MANNHEIMER ZENTRUM FÜR EUROPÄISCHE SOZIALFORSCHUNG



Political Feasibility and Economic Efficiency: Do Institutions Matter?

The Case of Agricultural Policies and – Accession in the Slovac Republic

Christian H. C. A. Henning

Arbeitsbereich II / Nr. 20 Mannheim 1998

ISSN 0948-0080

Arbeitspapiere

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Christian H.C.A. Henning: Political Feasibility and Economic Efficiency : Do Institutions Matter? The Case of Agricultural Policies and EU-Accession in the Slovac Republic. Mannheimer Zentrum für Europäische Sozialforschung (MZES). Mannheim, 1998 (revised version). (Arbeitspapiere Arbeitsbereich II / 20) ISSN 0948-0080

Deckblattlayout: Uwe Freund

Nicht im Buchhandel erhältlich Schutzgebühr: DM 5,--Bezug: Mannheimer Zentrum für Europäische Sozialforschung (MZES), Postfach, 68131 Mannheim

Redaktionelle Notiz:

Dr. Christian H.C.A. Henning war wissenschaftlicher Mitarbeiter am Mannheimer Zentrum für Europäische Sozialforschung (MZES) in dem von der DFG-geförderten Forschungsprojekt 'Policy Network Analysis of the Common Agricultural Policy' (NACAP). Das vorliegende Arbeitspapier ist im Rahmen des PHARE-Projektes 'Evaluation of consequences of an accession of the Slovak Republic into the EU on the competitveness of the Slovak food processing industry' entstanden, in dem Dr. Henning im Jahr 1997 als Consultant tätig war. Darüber hinaus profitierte das Papier von den Erfahrungen, die Herr Henning als Leiter des FAO-Projektes 'A Strategy for Agricultural and Rural Adjustment in Slovakia' (FAO/TCP.4552) in den Jahren 1996/97 machte.

Editorial Note:

Dr. Christian H.C.A. Henning has been research fellow at the MZES in a research project on 'Policy Network Analysis of the Common Agricultural Policy' (NACAP), financed by the 'Deutsche Forschungsgemeinschaft'.

The political feasibility study presented in this working paper has been undertaken in the course of the PHARE-project "Evaluation of consequences of an accession of the Slovak Republic into the EU on the competitiveness of the Slovak food processing industry", in which Dr. Henning participated as a policy consultant in 1997. Moreover, the paper gained much from the experiences Dr. Henning could make during his work as the team leader of the FAO-project "A Strategy for Agricultural and Rural Adjustment in Slovakia" (FAO/TCP-4552) in 1996/97.

Abstract

The political feasibility study presented in this working paper has been undertaken in the course of the PHARE-project "Evaluation of consequences of an accession of the Slovak Republic into the EU on the competitiveness of the Slovak food processing industry". The main objective of the PHARE-project was to identify the adjustment problems faced by the food-processing industry in the Slovak Republic when joining the EU and to elaborate on the best strategies in dealing with approaching competition from the EU food industry subject to the restrictions imposed by GATT. The main scope of the study at hand was to analyze to what extent economically efficient agricultural policies are politically feasible, i.e. will actually be implemented in the given Slovakian politico-economic system. In particular, the analysis consists of an evaluation of the political feasibility and implementation requirements of reforms economically needed by the processing industry given the present structure of the Slovakian politico-economic system. In addition, it has been analyzed to what extent EU-accession can be considered as a second-best policy leading to sub-optimal results from an economic point of view in comparison to first-best policies. However, being politically feasible it can thus be considered just as preferable as first-best policies, which are found to be politically infeasible. Moreover, specific changes of structural or institutional conditions of the political sector have been identified which shift the politico-economic equilibrium towards first-best policies.

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1 Introduction

1.1 Scope

The political feasibility study has been undertaken in the course of the PHARE-project "Evaluation of consequences of an accession of the Slovak Republic into the EU on the competitiveness of the Slovak food processing industry". The main objective of the PHARE-project was to identify the adjustment problems faced by the food processing industry in the Slovak Republic on joining the EU and to elaborate on the best strategies in dealing with approaching competition from the EU food industry subject to the restrictions imposed by GATT. Special importance was given to an evaluation of the necessary changes to structure, conduct and performance of the domestic food industry and to the development of feasible strategies that should have already been implemented by the specific branches by the time of accession. While economic analysis focuses on the identification of accession policies which are economically efficient, i.e. correspond in a pure theoretical manner to an optimal growth path of domestic GDP, the scope of the study here is to analyze to which extent economically efficient policies are politically feasible, i.e. will actually be implemented in a given politico-economic system. In particular, the analysis will consist of an evaluation of the political feasibility and implementation requirements of economic reforms needed by the processing industry given the actual structure of the Slovakian politico-economic system. It seems that the necessary reforms of the food sector could be seriously impaired should the current position of managers or the role state enterprises play in the political environment of the country examined be neglected. In this context, it should be analyzed to which extent second best policies exist which lead to sub-optimal results from an economic point of view in comparison to first best policies, but are politically feasible and thus overall seem preferable to first best policies which are found to be politically infeasible. Finally, specific changes of structural or institutional conditions of the political sector should be identified which shift the politico-economic equilibrium towards first best policies.

A practical appraisal of the political feasibility of carrying out the reforms will be made on the basis of the network-analytical approach to policy-decision-making (Coleman, 1990; Pappi et al., 1995; Knoke et al., 1995; Henning, 1994 u. 1995). This analysis will take into consideration specific characteristics of the Political Sector, such factors as institutional and constitutional procedures of political decision making, structural relations such as the number of non-governmental organizations searching access to the governmental organizations and thus participating formally or informally in the legislative decision making or policy implementation process.

1.2 Structure

The presentation of results is structured as follows. In chapter 2 the general political framework conditions of the Slovakian agricultural policy domain will be described. In detail, a short overview of the historical development followed by a description of the Slovakian constitutional including relevant institutional decision procedures will be presented. Moreover, chapter 2 provides an descriptive analysis of the Slovakian party system. In chapter 3 the concrete structures of the Slovakian agricultural policy domain are analyzed. These analyses include the present agricultural policy regime as well as basic institutions and procedures in agricultural policy. Finally, the most relevant non-governmental organizations operating in the agricultural policy domain are presented. The core of the analyses presented in this study are presented in chapter 4. In detail, a political exchange model will be derived and applied empirically to analyze both the political feasibility and economic efficiency of different agricultural policies and various EU-accession strategies. Essentially, the applied approach models the final political decision as the outcome of control exchange processes among politicians formally participating in political decision making and interest groups supplying political support to politicians.

Basic inputs of the political exchange model are actor's political control and his or her preferred policy position regarding relevant policy concerns, like welfare of rural households or farm structure, driving agricultural decision making. Furthermore, policy concerns are related with concrete agricultural policy regimes according to an estimated political technology.

Finally, comparative static simulation analyses of the politico-economic equilibrium have been undertaken to analyze the impact different institutional settings and lobbying structures have on the political feasibility of an Slovakian EU-accession and an implementation of an optimal transition policy in the agricultural sector.

2 General Political Framework Conditions

2.1 Historical Development¹

Slovakia is a landlocked (nation) country in the middle of Europe surrounded by Austria, Czech Republic, Poland, Hungary and Ukraine. Slovakia covers a total geographic area of 49 Mio km² and has a population of 5.3 Mio. Slovakian territory has been settled by Slovaks since the 5th century. From the 10th to the 19th century the Slovakian territory belonged to the Austrian-Hungarian empire. In 1918 the Czechoslovakian Republic was founded, which during World War II was partly annexed by the Germans and only after World War II was the Czechoslovakian Republic re-established. In 1948 the communist party came into power and integrated the Czechoslovakian Republic into the political hegemony of the Soviet Union. It was only in 1968 that internal pressure for reforms within the communist party of Czechoslovakia led to an temporary implementation of democratic elements in the socialistic system (Prager Frühling) which were then eliminated by the military intervention of the Warsaw Pact. Nevertheless a small group of reformers, the so-called Charta 77 remained politically active in the 70tens and 80tens.

