit better results when there are few parties in parliaments as in Paraguay, Uruguay and the Dominican Republic (table 11). In general, the Gallagher index is more useful for a comparison of all the cases included in our study. With the exception of Colombia and Paraguay, disproportionality is higher in the Senate than in the lower house. If the lower house exhibits disproportional representation, normally the second chamber aggravates this effect (see graphic 3). The disproportionality of the second chamber is very high in the Dominican Republic. It has also been high during some elections in Brazil, and in Mexico, before the electoral reform of 1997.

[^11]Table 11: Indices of disproportionality

| Country | Election year | Disproportionality index |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Loosemore-Hanby index |  | Rae index |  | Least-squares index |  |
|  |  | Deputies | Senate | Deputies | Senate | Deputies | Senate |
| Argentina* | 2001 | 9.41 | 31.16 | 1.34 | 7.79 | 4.08 | 11.71 |
|  | 2003 | 10.44 | 17.19 | 1.49 | 2.65 | 2.64 | 3.10 |
| Bolivia | 1985 | 8.24 | 33.10 | 1.65 | 22.07 | 2.95 | 15.79 |
|  | 1989 | 12.68 | 26.29 | 5.07 | 17.53 | 4.91 | 10.47 |
|  | 1993 | 11.96 | 35.98 | 2.99 | 17.99 | 4.60 | 16.44 |
|  | 1997 | 9.33 | 24.25 | 2.67 | 9.70 | 3.21 | 11.29 |
|  | 2002 | 9.03 | 29.48 | 2.26 | 11.79 | 3.77 | 12.97 |
| Brazil* | 1986 | 12.38 | 30.34 | 2.06 | 20.22 | 4.79 | 20.91 |
|  | 1990 | 11.22 | 50.00 | 1.18 | 100,00 | 3.30 | 50.00 |
|  | 1994 | 8.47 | 21.59 | 0.94 | 3.92 | 3.11 | 7.82 |
|  | 1998 | 7.02 | 34.39 | 0.78 | 11.46 | 2.30 | 13.78 |
|  | 2002 | 6.28 | 10.46 | 0.66 | 2.09 | 1.93 | 4.69 |
| Chile | 1989 | 19.05 | 15.97 | 3.81 | 4.56 | 5.05 | 5.35 |
|  | 1993 | 14.16 | 22.84 | 3.15 | 6.53 | 5.49 | 8.08 |
|  | 1997 | 14.07 | 33.99 | 3.52 | 13.60 | 6.00 | 13.58 |
|  | 2001 | 18.83 | 17.49 | 4.18 | 5.83 | 7.10 | 7.64 |
| Colombia | 1982 | 2.32 | 9.97 | 1.16 | 3.32 | 1.02 | 5.60 |
|  | 1986 | 7.26 | 2.28 | 2.90 | 0.76 | 3.96 | 1.04 |
|  | 1990 | 4.94 | 4.40 | 1.98 | 1.47 | 2.90 | 1.72 |
|  | 1994 | 11.83 | 7.78 | 1.48 | 2.59 | 4.23 | 2.27 |
|  | 1998 | 21.54 | 17.54 | 2.15 | 5.85 | 7.47 | 5.49 |
|  | 2002 | 13.01 | 11.30 | 0.67 | 0.54 | 3.12 | 2.67 |
| Dominican Rep. | 1986 | 12.39 | 29.32 | 8.26 | 19.55 | 5.69 | 16.77 |
|  | 1990 | 4.72 | 23.17 | 2.36 | 15.45 | 1.84 | 13.34 |
|  | 1994 | 5.95 | 15.67 | 3.97 | 10.44 | 3.43 | 8.61 |
|  | 1998 | 8.43 | 28.66 | 5.62 | 19.11 | 4.46 | 17.44 |
|  | 2002 | 6.72 | 51.80 | 4.48 | 34.53 | 3.66 | 30.31 |
| Mexico | 1988 | 5.08 | 42.92 | 2.03 | 21.46 | 2.05 | 24.04 |
|  | 1991 | 4.35 | 33.80 | 1.45 | 22.53 | 1.78 | 19.14 |
|  | 1994 | 9.57 | 23.98 | 4.79 | 15.98 | 5.18 | 13.58 |
|  | 1997 | 8.70 | 21.66 | 3.48 | 8.66 | 4.74 | 12.88 |
|  | 2000 | 9.44 | 12.04 | 6.29 | 4.01 | 4.49 | 6.28 |
| Paraguay | 1989 | 9.72 | 11.05 | 4.86 | 7.36 | 5.99 | 6.56 |
|  | 1993 | 7.88 | 1.98 | 5.25 | 1.32 | 4,31 | 1.22 |
|  | 1998 | 3.45 | 3.99 | 2.30 | 2.66 | 1.61 | 2.11 |
|  | 2003 | 4.00 | 5.35 | 1.60 | 1.78 | 2.24 | 2.14 |
| Uruguay | 1984 | 0.53 | 3.76 | 0.26 | 2.51 | 0.31 | 1.92 |
|  | 1989 | 0.62 | 3.23 | 0.31 | 1.61 | 0.40 | 1.70 |
|  | 1994 | 0.80 | 3.11 | 0.40 | 1.55 | 0.54 | 1.57 |
|  | 1999 | 0.84 | 3.24 | 0.42 | 1.62 | 0.43 | 2.10 |
|  | 2004 | 4.14 | 5.25 | 2.07 | 3.50 | 1.77 | 2.18 |

* Argentina, Brazil, Chile: Only the newly elected Senators (or deputies).

Sources: Political database of the Americas (http://www.georgetown.edu/pdba/english.html); Payne et al. (2002) and national electoral statistics.

## Graphic 3: Least-Squares Index of disproportionality



Six out of nine Latin American bicameral systems feature higher indices of malapportionment and disproportionality in the Senate than in the lower chamber. This result is to be expected, given that the second chambers are based on the principle that each subnational unit has the same weight, independent of the number of people living in its territory. Moreover, the senators are elected by majority vote.
We note that malapportionment is higher in Latin America than in other regions. We do not know what the political consequences are of malapportionment and disproportionality in Latin American Senates, which is not the focus of this study. Our objective in this final part is less ambitious. We analyze the impact of the special characteristics of bicameral systems and second chambers on the political representation of women in Latin America.

## 5. Gender Quotas in Bicameral Systems

In recent times, most Latin American countries introduced special quotas to increase the participation of women in politics (IDEA 2003). How do these mechanisms to promote a special segment of the electorate function in bicameral systems? How do they interact with different electoral systems and different degrees of malapportionment or disproportionality? What are the repercussions for the representation of women in parliament?
The result of gender quotas depends on cultural and legal factors (Are the quotas compulsory or indicative? Are there any sanctions for non compliance?), as well as on the electoral
system (Gray 2003: 55-56; Schmidt 2003: 120-123; Norris 2000, 2004: 179-208). In general, it is expected that gender quotas work better in proportional representational systems with medium to high district magnitude. They are likely to have fewer effects in plurality systems and in proportional representational systems with small district magnitude. It should be easier to implement gender quotas with closed and blocked list systems than with closed and unblocked list systems. In this context, it is interesting to compare the consequences of gender quotas in bicameral systems, because in these cases, the cultural and political context is the same, but the electoral systems vary. First, we verify if the quotas are the same for both chambers and speculate on the expected institutional effects. Second, we analyze and explain the real effects for the political representation of women in both chambers.

Table 12: Gender quotas in Latin American bicameral systems

| Country <br> (Year of Reform) | Minimum quota <br> by law (\%) |  | Placement mandate |  | Type of list |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deputies | Senate | Deputies | Senate | Deputies | Senate |
| Argentina (1991) | 30 | 30 | Yes | Yes | closed + <br> blocked | closed + <br> blocked |
| Bolivia (1997) | 30 | 25 | Yes | No | single mem- <br> ber/closed + <br> blocked | closed + <br> blocked |
| Brazil (1997) | 30 | 30 | No | No | closed + <br> unblocked | closed + <br> unblocked |
| Dominican Rep. <br> (1997) | 25 | --- | No | --- | closed + <br> blocked | single <br> member |
| Mexico (1996/2002) | 30 | 30 | No | No | Single mem- <br> ber/closed + <br> blocked | closed + <br> blocked |
| Paraguay (1996) | 20 | 20 | Yes | Yes | closed + <br> blocked | closed + <br> blocked |

Source: Peschard (2003a: 22), Payne et al. (2002: 98-100), IDEA, Global Database of Quotas for Women (www.quotaproject.org/).