In 1989 the political protest and reform movement grew analogously to other Central and Eastern European countries and finally resulted in the implementation of a transition process from the former socialistic system to a democratic market economy. From the beginning of transition both the Czech and Slovakian Republic discussed ways of taking the optimal reform course, which finally became irreconcilable, especially with regard to the speed of economic reforms. Therefore, the parliaments of the Czech and Slovakian Republic approved a common resolution to dissolve the Federation and created two separate states beginning 1. January 1993.

In the first year of independence the political situation was insatiable. After the first national elections in Slovakia in 1994 a multi-party government came into power comprising of the MDS, the party corresponding to the original reform movement "Public against Violence (PVA) with premier minister Meciar and the two extreme left wing and right wing parties, WAS and SNS, respectively. Although keeping to existing divergences regarding the speed of reforms, the Slovakian government managed to produce a relative stable and efficient macro-economical policy framework.

In 1990 the Czechoslovakian government for the first time expressed it's willingness to join the EU. This expression was given a concrete form in 1992, when Czechoslovakia signed an association agreement with the EU. After separation the Slovakian government took over all political commitments and rights resulting from the association agreement. In June 1995 the Slovak Republic applied for a full membership of the EU.

2.2 Constitutional Framework

The Slovak Republic (SR) is a parliamentary democracy. According to the constitution of the SR, state organs can be separated into the following:

- i) National Council (Parliament)
- ii) The Government
- iii) The President
- iv) The Constitutional Court
- v) The Supreme Control Board

¹ This part basically corresponds to Agenda 2000, European Commission, DOC/97/20.

2.2.1 The National Council

The structure, functions and competence of the National Council (NC) are specified in Part V. articles 72-92 of the constitution of the SR.

2.2.1.1 Organizational Structure

• 2.2.1.1.1 Members of the Parliament (MP's)

The status and competences of the MP's are regulated in art. 73-81 of the constitution. The parliament of the SR is a single chamber comprising of 150 directly elected MP's. Elections of the MP's of the NC take place every 4 years. The MP's have a free mandate and observe immunity. MP's are not to take the place of the president of the SR, become a member of the government, a judge, a public prosecutor or hold positions in other executive or judicature bodies of the SR.

• 2.2.1.1.2 The Plenum and Parliamentary Comittees

The committees are regulated in article 92. The NC is a so-called working parliament, i.e. it is subdivided into various committees and subcommitees, where the main parliamentary work is done, e.g. working out of legislative proposals. Final decisions on legislative acts are drawn by the Plenum comprising of all 150 MP's after the submissions of the committees. Committees are organized corresponding to ministry departments. According to the constitution of the NC each committee should comprise of members of the different parliamentary groups corresponding to their share of seats held in the NC. Chairmen of the committees are elected by the MP's.

• 2.2.1.1.3. Constitution, Dissolution and Quorum and Majority Rule of the National Council

The constituent assembly of the NC is announced by the President within 30 days after elections have taken place. If the president refrains from announcing the constituent assembly, the NC assembles on the 30th day after elections (article 82).

The NC can be dissolved (a) by the president if the parliament has approved a motion of no confidence three times in the first six month after parliamentary elections or (b) at any time by a three fifths majority of all MP's (article 83).

The NC has a quorum if 50 percent of the MP's are present. In general legislative acts are approved by simple majority, i.e. if 50 percent of the present MP's agree. A qualified majority of three fifth of all MP's, i.e. 90 MP's, is needed to approve or change the constitution and to elect or recall the President or to dissolve the NC (article 84).

2.2.1.2 Functions

Corresponding to the constitutional type of a parliamentary democracy, the National Council is the central legislative organ and the role of all other state organs is derived from it. Overall, the activity of the NC can be subdivided into:

- 1. Exercising legislative power
- 2. Election of other state organs, i.e. Government, President and Constitutional Court.
- 3. Control of other state organs and their administries

• 2.2.1.2.1.Legislative Decision Procedures

A. Regular legislative decision procedure

Regular legislative decision procedure includes the following steps.

1. Legislative Initiative (article 87 (1)):

A bill can be proposed by the Government, by committees of the NC and by MP's;

2. Parliamentary decision procedure (article 84):

- After a bill has been proposed to the NC, the chairman of the NC forwards it to the relevant committee(s). After the committee has worked out the proposal it is presented to the Plenum, which makes a legislative decision in a 1. Reading. The proposal is approved by a simple majority;
- 3. Suspensive Veto of the President (article 87 (3,4):
- After a proposal has passed the NC, the President has a suspensive Veto, i.e. the President can call for a 2. reading after the Parliament has approved a legislative measure in a 1. reading, but the NC can override the veto by simple majority;
- 4. Promulgation of legislative measures:
- An approved legislative measure has to be signed by the chairman of the NC, the President and the Prime Minister. It comes into force by promulgation.

B. Special legislative procedures

Motion of no confidence

(Part V, section 1, article 88)

A motion of no confidence towards the government has to be decided by the NC if at least one fifth of the MP's support the motion. A motion of no confidence is approved by absolute majority, i.e. more than 50 percent of all MP's. If a motion of no confidence is approved the President recalls the government and nominates a new Prime Minister.

Vote of confidence

(Part VI, section 2, article 114)

The government can at any time demand a vote of confidence by the NC. The vote of confidence can also be combined with a vote on a bill proposed by the government.

Referendum

(article Part V, section 2, article 93-100)

In specific cases the President has to carry out a referendum to approve a legislative decision. This is the case a) when the Parliament decides to carry out a referendum or b) when at least 350 000 citizens support a petition. An exception from this rule are legislative measures regarding civil rights, tax legislation's or budget items for which no referendum can be carried out. Moreover, a referendum has to be carried out to confirm constitutional changes and when accessing or exiting from a confederation.

2.2.1.3 Election and Establishment of Other State Organs

According to article 86 of the constitution the NC elects the following state organs:

- The President of SR: The NC elects and recalls the President of the SR. To elect or recall a President a three fifth majority of all MP's is needed (article 84(3));
- The judges, the chairman and the deputy-chairman of the Supreme Court of the SR: The judges of the Supreme Court are elected by an absolute majority proposed by the government.
- The chairman and deputy-chairman of the Supreme Control Board;

Moreover, the NC participates in the nomination of the judges of the Constitutional Court and establishes ministries or other organs of state administratives.

2.2.1.4 Control of Other State Organs

According to article 86 of the constitution the NC controls and advises the government. Besides the vote of no confidence and the right to establish ministries control instruments of the NC vis-à-vis the government also include the right of the MP to ask a question towards the government, a single minister or a central administrative body. The government or a single minister or the administrative body is obliged to answer the question within 30 days. Moreover, the NC approves the State budget and thus implicitly controls the activity of the government and discusses the policy program of the government.

2.2.2 The Government

The organizational structure and competences of the government of the SR is specified in Part VI, section 1 articles 108 - 123.

2.2.2.1 Organizational Structure

• 2.2.2.1.1 Prime Minster, Ministers and Ministries

The government is a collective state organ consisting of the Prime Minister, the Vice-Prime Minister and the Ministers. A member of the government is not allowed to be a member of the NC, a judge nor to practice any other occupation. The central administrative bodies of the Government are the Ministries.