Expectations: Based only on the electoral systems (see tables 3,11) and the type of gender quota, we would expect to find the highest participation of women in the lower house of the Argentine congress. We expect low participation rates in Chile, Colombia and Uruguay, which are countries without gender quotas, as well as in Brazil (both chambers) and in the Senate of the Dominican Republic.
Results: In a worldwide ranking of the percentage of women in National Parliaments by the Inter-Parliamentary Union ${ }^{25}$ from October 2004 Argentina is placed $11^{\text {th }}$ and $3^{\text {rd }}$ in Latin

[^12]America (Costa Rica $8^{\text {th }}$, Cuba $7^{\text {th }}$ ), Mexico ranks $27^{\text {th }}$, Bolivia $44^{\text {th }}$ and the Dominican Republic $50^{\text {th }}$. But we observe a great disparity in the representation of women in parliament in our nine cases (see table 13). In the lower house the variation is between $8 \%$ and $34 \%$ of the seats, in the Senate the extreme values are $4 \%$ and $35 \%$ of the seats. In general, the representation of women is higher in the lower house, but there are two exceptions - Argentina and Brazil.

Table 13: Quotas and Representation of Women in Latin American bicameral Parliaments (in \%)

| Country | Quota $^{*}$ | Lower House | Upper House |
| :--- | :---: | :---: | :---: |
| Argentina (2003/2001) | Yes | 34.1 | 34.7 |
| Bolivia (2002) | Yes | 18.5 | 14.8 |
| Brazil (2002) | Yes | 8.2 | 12.4 |
| Chile (2001) | No | 12.5 | $4.1 / 5.3^{* *}$ |
| Colombia (2002) | No | 12.0 | 8.8 |
| Dominican Rep. (2002) | Yes | 17.3 | 6.3 |
| Mexico (2000) | Yes | 16.0 | 15.6 |
| Paraguay (2003) | Yes | 10.0 | 8.9 |
| Uruguay (2004) | No | 12.1 | 9.7 |

* In the constitution or electoral law.
** As a percentage of the elected Senators.
Source: IDEA, Global Database of Quotas for Women (www.quotaproject.org/).

Next, we will comment on the nine cases included in our study:

- The case of Argentina is quite interesting. The plurality system (with minority representation) for the Senate is not conducive to the implementation of a gender quota. ${ }^{26}$ Nevertheless, Argentina boasts one of the highest percentages of women in parliament not only in Latin America but also worldwide. One reason for this surprising result is the wording of the decree issued by president de la Rúa, which regulates the law on gender quotas. In the cases in which the mathematical application of the $30 \%$ rule of seats up for election to be filled by women result in factions less than one, the concept of minimum quantity of candidates shall be the next greater unit (Lubertino 2003: 37-38). In consequence, if there are two positions on a list, as in the election for the Senate, at least one candidate will be a woman. This rule is very favorable for the representation of women in the Argentine Senate. The second seat of the winning list

[^13]will always be occupied by a woman, which guarantees that at least one third of the senators will be women.

In Bolivia a quota system was introduced recently in 1997. It requires the parties to have at least $30 \%$ women on their lists of candidates. But the electoral system limits the effect of this regulation: 68 members of the Chamber of Deputies are elected in single-member districts by plurality vote, only 62 are elected in multimember districts by proportional representation. For the upper house, in three member districts, the Senators are elected by majority vote (two for the first majority, one for the second majority). Each party list includes two principles and two alternates, and the parties can comply with the gender quota by nominating women as alternates. As a result, $10.3 \%$ of the Deputies elected in single-member districts are women as compared to $18.2 \%$ for all Deputies. Of the candidates for the Senate only $21.5 \%$ of the principles, but $47.3 \%$ of the alternates have been women. 14.8 of the elected Senators are women (Costa Benavides 2003).

In the case of Brazil, a gender quota of $30 \%$ (in the 1998 elections $25 \%$ ) was introduced in 1997. At first, the repercussions were quite limited (Araújo 2003). Subsequently, in the lower chamber the percentage of women was reduced from $6.2 \%$ in 1994 to $5.6 \%$ in 1998. It was up to $8.2 \%$ again in 2002. The gender quota refers to candidates on the party lists (lower house). However, the 1997 electoral reform increased the number of competing candidates on the party lists to $150 \%$ of the total number of seats up for elections in the district. At the same time the party is not obliged to occupy all positions on the list, the law only stipulates that the positions reserved for woman cannot be occupied by men. Finally, the lists are closed and unblocked, so the electors decide over the ranking of the candidates on the lists and their electoral fortune. These factors help to explain why the percentage of women in the Brazilian lower chamber is well below the $30 \%$ quota. The Senate renews either one-third or two-thirds of its members (in all districts) every four years. This implies the district magnitude varies between one and two in the different election years. Surprisingly, women have had more chances to win a Senate seat when the renewal of a third of its members has taken place as in the 1994 and 2002 elections (Llanos \& Sánchez 2004: 12). As a result the percentage of women in the Brazilian Senate went up from $6.3 \%$ (1999) to $12.4 \%$ (2003).

- In Chile there is no quota law, and the electoral system is the same for the Senate and the lower chamber. The small district magnitude for both chambers of congress is a disadvantage for female candidates (Gray 2003: 72-73). The election in two member districts with closed but unblocked lists makes it difficult to implement a gender
quota. In our group of countries, Chile has by far the lowest representation of women in Parliament. There is a slight difference between the lower house and the Senate. The only factor that can explain the difference in representation, is the number of districts being contested (60 in the lower chamber against 18 or 20 in the Senate). Moreover, the Senate has more prestige and is the final step in the career of many politicians.

In Colombia there is no gender quota either. As a result, the representation of women in parliament is quite low. Because of the electoral system - proportional representation by national list - and the size of the Senate ( 102 members) we would have expected a higher percentage of women in the second chamber.

- In the Dominican Republic, there are no sanctions for non-compliance with the gender quota of $25 \%$ for the lower chamber. The Senate is elected in single-member districts by plurality vote. As result, the representation of women in the second chamber is quite low.
- The electoral system in Mexico makes it complicated to implement a quota system, because the majority of the Deputies (300 from 500) and Senators (96 from 128) are elected by plurality vote (in one or three member districts). The rest are elected by a national list (Senators) or regional list (Deputies: five 40-member lists). A new reform of the electoral law (2002) for the mid-term elections made it mandatory that in the party lists for proportional representation, one among every three candidates should be a woman. In addition, the sanctions for non-compliance with the gender quota have been stiffened. As a result, $23 \%$ of the Deputies elected in 2003 were women, up from 16\% in 2000 (Peschard 2003b: 103).
- Because of the electoral system (proportional) and the district size, we expected a better compliance with the gender quota in Paraguay which was not the case. Probably the explanation consists in the fact, that there are no sanctions for noncompliance.
Uruguay has no quota system. There are no great differences with respect to the electoral systems for both chambers (proportional). More important is the different size of the two chambers (99 against 31). As a result, in the Uruguayan parliament the percentage of women is low, with little difference between the two chambers.

The electoral rules for the Latin American Senates (as well as the minor size of this chamber) do not favor the election of women to the Second Chambers. In seven out of nine Latin American countries the percentage of women is lower in the Senate than in the Chamber of Deputies. Therefore, gender quotas seem to have had less influence on the representation of women in the second chamber. However, the comparison of Argentina, Bolivia and Mexico,
which have similar electoral systems for the Senate, demonstrates that the effect of gender quota ultimately depends on the specific instructions and the implementation of the quota laws.

## 6. Conclusions: Are Two Chambers Better Than One?

Most Latin American citizens are not satisfied with the way democracy works in their countries. Bicameral systems may have a positive effect on the quality of democracy, because they provide the possibility of a richer and more complete representation. We have shown that the two chambers in Latin American bicameral systems feature different principles of representation. But this premeditated institutional design can produce negative side effects. In a region characterized by a relatively high level of malapportionment in the first chamber (compared to other world regions), the second chamber reinforces the malapportionment in parliament (in six of nine countries). In addition, in a worldwide comparison, Latin American Senates receive the highest malapportionment scores. There are only three Latin American cases which diverge from this trend, because the Senators are elected by proportional representation in national lists. Yet, electoral distortions are not restricted to the issue of legislative districting. As a general trend, representation is much more disproportional in the upper chamber than in the lower house. Moreover, the differences in the electoral systems and district magnitudes for both chambers make it more difficult for women to win a seat in the Senate. However, as the Argentine case demonstrates the effect of gender quota ultimately depends on the specific implementation rules and execution of the quota laws. Bicameralism is certainly not to blame for the negative perceptions of democracy in Latin America, but equally, it is possible that bicameralism does not contribute to the quality of democratic representation.

## Bibliography

Alcántara, Manuel; García, Mercedes; Sanchez, Francisco (2005): Funciones, procedimientos y escenarios: un análisis del poder legfisdlativo en América latina. Salamenca: Ediciones Universidad de Salamanca.

Anastasia, Fátima; Melo, Carlos Ranulfo; Santos, Fabiano (2004): Governabilidade e representação política na América do Sul. São Paulo: Fundação editora da UNESP.

Araujo, Clara (2003): Quotas for Women in the Brazilian Legislative System, in: IDEA, 1.c., pp. 72-87.

Carey, John M. (2003): Presidentialism and Representative Institutions, in: Dominguez, Jorge I.; Shifter, Michael (eds.), Constructing Democratic Governance in Latin America, Second edition, Baltimore and London: Johns Hopkins University Press, pp. 11-42.