• 2.2.2.1.2 Nomination, Quorum and Majority Role of the Government

The Prime Minister is nominated by the President. The Ministers, who are suggested by the Prime Minister are nominated by the President. After nomination the Government is committed to present their governmental policy program to the NC and to demand a vote of confidence. The government is generally responsible vis-à-vis the NC. Ministries and other bodies of state administration are established by legislative acts of the NC (see above).

The government is a collective body which is nominated by simple majority. The government has a quorum if more than 50 percent of it's members are present.

2.2.2.2 Functions

According to the constitution (Part VI, section 2 article 108) the government is the supreme body exercising executive power in the SR. Central functions of the Government are:

i) Formulation and implementation of policy program;

ii) Initialization and implementation of legislative measures;

iii) Nomination of state representatives.

In particular the government has the authority to formulate governmental regulations which have the character of legislative measures.

Although according to the constitution the government is considered a collective body (cabinet principal), in political practice the resort principal has often dominated over the cabinet principal, i.e. the ministries have observed relative freedom in formulating and implementing policies regarding their resorts, while a coordination of policies over ministries or a collective policy formulation as foreseen in the constitution rather took place.

2.2.3 The President

The competences and status of the President of the SR is specified in Part VI, section 1 article 101 - 107.

The President of the SR is elected by the NC. The term of office is five years. A candidate is elected by the NC with a qualified majority of three fifths of the MP's. A candidate can be elected for a maximum of two successive periods in a row

The functions and competences of the President comprises the following areas:

- 1. <u>Representation of the Slovak Republic</u>: The President is the head of the state. The President represents the SR in international arenas, e.g. bargaining on international agreements. The president nominates and recalls higher state administratives;
- 2. <u>Participation in legislative power</u>: The President has suspensive veto (see above), he has to sign approved legislative measures and he has to declare and carry out a referendum;
- 3. <u>Participation in executive power</u>: The president is supreme commander of the military forces. He reports on the situation of the SR to the NC;
- 4. <u>Control of other state organs</u>: The President nominates the Prime Minister; has the right to dissolve the NC under specific conditions; has the right to participate in meetings of the NC; has the right to participate and chair the meeting of the government and he has the right to ask for reports of the government or single members of the government.

2.2.4 The Constitutional Court

The organizational structure, functions and competences of the Constitutional Court are specified in Part VII section 1 articles 124 - 140.

2.2.4.1 Organizational Structure

The Constitutional Court consists of 10 judges. The judges are nominated by the President from a set of 20 candidates elected by the NC. The regular office term of a judge is seven years.

Decisions of the Constitutional Court are made by the Plenum. The Constitutional Court can only start a proceeding if a claim has been filed. Depending on the type of proceeding the following parties can file a claim:

- A fifth of the MP's;
- The President of the SR;
- The Government;
- A judicial Court;
- The public prosecutor;
- Any Citizen of the SR.

2.2.4.2 Functions and Competences

The Constitutional Court is an independent body to secure the constitution (Article 124).

In particular, the Constitutional Court has to decide on:

- the compatibility of legislative acts (legislative measures or regulations) with the Constitution;
- disputes over respective areas of competence among state organs;
- claims of citizens regarding the deformation of fundamental citizen rights and freedom by decisions or acts of state organs, state administration or the local community governments.

2.2.5 The Supreme Control Board

The role of the Supreme Control Board is specified in Part III section 2 articles 60 - 63 of the constitution.

According to article 60 in the constitution the main task of the Supreme Court is the control of economic behavior regarding state budget expenditures, state property, private property rights and state receivable. The organizational structure as well as the competences of the Supreme Control Board are not specified in detail in the constitution. In article 61 it is only specified that the Supreme Court consists of a chairman and deputy-chairman both being elected by the NC. Moreover, the Supreme Control Board is committed to report it's results annually to the NC.

2.2.6 Local Government

In part IV article 64 - 71 the organizational structure and competences of the local governments are regulated.

According to article 65 the community is a juristical person that can act politically and financially autonomous under institutionally determined conditions. Organs of the community are the mayor and the district council. Both organs are elected by the citizens of the community. The competence and functions of the local government are mainly located in the area of administration and administrative implementation of legislation.

2.3 Party System and Slovakian Electorate

With circa 78 political parties Slovakia clearly observes a multi-party system. Even if one focuses on the parties represented in the parliament one still has to consider the Slovakian party system as a multi-party system given 7 parties being represented in the NC after election in 1994 (see Chart 1 below).

Although there exists a multitude of political parties, the Slovakian party system can be aggregated into four main categories (see also Hatschikjan, 1994):

- 1. the former communistic party and its successors;
- 2. parties emerging from reform movements of 1989;
- 3. the standard democratic parties;
- 4. one-issue parties.

2.3.1 The Former Communistic Parties

The origin of the former communistic parties is the old communistic party of Czechoslovakia, the KPC. In the first election after the revolution in 1990 the KPC changed both their party leaders as well as their political program. Analogously to the on-going separating tendencies in Czech and Slovak Republic the KPC also separated into two parts, a Czech and a Slovakian communist party which in the beginning remained at least formally a common party. In 1991 the Communist party separated totally and the Slovakian part renamed itself the Party of the Democratic Left (PDL). In the 1994 elections the PDL tried to integrate the left-oriented political forces into a powerful socio-democratic movement building the Common choice coalition together woth the Social Democratic Party of Slovakia (SDPS), the Green Party (GPS) and the Agricultural Movement of the Slovak Republic (AM).

While the PDL clearly tried to change its image as old communist elites and was politically oriented towards a social-democratic ideology, the Worker's Association of Slovakia (WAS) which was established in 1993 identified with the old communist ideology of the past. In the elections to the national parliaments in 1990, the Slovakian KPC received 13.3% of the votes and still was the second strongest political party. This position could be held by the SDL in the 1992 elections, where the SDL received even more votes resulting in 14.4% of seats of the Slovakian parliament. Interestingly, the SDL could not profit from the coalition with other left-wing parties in the 1994 elections. In contrast, with only 10.41% the common choice coalition (CC) received together even less votes then the SDL

alone in 1992. On the other side the anti-reform party WAS could unexpectedly gain 7.34% of the votes (see Chart 1).

2.3.2 Reform Movements

In the Slovak republic the political activities of the "soft revolution" have been mainly supported by the movement "Public against Violence" (PVA) that has been founded by personalities in science and culture. Politically, the PVA was a relatively amorph group with a rather weak organization. Main political goal of the PAV can be seen in the establishment of a democratic federation of the Czechs and the Slovaks. Not at least of its amorph structure as well as its weak organization the PVA separated into various political groups after the first election of 1990. Namely, the "Movement for a Democratic Slovakia" (MDS) which has been founded by Prime Minster Meciar and his followers in March 1991 after he left the PVA. The remaining part of the PVA founded the Civic Democratic Union (CDU) which later was transformed into the Party of the Civic Democrats. The latter the CDP united with the Civic Democratic Party (CDP) in May 1993 and finally merged with Democratic Party (DP) in 1994. The resulting party retained the name Democratic Party (DP). Moreover, the MDS gradually split. Milan Knazko and later also Jozef Moravcik split from the MDS creating the "Alliance of Democrats" and "Alternative for Political Realism", respectively. These two parties finally merge to the Democratic Union (DU) (see figure 1) which gained 8.57% of the votes in the 1994 elections, while the DP failed to attract sufficient number of votes and thus is not represented in the 1994 parliament. The PVA was the strongest political force in Slovakia with 29.3% of votes in the 1990 election. This result was even improved by the MDS in the 1992 elections with 37.26% of the votes for the Slovakian National Council. In contrast, the second successor of the PVA, the CDU was not represented in the Slovakian National Council in 1992. In the first election after independency of the Slovak Republic the MDS lost receiving only 34.96% of votes.

| Parties/Coalitions | Share of Votes gained in election (%) | | | | |
|----------------------|---------------------------------------|-------|-------|--|--|
| | 1990 | 1992 | 1994 | | |
| Communist Parties | | | | | |
| KSC | 13.3% | - | - | | |
| SDL | - | 14.7% | - | | |
| WAS | - | - | 7.34% | | |
| Reform Movements | | | | | |
| PVA | 29.3% | - | - | | |
| MDS | - | 37.3% | 35.0% | | |
| DU | - | - | 8.57 | | |
| CDU | - | <5% | - | | |
| Classical democratic | | | | | |
| Parties | | | | | |
| CDM | 19.2% | 8.8% | 10.08 | | |
| SDPS | <5% | <5% | <5% | | |
| DP | <5% | <5% | - | | |
| One-issue parties | | | | | |
| SNP | 13.9% | 7.93% | 5.4% | | |
| HC | 8.6% | 7.4% | 10.2% | | |
| GSP | <5% | <5% | - | | |
| PPS | - | <5% | - | | |
| AM | - | <5% | - | | |
| Party Coalitions | | | | | |
| CC | - | - | 10.4% | | |

Chart 1: Election results in the Slovak Republic from 1989 to 1994¹

¹ Governmental parties in bold figures

2.3.3 Classical Democratic Parties

This group comprises of conservative parties, i.e. the "Christian-democratic movement" (CDM), the socio-democratic parties, i.e. Socio-Democratic Party of Slovakia (SDPS) and the liberal parties, i.e. the Democratic Party (DP). While the CDM was newly created after the revolution, the SDPS and the

DP existed during the communist period as so-called block-parties as well as before World War II. Despite this long tradition, both the SDPS and the DP have so far never managed to gain sufficient votes to become a member of the NC (see Chart 1). In contrast, the CDM was represented in all three Slovakian parliaments since 1989 with a share of votes of 19.2%, 8.8% and 10.08% in 1990, 1992 and 1994, respectively (see Chart 1).

2.3.4 One-Issue Parties

One issue parties consist of parties representing the interest of ethnic minorities, i.e. the Hungarian Civic Party (HCP) and the Hungarian Christian Democratic Movement (HCDM), both forming the Hungarian Coalition (HC). Moreover, the Green party (GPS) falls into this category focusing it's policy program on environmental issues as well as the Slovak National Party (SPS) which focuses it's policy program on national priorities and attacks against the HC. As national issues played a major role in all post-reform elections the SNP gained sufficient votes in all elections to be represented in the parliament (see Chart 1). The same holds true for the HC, while the GSP was represented as a member of the Common Choice coalition (CC) in parliament for the first time in 1994.

2.3.5 Policy Space of Parliamentary Parties in the 1994 Elections

The relevant policy or ideological dimensions the Slovakian electorate was concerned with changed during the transition process. While the 1990 elections were mainly concerned with the protest against the former communistic regime, the outcome of the elections in 1992 was mainly determined by the policy dimension of the Slovakian independence from the Czech Republic. Moreover, the first enthusiasm for economic and political reforms towards a democratic market economy cooled down significantly, as many people experienced economic cuts and drawbacks resulting from these reforms. This was especially true for Slovakia, which strengthened it's opposition against the big bang strategy of Klaus in the Slovakian electorate. Thus, the optimal speed of reforms played a secondary role in the second election of 1992.

Since independence of the Slovak Republic relevant political parties can be located in the three dimensional policy space. generated by the following dimensions (see figure 1 and also Szomolanyi and Meseznikov, 1995):

1. Optimal economic system and speed of reform:

The ideal positions range from a preference for the old socialistic system (anti-reform position) over a mixed economy (moderate reform position) towards a market economy (strict economic reform position)

- 2. The role of the state:
- The ideal positions can be characterized by an etatistic system with high state interventions in the economy on the one hand versus a pluralistic system with a liberal state, i.e. low state interventions on the other hand.

3. Foreign Political Orientation:

The ideal positions range from a strong nationalistic and protectionistic orientation over a freetrade and liberal orientation towards the international capitalistic system, in particular the EU. Figure 1:Location of Political Parties in Relevant Ideological Space of Slovakian Voters election 1994



Source: Own Estimations on the basis of Szomolanyi and Meseznikov (1995)

According to Figure 1 it follows quite plainly that the classical left-right classification of Slovakian parliamentary parties presented in the literature (see e.g. Szomolanyi and Meseznikov, 1995) does not match with the ideological perception of Slovakian voters. According to classical left-right classification the governmental parties span the full space including the extreme left wing party WAS, the centered party MDS and the extreme right-wing party SNP. According to the ideological space corresponding to the perceptions of Slovakian voters (Figure 1) the governmental parties are relatively close together. Especially, on the third dimension, namely foreign policy orientation, governmental parties are clearly separated from non-governmental parties. Analogously, governmental coalition is connected on the second dimension corresponding to the role of the state. Only with regard to the third dimension, namely the speed of reform processes, other parties such as the Common Choice parties, take positions in-between governmental parties. Thus, as long as the electional impact of the first dimension, the speed of reforms, is not considered to be too high, the multi-party government turns out to be a classical case of a connected minimum winning coalition, a fact that would not reveal using the standard left-right classification of Slovakian parties as presented in the literature.

Note that when given the relative share of votes of the different parties, the majority of Slovakian voters clearly prefers a moderate social-oriented transition policy buffered by a high degree of state interventions in the social and economic sector, i.e. protectionistic measures vis-à-vis a big bang strategy towards an efficient market economy with free trade as originally suggested by Klaus. A further analysis of the electorate of the different parties underlined the fact that the main reason for

these revealed preferences of an average Slovakian voter can be seen in the strong economic cutbacks in rural regions especially in East and Middle Slovakia, as the maximal voter support of the governmental parties, dispite the SNP, could be found in these regions (see Krivy, 1995). In contrast, the reform oriented parties, namely the DU and the CDM, attained their highest results in city centers, especially in Bratislava and Kosice.

Regarding the outlook of future governmental and policy development two statements should be made. Firstly, when forecasting past developments of voters ideological perceptions into the future, it seems rather unrealistic that a significant shift towards a more positive attitude regarding a free-trade market economy will take place in the near future. The main reason for this pessimistic view can be described as follows: Observed economic cutbacks imply a shift of voters ideology towards a preservation of the old economic structures, while policies targeting on the preservation of the often inefficient state sector increase observed economic problems which then in turn leads to further ideological resistance against economic reforms.

Secondly, an alternative pro-reform government also seems rather unrealistic when given the specific structure of the Slovakian party system. Taking the present distribution of parliamentary seats, an alternative multi-party government that includes the standard democratic parties, namely CDM, DU as well as HC and CC, would only be possible if one of the actual governmental parties would join the coalition of standard economic parties. A closer analysis of the ideological space shows that a coalition with the SNP and with WAS seems politically infeasible. The SNP would be absolutely incompatible with the HC regarding the third dimension, i.e. nationalistic issues and the WAS represents the diametrical contra position to the CDM, DU and HC regarding the first and second dimension.

Thus, the only politically feasible alternative would be an over-sized coalition with the MDS. However this coalition bears the danger of a non-parliamentary opposition and policy frustration, especially in the disadvantaged areas of East and Middle Slovakia which in turn might strengthen the nationalistic and anti-reform parties overproportionally. Therefore, a future stable path of Slovakia towards a democratic market economy integrated in the international capitalistic system and the EU, crucially depends on the internal capacity of the MDS to join political forces and to gain electional support for a consistent pro-reform policy. With regard to this point, the establishment of strong economic interest organizations in the non-governmental sector, in particular private entrepreneurs as well as labor interests, which are able to mediate pro-reform policies to the electorate would certainly also make a stable transition path more realistic.