CERC (2004): Informe de Prensa. Confianza en las Personas, las Instituciones y las Élites. 26 abril de 2004, Santiago de Chile.

Corporación Latinobarómetro (2005): Informe Latinobarómetro 2005. Santiago de Chile.
Costa Benavides, Jimena (2003): Women's Political Participation in Bolivia, in: IDEA, l.c., pp. 104-110.

Cotta, Maurizio (1974): A Structural-Functional Framework for the Analysis of Unicameral and Bicameral Parliaments, in: European Journal of Political Research, 2, pp. 201-224.

Evans, Harry (ed.) (2000): Odger's Australian Senate Practice. Electronic Edition, www.aph.gov.au/Senate/pubs/Html/index.htm

Gallagher, Michael (2001): Proportionality and Disproportionality, in: Rose, Richard (ed.), International Encyclopedia of Elections, London: Macmillan, pp. 238-241.

Gibson, Edward L. (ed.) (2004a): Federalism and Democracy in Latin America. Baltimore and London: The Johns Hopkins University Press.

Gibson, Edward L. (2004b): Federalism and Democracy: Theoretical Connections and Cautionary Insights, in: Gibson, Edward L. (ed.) (2004a), 1.c., pp. 1-28.

Gray, Tricia (2003): Electoral Gender Quotas: Lessons from Argentian and Chile, in: Bulletin of Latin American Research, 22.1, pp. 52-78.

Huneeus, Carlos (2003): Chile un país dividido. La actualidad del pasado. Santiago de Chile: Catalonia.

IDEA (2003): The Implementation of Quotas: Latin American Experiences. Workshop Report. Stockholm: IDEA.

Lijphart, Arend (1994): Electoral Systems and Party Systems. Oxford: Oxford University Press.

Lijphart, Arend (1999): Patterns of Democracy. Government Forms and Performance in Thirty-Six Countries. New Haven: Yale University Press.

Llanos, Mariana; Nolte, Detlef (2003): Bicameralism in the Americas: Around the Extremes of Symmetry and Incongruence, in: Journal of Legislative Studies, 9.3, pp. 54-86.

Llanos, Mariana; Sánchez, Francisco (2004): Councils of Elders? The Senate and its members in the in the Southern Cone. Arbeitspapier des Instituts für Iberoamerika-Kunde Nr. 17, Hamburg: Institute for Ibero-American Studies.

Lubertino, María José (2003): The Argentina Experience and Beyond, in: IDEA, 1.c., pp. 32-41.
Monroe, Burt (1994): Disproportionality and Mal apportionment: Measuring Electoral Inequity, in: Electoral Studies, 13.2, pp. 132-149.

Navarro, Marc (2004): Intereses subestatales en legislativos bicamerales: sobre la cooperación interinstitucional en entornos descentralizados, in: América Latina Hoy, 38, pp. 57-76.

Nolte, Detlef (2003): Funciones y funcionamiento de los Senados en los sistemas bicamerales de América Latina: un enfoque comparado, in: Res Pública, $\mathrm{N}^{\circ} 3$, pp. 9-61.

Nolte, Detlef (2004): Pautas de orientación socioeconómica y perfil ideológico de los senadores en el Cono Sur, in: América Latina Hoy, Vol. 38, pp. 101-123.

Norris, Pippa (2001): Women: Representation and Electoral Systems, in: Rose, Richard (ed.), International Encyclopedia of Elections, London: Macmillan 2001, pp. 348-351.

Norris, Pippa (2004): Electoral Engineering. Voting Rules and Political Behavior. Cambridge: Cambridge University Press.

Patterson. Samuel C.; Mughan, Anthony (eds.) (1999): Senates. Bicameralism in the Contemporary World. Columbus, OH: Ohio State University Press.

Payne, J. Mark et al. (2002): Democracies in Development. Politics and Reform in Latin America. Washington, D.C.: Johns Hopkins University Press.

Peschard, Jacqueline (2003a): The Quota System in Latin America: General Overview, in: IDEA, 1.c., pp. 20-28.

Peschard, Jacqueline (2003b): Quota Implementation in Mexico, in: IDEA, 1.c., pp. 102-103.
PNUD (2004): La Democracia en América Latina. Hacia una democracia de ciudadanos y ciudadanas. Lima: PNUD.

Riescher, Gabriele; Sabine, Ruß; Haas, Christoph M. (eds.) (2000): Zweite Kammern. München and Wien: Oldenbourg.

Riker, William (1992): The Justification of Bicameralism, in: International Political Science Review, 13.1, pp. 101-116.