3 Agricultural Policy Domain

In the previous chapters general patterns of the Slovakian political system have been discussed. This chapter is to analyze in more detail the Agricultural Policy Domain conceptualized as the set of political institutions and non-governmental actors being concerned with agricultural policy.

3.1 The Agricultural Policy Process

3.1.1Present Policy Regime

In 1995 the OECD calculated a producer subsidy equivalent of 25% compared to 49% for the EU. Main agricultural policy instruments are direct payments to farmers in disadvantaged areas. These payments are related to soil quality and paid per hectare of farm land. Moreover, premiums are paid for sheep and goat production. Furthermore, subsidies are paid for the purchase of high quality inputs, i.e. certified seeds and breeding animals as well as for investments.

The agricultural price and market policies comprise of intervention purchases, fixing of minimum and maximum prices, quota regimes as well as trade policies, i.e. application of import and export licenses, import tariffs and export. The main subsectors to which price and market policies are applied are milk, sugar, beef, cereals and to a lower extent pork meat, poultry and vegetable and fruits. (for further details see FAO-report, TCP/SLO-4552 volume I and II).

Since the tax reform of 1993 the agricultural sector observes enormous tax alleviation's reducing the overall tax burden from approximately 1.24 billion SK to a minimal amount.

In 1995 total state expenditures on agricultural policies amounted to 7.6 billion SK which corresponds to 16% of total agricultural production (KOM DOC/97/20) and to 61% of total budget of the Ministry of Agriculture (MoA) (FAO-TCP/SLO-4552). 53% of total budget expenditures were direct subsidy payments (systematic subsidies), 18% were subsidies that went into flow inputs and capital goods, while 8.5% were spent for market regulation and export subsidies. Tax releases amount for another 9% of total agricultural expenditures.

Almost all subsidies are directed to agriculture, while agroprocessing received only 450 Mio SK mainly as interest subsidies. Moreover, subsidies are biased against agricultural subsectors, farm types and regions (see FAO-TCP/SLO-4552). Regarding farm types cooperatives received higher subsidies per hectare or employee compared to private trade companies.

3.1.2 Institutions and Procedures²

According to the constitution all agricultural policy proposals have to be approved by the Slovak government and the NC. In political practice the central institution for the formulation and implementation of agricultural policy is the Ministry of Rural Economy (MoA in the following). The Department of Rural Economy integrates four branches of national economy:

- agriculture
- foodstuffs industry
- forestry
- management of water supplies

The Ministry of Rural Economy is headed by the Minister of Rural Economy and comprises of the following departmental units:

- State Secretary (for rural economy, i.e. Minister's deputy)
- Secretariat of the Minister
- Ministry Board
- Commissioner of the Government of the Slovak Republic for the Danube Water System including Dams and Powerplants (Gabèíkovo Nagymaros)

² This part basically corresponds to the legal report of DR. Bandlerova prepared for FAO-TCP/SLO-4552, Vol. II annex 4 (1997).

- Personnel and Education Division
- Inspection Division
- Economy Management Division
- Organization Division (independent)
- Defense Division (independent)
- Rural Policy Section
- Division of Information and Summary Concepts
- Division of Economic Policy
- Division of Science, Research and Energy Resources (independent)
- Law Section
- Legislative Division
- Division of Privatization and Entrepreneurial Schemes
- Division of Land Registers and Adjustments
- Section of Agriculture and Food Industry
- Plant Production Division
- Animal Production Division
- Trade and Foreign Policy Section
- Business Division
- Foreign Relations Division
- Forestry Section
- Forestry Division
- Division of State Control for Forestry and Gamekeeping
- Division of Forestry Economy
- Division for Transformation of Proprietoral Relations (independent)
- Water Management Section
- Division of Watersupply and Sewage
- Division of Water Streams
- Division of Organizational and Technical Development of Water Management

Moreover, to implement market and price policy interventions the following Funds have been established:

- State Fund for Market Regulation (SFMR)
- State Support Fund for Agriculture and Food Industry (SSFAF)
- State Water Management Fund
- State Fund for Forest Improvement

Formally, the Funds operate independently from the MoA since 1996. In political practice these Funds are still subordinated to the MoA.

The pending "Government Proposal for a National Council Act on the Territorial and Legal reorganization of the Slovak Republic" provides changes in administrative arrangement with possible consequences for the above structures. The administrative units of the Slovak Republic will continue to be regions and districts.

Administrative units can also be municipalities exercising state control if in concordance with particular laws. Under the present territorial division Slovakia has 3 regions containing 36 districts. The pending act provides the increase of regions to 8 and districts to 74. The pending government proposal has so far not been approved by the President of the Slovak Republic.

Further departmental institutions of the Ministry of Rural Economy are:

- Institute of Scientific and Technical Information in Agriculture (UVTIP)
- Agency of the Slovak Academy of Rural Management Science
- Agro-Institute of Nitra
- Secondary Agricultural Trade Schools (SOU)
- Agency for Rural Development (ARVI)
- Research institutes, e.g. RIAFE

Manning of the Ministry is relatively laborsaving in comparison with similar European countries: up to 7,668 hectares of agricultural land per Ministry of Agriculture employee, while in Austria the rate is 5,506 hectares per Ministry of Agriculture employee.

The State control of special activities in the department is further provided by the following organizations:

- Land Registry Bureaus
- Land Registry Fund
- State Veterinary Control
- The Institute of State Inspection of Biopreparations and Medicaments
- State Stock Breeding Control
- State Stock Breeding Inspection
- Central Inspection and Examination Institute
- Slovak Agricultural and Food Inspection
- State Testing Board of Agricultural Machinery, Food Machinery and Forestry Machinery

A special position concerning the privatization process in agriculture is held by the Slovak Land Registry Fund and by the Land Registry Bureaus. Slovak Land Registry Fund controls the management of state registered land and of land with nontestified property. It controls land properties whose proprietor is the state and those whose proprietors are not known. It is also the administrator of the state property offered for sale within the privatization process.

3.1.3 Non-Governmental Actors

An important place in the agricultural policy domain is occupied by the *Slovak Agriculture and Food Chamber (SPPK)* which has been constituted under the new economic conditions. It associates 30 professionally oriented unions, associations and leagues. In the following a preselected list of member organizations of the SPPK is presented:

Member organizations of the Slovak Agriculture and Food Chamber (SPPK):

Agricultural Producer

- 1. Union of Agricultural Co-operatives of the Slovak Republic
- 2. Association of Land Owners and Agro-businessmen of Slovakia
- 3. Agricultural Employers Union of the Slovak Republic
- 4. Association of Christian-Democratic Agriculturists of Slovakia
- 5. Union of Poultry Growers of Slovakia
- 6. Slovak Union of Sugar Beet Growers
- 7. Slovak Union of Oilseed Plant Growers
- 8. Union of Vegetable Growers
- 9. Fruit Growers Union of the Slovak Republic
- 10.Association of Potato Growers and Processors of Slovakia (SLOVSOLANUM)
- 11.Association of Seedcorn Growers in Slovakia

Agroprocessing

- 1. Entrepreneurial Union of Meat Industry, Butchers and Pork butchers of Slovakia
- 2. Slovak Milkmen's Union
- 3. Slovak Association of Millers
- 4. Entrepreneurial Union of Bakers, Pastry Makers and Confectioners of Slovakia
- 5. Slovak Sugar Manufacturers Society
- 6. Slovak Union of Grape Growers and Wine Makers
- 7. Slovak Association of Beer Brewers and Maltsters
- 8. Slovak Cannery Union
- 9. Union of Wine Makers in Slovakia
- 10.Slovak Union of Agropurchase

In contrast to agricultural and agroprocessing producer and manager interests, consumer interests are represented rather weakly. At present no consumer organization operating in the agricultural policy domian could be identified, however the following unions operate in the agricultural policy domain:

Consumer organizations and unions

- 1. Union of Wood, Forestry and Water
- 2. Union of Food Industry
- 3. Union of Agriculture

Finally, specific local and regional interest groups operate, at least partly, in the agricultural policy domain:

Regional interest groups

- 1. Regional Land and Information Administration (RPIS)
- 2. Association of Slovak Towns and Villages.

4 A Politico-Economic Model

4.1 The Theoretical Approach

From a theoretical perspective a politico-economic system is conceptualized according to Figure 2. Relevant actors are political agents, interest groups and voters. In the political sector specific policies $\alpha = (\alpha_1, ..., \alpha_m)$ are formulated. These policies are considered as binding restrictions for the economic sector and thus imply a specific economic equilibrium $x(\alpha)^3$ under given structures of the economic sector. The conditional equilibrium in the economic sector $x(\alpha)$ corresponds with specific welfare's of diefferent socioeconomic groups, e.g. consumers, agricultural producers, etc.. Note that socioeconomic groups understood as societal roles and do not directly correspond to individual members of society. In fact each member of the society plays multiple roles and thus corresponds to a set of socio-economic groups, e.g. a cooperative worker household corresponds to a consumer role and an agricultural worker role. Depending on the specific social stratification the welfare of different socio-economic groups implies different welfare level's of individual members of society, denoted as *voter's* in the following⁵.

Formally, political decisions (α) are drawn by a set of political agents according to specific institutional rules generally determined by the political constitution. In more specific terms the political decision is subdivided into different parts of a policy cycle corresponding to separate policy arenas. In the context here, it is convenient to separate two parts of the policy cycle, the legislative decision and the implementation of the legislative decision. In general different political agents participate to a different extent in these two parts. For example the parliament or the groups of the parliament generally play an important role in the legislative decision, while it plays no or only a minor role in the policy implementation. In contrast, government operates at both levels, as an agenda setter of the legislative decision and introduction of policy proposals, and as the main executive power in policy implementation.

Figure 2: Schematic Representation of a Politico-Economic System

³ Although the framework as presented in Figure 2 is a quite general one capturing a wider range of politico-economic systems including socialistic command economies, the analysis here should focus on democratic market economies.

⁵ Formally, it is common to model *voter's* welfare as as function, normally a weighted geometric mean, of the welfare of the different socio-economic groups, where the weights of different socio-economic groups correspond to the status of each individual *voter* in the economic system (see for example, Rausser, 1984, Swinnen, 1993; Pappi and Henning, 1997). Therefore, an agricultural worker household normally puts high weight on the welfare of agricultural workers as well as on the welfare of rural consumers. It might also put some positive weight on the welfare of agricultural producers, as long as the household holds some share of agricultural firms, which is generally the case for cooperative farm workers.



Due to the fact that in democratic systems the political agents are elected by the *voter's* the political decision α is not independent of the economic equilibrium. The interdependence results directly if one conceptualizes *voters* as welfare maximizers and political agents as voter support seeking actors. Hence, *voters* anticipate the impact of policy outcomes on their welfare and therefore vote for political agents which provide policies favorable to their preferences. Thus, political preferences over policies (α), e.g. intervention prices or quotas, are instrumental preferences derived from preferences over higher order dimensions (Z), e.g. policy concerns discussed above. The technical relation T(Z, α) between policy concerns, e.g. welfare of rural households, depends on properties of the economic system. Thus, changes in the economic sector imply changes in the political sector, e.g. institutional rules, as well imply changes of the politico-economic equilibrium, i.e. an adaptation of applied policy instruments.

The operational approach applied in the study follows a political exchange model which has been developed theoretically by Henning (1994, 1995 and 1996, see also Pappi and Henning, 1997) on the basis of the Linear System of Action by James Coleman (1990). This model has already been applied empirically to the CAP-reform of 1992 in the EU (Pappi and Henning, 1997), to the EU-Social and labor policy (Schnorpfeil, 1996) and to the European Monetary Union (Pappi and Thurner, 1997).

The general logic of the model corresponds to the theoretical framework presented in Figure 2 above. For a detailed description of the model see Henning (1994) or Schnorpfeil (1996) or Pappi and Henning (1997). In the following the logic of the model should only be described intuitively.

A set of political agents N_g draw a multidimensional political decision $\alpha_1,..\alpha_m$ according to specific institutional decision procedures. The institutional rules determine the political control resources C_g of each political agent whereby the sum of control resources over all agents is 1. Each political agent has a specific preferred political position Y_g that is the set of policies he would implement if he could act as a political dictator making political decisions alone. Substantively speaking, the political control resources correspond to the probability that a political agent is able to push his preferred position through given the institutional decision procedures. For example, in the case of a parliamentary decision the political power of a parliamentary group corresponds to the number of seats it holds.

Given these settings, the mean voter decision rule (Henning, 1996 or Pappi and Henning, 1997) applies which means that the political agents agree on a final political decision (α^*) which corresponds to the weighted mean overall position preferred by the agents. The weights of the preferred position of an agent g corresponds to his institutionally determined amount of political control C_q:

(1)
$$a^* = \sum_g C_g y_g$$

Since the political decision is considered to be multi-dimensional, $\alpha = (\alpha_1, ..., \alpha_m)$ the different political agents observe the opportunity to exchange political control over different policy-dimensions under the mean voter decision rule. Assuming α would consist of intervention prices for milk and for cereals, then a political agent g mainly interested in the milk sector has an incentive to exchange political control over cereals with political control over milk. As a result of this political control exchange the final policy outcome would be closer to the preferred milk price of agent g. Thus, the logic of political control exchange corresponds to the idea of political package deals whereby all participating politicians benefit, since they have different political interests in different policy dimensions, e.g. the intervention price for milk and cereals.

The political exchange model assumes that political control exchange occurs on a political market which comes close to a perfect economic market. Hence the final exchange equilibrium can be modeled analogously to an economic market equilibrium.

Thus, the political equilibrium determines the political control demand C^*_{gj} of each political agent and each policy dimension j =1,...,m, while the supply of political control is institutionally fixed to 1. According to the mean voter decision rule the exchange equilibrium corresponds to the following equilibrium decision for each policy dimension:

(2)
$$\boldsymbol{a}_{j}^{*} = \sum_{g} C_{gj}^{*} y_{g}$$

Knowing the political preferences of each agent that is agent's relative interest X_{gj} in the various policy dimensions, makes it possible to derive actor's political control demand from utility maximization given the relative exchange rates of political control $V_1,...,V_m$. The political equilibrium thus corresponds to specific equilibrium prices $V_{1}^*,...,V_m^*$ reflecting the relative political importance of the different policy dimensions. Taking up our example from above again, the higher the equilibrium price for political control over the intervention price of milk in comparison to the equilibrium price for political control over the intervention price for cereals, the higher is c.p. the relative interest of the political agents in the milk market.

Therefore, the equilibrium prices can be used to construct a measurement of political feasibility meaning to what extent specific policy regimes differ from a political equilibrium and hence only have a low chance to be implemented. Below political feasibility indices will be derived in more detail. So far, we have only introduced political agents, e.g. actors engaged in political decision-making according to the constitutional rules. Political influence of interest groups, i.e. non-governmental organizations, which is not based on institutional control has been left out. Political influence of interest groups results from the fact that in democracies politicians are elected by their electorate and hence are interested in political support. Interest groups control at least partly the political support of their clientele, in other words interest groups can at least partly manipulate the voting decisions of their clientele. Therefore, support seeking politicians are interested in representing political positions preferred by interest groups in exchange with political support from these groups. Formally, this type of exchange can be interpreted as an exchange of political control resources possessed by the politicians with political support. Thus, interest groups exchanging support with political control determine at least implicitly the final political decision that was formally made by political agents alone. Obviously, the higher the potential of an interest group to manipulate voters the higher will be c.p. it's political influence. Essentially speaking, exchange of political control with political support means granting political favors to an interest group in exchange for political support. Such exchange is a highly complex social process and hence generally involves high transaction costs which can only be avoided by strong and stable social relations among actors. The latter fact corresponds to the well known lobbying wisdom that political influence of interest groups is strongly related with access to politicians (for a more formal evaluation of this argument see Pappi and Henning, 1997). Thus, overall political influence of interest groups is determined by both their control of political support and their relative access to politicians. Policy networks are suitable instruments to measure both aspects of political influence empirically (Pappi and Henning, 1997). Therefore, to include the political influence of interest groups in the politico-economic model a policy network approach has been used.