Rogers, James R. (2001): An Informational Rationale for Congruent Bicameralism, in: Journal of Theoretical Politics, 13.1, pp. 123-151.

Russell, Meg (2001): What are Second Chambers For?, in: Parliamentary Affairs, 54, pp. 442-458.
Samuels, David; Snyder, Richard (2001): The Value of a Vote: Malapportionment in Comparative Perspective, in: British Journal of Political Science, 31.4, pp. 651-671.

Sánchez, Francisco (2004): Cámaras diferentes, partidos iguales: los partidos políticos en los bicameralismos, in: América Latina Hoy, Vol. 38, pp. 77-100.

Sánchez, Francisco; Llanos, Mariana; Nolte, Detlef (2005): Bicameralismo, Senados y senadores en el Cono Sur latinoamericano. Barcelona: Parlament de Catalunya/ICPS.

Schiavon, Jorge A. (2004): Bicameralismo, configuración institucional y partidaria en América Latina: un modelo de puntos y jugadores con veto para explicar la provisión e políticas públicas, in: Foro Internacional, 54.1, № 175, pp. 126-149.

Schmidt, Gregory D. (2003): Unanticipated Success: Lessons from Peru's Experiences with Gender Quotas in Majoritarian Closed List and Open List PR Systems, in: IDEA, 1.c., pp. 120-133.

Schüttemeyer, Suzanne; Sturm, Roland (1992): Wozu Zweite Kammern? Zur Repräsentation und Funktionalität Zweiter Kammern in westlichen Demokratien, in: Zeitschrift für Parlamentsfragen, 23.3, pp. 517-536.

Shell, Donald (1998): The Second Chamber Question, in: Journal of Legislative Studies, 4.2, pp. 17-32.

Shugart, Matthew Soberg; Haggard, Stephan (2001): Institutions and Public Policies in Presidential Systems, in: Haggard, Stephan H.; McCubbins, Mathew D. (eds.), Presidents, Parliaments, and Policy, Cambridge, pp. 64-104.

Snyder, Richard; Samuels, David (2001): Devaluing the Vote in Latin America, in: Journal of Democracy, 12.1, pp. 146-159

Snyder, Richard; Samuels, David (2004): Legislative Malapportionment in Latin America: Historical and Comparative Perspectives, in: Gibson, Edward L. (ed.) (2004a), 1.c., pp. 131-173.

Stepan, Alfred (2004a): Toward a New Comparative Politics of Federalism, Multinationalism, and Democracy: Beyond Rikerian Federalism, in: Gibson, Edward L. (ed.) (2004a), 1.c., pp. 29-84.

Stepan, Alfred (2004b): Electorally Generated Veto Players in Unitary and Federal Systems, in: Gibson, Edward L. (ed.) (2004a), l.c., pp. 323-362.

Swenden, Wilfried (2004): Federalism and Second Chambers. Regional Representation in Parliamentary Federations: the Australian Senate and German Bundesrat Compared. Brussels: P.I.E.-Peter Lang.

Thompson, Elaine (1999): The Senate and Representative Democracy, in: Papers on Parliament No. 34, Chapter 3, Canberra: Parliament of Australia, www.aph.gov.au/Senate/pubs/pops/Pop\ 34/chapter3.htm.

Tsebelis, George; Money, Jeannette (1997): Bicameralism. Cambridge: Cambridge University Press.

Valenzuela, Arturo (2004): Latin American Presidencies Interrupted, in: Journal of Democracy, 15 (4), pp. 5-19.

## WORKING PAPERS Global and Area Studies

Edited by the German Overseas Institute (DÜI) in Hamburg.

## Recent issues:

No 10 Joachim Betz: Die Institutionalisierung von Parteien und die Konsolidierung des Parteiensystems in Indien. Kriterien, Befund und Ursachen dauerhafter Defizite [The Institutionalisation of Parties and the Consolidation of the Party System in India. Criteria, State and Causes of Persistent Defects]; October 2005

No 9 Dirk Nabers: Culture and Collective Action - Japan, Germany and the United States after September 11, 2001; September 2005

No 8 Patrick Köllner: The LDP at 50: The Rise, Power Resources, and Perspectives of Japan's Dominant Party; September 2005

No 7 Wolfgang Hein and Lars Kohlmorgen: Global Health Governance: Conflicts on Global Social Rights; August 2005

No 6 Patrick Köllner: Formale und informelle Politik aus institutioneller Perspektive: Ein Analyseansatz für die vergleichenden Area Studies [Formal and Informal Politics from an Institutional Perspective: An Analytical Approach for Comparative Area Studies]; August 2005

No 5 Ruth Fuchs: ¿Hacia una comunidad regional de seguridad? Las Fuerzas Armadas en la percepción de las elites parlamentarias en Argentina, Chile, Brasil, Uruguay y Paraguay [Moving towards a Regional Security Community? The Armed Forces in the Perception of Parliamentary Elites in Argentina, Chile, Brazil, Uruguay y Paraguay]; July 2005

No 4 Andreas Mehler: Major Flaws in Conflict Prevention Policies towards Africa. The Conceptual Deficits of International Actors' Approaches and How to Overcome Them; June 2005

No 3 Susan Steiner: Decentralisation and Poverty Reduction: A Conceptual Framework for the Economic Impact; June 2005

No 2 Bert Hoffmann: Emigration and Regime Stability: Explaining the Persistence of Cuban Socialism; June 2005

No 1 Matthias Basedau: Context Matters - Rethinking the Resource Curse in SubSaharan Africa; May 2005

All Working Papers are available as pdf files free of charge at www.duei.de/workingpapers. For any requests please contact: workingpapers@duei.de.
Editor of the Working Paper Series: Bert Hoffmann.


[^0]:    1 This article is part of a larger research project on the functions and functioning of the Senates in Latin American bicameral systems which at the Institute of Ibero-American Studies in Hamburg, with the financial support of the Deutsche Forschungsgemeinschaft (DFG).The project includes a survey of 147 Latin American senators. Other publications of this project are available on the Internet (www.duei.de/iik/show.php/de/content/forschung/kammer.html). The German Academic Exchange Servie (DAAD) funded a research stay in Salamanca. We presented a first draft. We thank the participants of the workshop "Elections and democracy in Latin America" at the ECPR Joint Sessions of Workshops (Granada, 14-19 April 2005) for their comments, especially Jorge Gordin, Gabriel Negretto and Pär Zetterberg, as well as our colleagues in Hamburg, Mariana Llanos and Fabrice Lehoucq; and in Salamanca: Pilar Domingo, Leticia Ruiz, Araceli Mateos, Patricia Marenghi, Mercedes García Montero and Manuel Alcántara.

[^1]:    2 As far as we know, Chile is the only country where we can fall back on surveys differentiating between both houses of Parliament (CERC 2004: 7; Huneeus 2003: 212-213). The time series show no difference with respect to the confidence in the Senate or the lower house/Senators or Deputies. This is a surprising result, because Chilean Senators display a high self-esteem. For many politicians the Senate is the final step in their political career. But, apparently citizens do not differentiate in the evaluation between both chambers. Conceivably, the non-elected Senators have a negative influence on the evaluation of the upper house.

[^2]:    3 Consult, for instance, Cotta (1974), Riker (1992), Schüttemeyer \& Sturm (1992) ), Tsebelis \& Money (1997), Shell (1998), Patterson \& Mughan (1999), Riescher, Ruß \& Haas (2000), Rogers (2001), Russell (2001), Nolte (2003).

[^3]:    4 This is the case of the Australian Senate. "As a consequence of the 1948 proportional method of electing Senators, it does so in a fashion which more accurately reflects the state of electoral opinion in the nation. It corrects dysfunctions of the single member electoral system used for choosing the House of Representatives and thereby provides parliamentary representation for individuals and parties with significant voter support, which would be otherwise unrecognised in parliamentary terms except where such support is geographically concentrated" (Evans 2000: chapter 1.5).
    5 Arend Lijphart $(1984,1999)$ was the first to construct an index to measure the strength of bicameralism based on these two dimensions. Most other authors who explore the strength of bicameralism base their analysis on the original or a refined version of Lijpharts' model. See for example, Anastasia, Melo \& Santos (2004), Navarro (2004), Schiavon (2004), Swenden (2004). In the tradition of Lijphart in another study (Llanos \& Nolte 2003) we constructed an analytical tool to evaluate the strength of bicameralism in Latin America.
    6 In Chile, nine of 47 Senators were not elected by popular vote but appointed by different political institutions (President, Supreme Court, National Security Council). Moreover, the former presidents (if they served a mandate of six years) are lifetime senators. A reform of the Constitution abolished appointed and lifetime senators in 2005. Former presidents are also members of Parliament in some other Latin American countries, for example in the Paraguayan Senate.

[^4]:    7 In the Chilean case at first, each of the thirteen administrative units (regions) of the country should elect two senators without regard to the population of each region. Later the six most populous regions have been divided in two circumscriptions. However, there is still a great difference among the circumscriptions in the numbers of votes necessary to elect a senator.