As a result of this approach the relative share of political control resources held by each interest groups as a result of exchange of political support could be calculated.

On the basis of a political control distribution among politicians and interest groups the final politicoeconomic equilibrium could be calculated according to the political exchange model already described above.

4.1.1 Measuring Political Feasibility

Political feasibility corresponds to the empirical fact that economic efficiency of political strategies is rather a sufficient condition that a strategy is actually implemented. In contrast, politico-economic analysis have often shown that efficient policies fail to be implemented due to specific interests and power settings in the political sector impeding their actual implementation (de Janvery et al., 1993, Krüger, 1993). Therefore, policy analyses should not focus on economic efficiency alone, but also on the political feasibility of alternative policies. Substantively, political feasibility of a policy corresponds to a policy to such a degree that it can be considered as a politico-economic equilibrium given concrete economic and political framework condition. The more a specific policy is considered to lie outside of a politico-economic equilibrium the less is the chance that this policy will actually be implemented. Thus, potential contributions of political feasibility studies lie in the following areas:

- measurement of political feasibility of efficient policies;
- identification of second best policies, i.e. policies that are politically feasible and maximize economic efficiency;
- identification of institutional arrangements that imply a shift of politico-economic equilibrium towards economically efficient policies.

To be able to compare political feasibility of different policy regimes, i.e. a market intervention system with production restrictions and a system with direct payments to the farmers without any production restrictions, it is necessary to formulate the politico-economic equilibrium in macro-dimensions Z and not with the actual policy instruments α . The transformation of policy instruments into the Z-space of policy concerns follows the political technology T(Z, α) which is mainly determined by economic framework conditions, as well as by ideological perceptions of voters.

To derive a political feasibility index the politicio-economic equilibrium of the political exchange model is computed in terms of policy concerns, e.g. political control demand over macro-dimensions. The politico-economic equilibrium corresponds to specific states of policy concerns (z*) in the Z-space, e.g. high or low welfare of rural households, high or low profits of farmers, etc.., which can be transformed into concrete policy regimes, i.e. policy instruments, on the basis of the political technology. Looking at it from the other way around any policy regime α can be transformed into a state of policy concerns $z(\alpha)$. Obviously, the closer $z(\alpha)$, implied by a specific policy regime α , lies to the equilibrium z^* , the higher the political feasibility of α .

Since z is multi-dimensional, e.g. comprises of different policy concerns, the distance of a point z to z^* generally varies for the different components of z, that are the different policy concerns. Thus, intuitively a specific policy regime can be considered as politically feasible the closer the implied states of important policy concerns lie to the political equilibrium. For example, if most politicians would be concerned with the milk sector, any policy regime which implies a state of the milk sector, say Z_i, lying relatively far away from the political equilibrium, Z_i*, can be considered to be politically infeasible. In contrast, policy regimes which only differ from the political equilibrium regarding policy concerns of lower importance, might still be considered as political feasible, since most politicians have relative low intensities to push their preferred position through in this concern. A good measurement for relative importance of different policy concerns are the equilibrium prices v* for control over these concerns. The higher a equilibrium price of a concern j in comparison to a policy concern I the higher is the importance of the concern j in the political system, since actors are willing to give up a higher amount of political control over I in exchange for control over j. Therefore, political feasibility of a policy regime α can be measured by an index F(α) corresponding to the weighted euclidian distance to the implied state of policy concerns $z(\alpha)$ equilibrium point z^* , where the weight of a policy concern j just corresponds to its equilibrium price Vi*:

(4)
$$F(\mathbf{a}) = 1 - \sqrt{\sum_{j} (Z_{j}(\mathbf{a}) - Z_{j}^{*})^{2} V_{j}^{*}}$$
 with:: $\sum_{j} V_{j} = 1$

The index F can be normalized by normalizing the range of each policy concern Z_j to the interval (0,1). The closer the normalized index is to 1 the higher is the political feasibility of a policy regime, and vice versa the closer the normalized index is to 0 the lower is the political feasibility of a policy regime.

4.2 Empirical Data Input

4.2.1Actors

According to the analyses presented in the previous chapters, the formal decision making process has been subdivided into the legislative and an implementation arena. The political agents participating in the legislative decisions are determined by the constitutional rules. In particular these are the MP's of the NC, the President and the Government. At the implementation level the government is the central actor as laid down in the constitution. Moreover, the State Fund for market regulation (SFMR) and the State Support Fund for Agriculture and food industry (SSFAF)_have to be taken into consideration as, at least formally, independent administrative units concerned with agricultural policy implementation.

In more specific terms it is not the MP's, but the parliamentary groups that have been taken as the relevant decision units reflecting the fact that the MP's of a parliamentary group agree ex ante upon a common position to fight for in the political battle. In contrast, the government has not been conceptualized as one corroborative actor, but the single members of the government, that are the ministries and the Prime Minister have been taken as different actors. Moreover, we have used a theoretically expected interest in agricultural policy and EU-accession policies to exclude ex ante some of the Ministries to focus the list of governmental organization on the main important actors. This ex ante list has been confirmed by information received from interviews with national and international experts (see also next section).

Overall, the following list of political agents has been used to identified the political agents relevant in political practice:

Governmental Institutions

- 1. Prime Minister (PM)
- 2. Ministry of Agriculture (MOA)
- 3. Ministry of Economy (ME)
- 4. Ministry of Finance (Mfin)
- 5. Ministry of Foreign Affairs (MFA)
- 6. Ministry of Interior (Mint)
- 7. Ministry of Labor, Social Affairs & Family (Mlab)
- 8. Ministry of the Environment (Meo)
- 9. Ministry of Management and Privatization of
- State Property (Mpriv)
- 10.Ministry of Justice (MJU)
- 11.State Fund for Market Regulation (SFMR)
- 12. State Support Fund for Agriculture and Food Industry (SSFAF)

Parliamental Groups

- 13. Coalition Movement for the Democratic Slovakia and Slovak Farming Party (MDS)
- 14. Slovak Workers Association (WAS)
- 15. Slovak National Party (SNP)
- 16. Coalition of the Democratic Left (PDL)
- 17.Christian Democratic Movement (CDM)
- 18. Hungarian Coalition (HC)
- 19. Slovak Democratic Union (DU)

20. The President of Slovak Republic (P)

Moreover, the following list of non-governmental organizations has been pre-selected as input for undertaken policy network analysis.