[^5]:    8 Most of the survey data are published in Sánchez, Nolte \& Llanos (2005). For comparison of the perceptions of senators and deputies we also used data from the project "Elites Parlamentarias Latinoamericanas" of the University of Salamanca.

[^6]:    9 In effect, the size of the second chambers has an influence on the chances of different political parties to win a seat. If there are many districts, the likelihood that representatives of parties with a local or regional stronghold will be elected grows. On the other hand, if the Senate is elected in one national district (with proportional representation), the size of the second chamber has an influence on the effective threshold to elect representatives.
    ${ }^{10}$ "If the composition of the two chambers would be identical or nearly so, then the argument against bicameralism on the grounds of waste and duplication is more compelling, and any argument about the effects of unicameralism on the effectiveness of checks and balances .... Is less so." (Carey 2003: 28)
    ${ }^{11}$ In a recently published book on federalism in Latin America, one of the authors complains: "The norm 'of one person, one vote' is the most invoked and exalted norm of democratic theory, and the most violated norm of democratic practice. This is due not only to illegal manipulations by nefarious authoritarians, but to constitutional design by revered 'founding fathers' wary of potential excesses from majority rule as well." (Gibson 2004b: 15)
    12 A Chilean politician recently argued: "El bicameralismo es parte del pasado, y salvo en los sistemas federales, no se justifica realmente, demora los procesos legislativos, genera un gasto innecesario y al final de cuentas debilita la fuerza del Parlamento como institución. Dos cámaras se traducen en dos opiniones, esa división obviamente debilita sus posiciones en favor del Ejecutivo. Esto es una cuestión central, si se asume realmente la necesidad de fortalecer el rol del Parlamento hay que pasar decidamente al unicameralismo." (Mártinez 2004).

[^7]:    13 "In a malapportioned system, all citizens can enjoy a free and equal opportunity to formulate and signify their preferences, but they are denied the opportunity to have their preferences weighed equally." (Samuels \& Snyder 2001: 150).
    14 Yet a regressions analysis corroborates that upper chambers in federal systems are significantly more malapportioned than second chambers in non-federal systems (Samuels \& Snyder 2001: 666-667).
    15 Regression analysis of a worldwide sample showed a significant correlation between malapportionment and a regional factor "Latin America" (Samuels \& Snyder 2001: 664-666).

[^8]:    ${ }^{16}$ Samuels \& Snyder (2001) use a modified version of the Loosemore-Hanby index of electoral disproportionality The malapportionment index is the sum of the absolute differences between each districts' seat and population shares (in percent) divided by 2.
    ${ }_{17}$ The data do not measure whether the malapportionment in the two chambers, if there is any, reinforces or cross-cuts the differences between different territorial units.

[^9]:    18 This index was developed by Laakso-Taagepera: the seat shares of each party represented in Parliament were squared and than added. Subsequently 1 is divided by this value.

[^10]:    19 In Argentina we included only the 2001 elections. After a reform of the constitution (1994), for the first and only time, all Senators were elected at the same time. Thereafter, there would be a partial renewal of a third of the Senate every two years.
    ${ }_{20}$ In 1999 were elected 38, in 1993 18, in 1997 20, and in 2001 again 18 Senators. Moreover, because the Chilean binominal system functions on the basis of nationally designed party lists (for the different districts) that in the case of the governing Concertación-coalition list include more than two parties. Therefore not all parties can present candidates in all binominal districts.

[^11]:    21 For a discussion of the different measures of proportionality/disproportionality and their advantages or disadvantages see Lijphart (1994: 57-62); Monroe (1994); Gallagher (2000).
    22 The Loosemore-Hanby index is the sum of the absolute differences between vote percentages and the seat percentages of the parties divided by 2 .
    ${ }^{23}$ The Rae index is calculated as the sum of absolute differences between the vote percentages and the seat percentages of the parties divided by the number of parties.
    24 The Gallagher index is calculated as the sum of the squared differences between the vote percentages and the seat percentages of the parties divided by 2 . Finally the square root of this value is taken.

[^12]:    25 See IPU, Women in National Parliaments. World Classification (www.ipu.org/wmn-e/classif.htm).

[^13]:    26 According to the 1994 constitutional reform and after a long transition period, since 2001 all senators are elected by popular vote. Before the reform, they were elected by provincial Parliaments. In the Chamber of Deputies, the implementation of a gender quota started in 1993. The percentage of women elected to the Chamber of Deputies rose from on average of $4.2 \%$ in the period 1983-1991 to $21.3 \%$ in 1993, $27.7 \%$ in 1995 and 29.6\% in 1999 (Gray 2003: 61-62).