Slovak Agriculture and Food Chamber (SPPK) Member organizations of SPPK

Agricultural Producer

- 21. Union of Agricultural Co-operatives of the Slovak Republic (Coop)
- 22. Association of Land Owners and Agro-businessmen of Slovakia (LO)
- 23. Agricultural Employers Union of the Slovak Republic (AEU)
- 24. Association of Christian-Democratic Agriculturists of Slovakia (ACU)

Agroprocessing

- 25. Coalition of branch organization of agroprocessing industries (CAP)
- 26. Slovak Union of Agropurchase (AGTrade)

Consumer organizations and unions

- 27. Union of Food Industry (UFI)
- 28. Union of Agriculture (UA)

Regional interest groups

- 29. Regional Land and Information Administration (RPIS)
- 30. Association of Slovak Towns and Villages (ATV)

4.2.2 Political Control

To measure political control the total political decision process is subdivided into two arenas, the legislative decision process and policy implementation. Formally, the political decision procedure is conceptualized as a compound voting game, where each arena (legislative decision and implementation, respectively) is considered as a different subgame (for the calculation of multichamber voting games see Claasen, 1990 or based on Claasen, Bräuninger and König, 1996-7). According to this conception political power corresponds to voting power which is measured via the Shapley-Shubik index (Shapley and Shubik, 1954). Technically, the Shapley-Shubik index has been calculated on the basis of a program by Bräuninger and König provided in the Internet (Bräuninger and König, 1996-7, see also Claasen, 1990). In more specific terms, the legislative subgame has been modeled in two versions. First, as a one-chamber voting game with the NC as a single chamber neglecting the President. This interpretation corresponds to the fact that a simple majority of the NC can override the suspending veto power of the President (see chapter 2 above). Thus, neglecting time preferences a suspending veto power results in no effective political control. In contrast, assuming time preferences with non-zero discount rate a suspending veto power corresponds to effective political control. In the extreme case, i.e. infinitely high discount rate, suspending veto power of the President implies that the legislative subgame corresponds to a two-chamber voting game, with the NC as one and the President as a second chamber. Therefore, to model the impact of the President on agricultural decisions, both extreme cases have been formulated as two different institutional scenarios labeled "legimp" and "legimpP", respectively. Note that in reality, suspending veto power can be expected to result in political power of the President which lies between the two extreme cases of no legislative power and the power of a second chamber.

Note, that the implementation subgame differs from the constitutional rules in so far, as not all members of the government have received equal voting weights. In more specific terms, besides the Prime Minister (PM) only the Ministry of Agriculture (MoA), as well as the Ministry of Finance (Mfin) and Ministry of Economy (ME) are relevant in political practice, while other members of the government have no significant impact on agricultural policy formulation. This assumption corresponds to expert information indicating the dominance of the resort principle in the internal decision making unit of the Slovakian government.

In contrast to policy implementation in the agricultural policy domain, when it comes to policies regarding the EU-accession of Slovakia, the Ministry for Foreign Affairs (Mfor) and the Ministry of Labor, Social Affairs and Family (Mlab) have to be taken into account additionally. In particular, the voting weights of the Ministries and Prime Minister have been adapted in the EU-Game. Moreover, according to the constitution the legislative subgame changed from a simple majority vote to a qualified majority of three fifth of the total MPs regarding the decision on an EU-accession.

Finally, the political decision process is conceptualized as a pure legislative and pure implementation process. This composite game corresponds only to a single subgame, the legislative or the implementation subgame, respectively. The institutional scenarios of a pure legislative subgame are labeled by "legis" (without President) and legisP (with President as a second chamber), respectively, while the pure implementation scenario is labeled by "imp". In detail, the Shapley-Shubik indices calculated under the different institutional scenarios are listed in Chart 2.

| Political institutions | Institutional Scenarios | | | | | |
|------------------------|-------------------------|--------|-------|-------|-------|---------|
| | legimp | legimP | leg | legP | imp | EU-game |
| Legislative | 0.418 | 0.280 | 1 | 0.50 | - | 0.378 |
| subgame | | | | | | |
| MDS | 0.257 | 0.169 | 0.619 | 0.310 | - | 0.312 |
| WAS | 0.008 | 0.005 | 0.019 | 0.010 | - | 0.011 |
| SNP | 0.008 | 0.005 | 0.019 | 0.010 | - | 0.002 |
| CDM | 0.036 | 0.025 | 0.086 | 0.043 | - | 0.014 |
| DU | 0.036 | 0.025 | 0.086 | 0.043 | - | 0.011 |
| HC | 0.036 | 0.025 | 0.086 | 0.043 | - | 0.014 |
| CC | 0.036 | 0.025 | 0.086 | 0.043 | - | 0.014 |
| Ρ | - | 0.334 | - | 0.5 | - | 0.312 |
| Implementation | 0.582 | 0.386 | - | - | 1 | 0.310 |
| subgame | | | | | | |
| PM | 0.187 | 0.122 | - | - | 0.333 | 0.087 |
| MoA | 0.187 | 0.122 | - | - | 0.333 | 0.025 |
| ME | 0.103 | 0.071 | - | - | 0.166 | 0.025 |
| MFI | 0.103 | 0.071 | - | - | 0.166 | 0.087 |
| MFO | - | - | - | - | 0.166 | 0.087 |
| Mlab | - | - | - | - | 0.166 | 0.087 |

Chart 2: Calculated Shapley-Shubik Indices¹ of the Slovakian Parliament, Government and President under different institutional scenarios

Source: Own calculations on the basis of a computer program of Bräuninger and König (1997)

Finally, the political influence of interest groups has been taken into account. According to the conceptions presented above, political influence of interest groups corresponds to the control of political support or other resources valuable to politicians, e.g. expert information. In the framework of the applied political exchange model (Henning, 1994; Pappi and Henning, 1997) political influence of interest groups results from exchange of political support with political control resources held by the politicians. As stated above the actual political control held by an interest group can be measured empirically by policy networks. In more specific terms, an access and a reputation network have been ascertained empirically for the Slovakian Agricultural policy domain. The structures of the empirical policy networks strongly indicate that the only significant access point of interest groups is MoA, while all other political institutions could not be reached by relevant agricultural interest groups. In particular, the interest groups access to MoA is channeled via the Slovak Agriculture and Food Chamber (SPPK), an independent peak-organization comprising of different agricultural and agroprocessing branch organizations (see annex). The SPPK is part of an institutionalized process of policy formulation and implementation within MoA. According to expert estimation the impact of SPPK on the final policy proposal of MoA reached 70 percent. Correspondingly, self-control of MoA amounts to only 30 percent. These figures of external control of the policy positions of MoA seem rather high, but note that these figures correspond to figures indicated by the Ministries of Agriculture of the EU-member states (Pappi and Henning, 1997a).

Within the SPPK the only powerful organizations having direct access to the MoA are the Union of Agricultural Cooperatives of the Slovak Republic (labeled Coop in the following), the various branch organizations of agroprocessing industry which have been considered as one corroborative actor (labed CAP) and the agricultural traders' association (labed Trade in the following).

In contrast, all other SPPK-members, in particular private farmer organizations (labed ACU and the organization of land owner (LO), have no direct access to MoA or have been considered as

neglectable according to expert estimations. Moreover, a few consumer organizations exist and political influence of union organizations is conceived as rather weak having no reasonable impact on agricultural policy formulations. Nevertheless, since possible impacts of (simulated) strong consumer and union organisations should be analyzed, these organizations are consider as one coalition labeled "Con" in the following analyses.

Overall, taking into account political support exchange with interest groups the total institutional control of MoA is partly transferred over to interest groups. According to empirical access and reputation networks the following division of political control resources among MoA and interest groups providing political support and expert knowledge to MoA has been measured:

Chart 3: Political influence of interest groups towards MoA and self-control of MoA

| Organization | Share of political control held after support exchange |
|---------------------|--|
| self-control of MoA | 0.30 |
| SPPK | 0.10 |
| Соор | 0.35 |
| CAP | 0.35 |
| Trade | 0.20 |
| ACU | 0 |
| LO | 0 |
| Con | 0 |

Source: Own calculation on the basis of collected network data

Multiplying relative access to politicians (Chart 3) with institutional power of politicians under the various institutional scenarios results in the political control resources held by the different governmental and non-governmental organizations which are the relevant data input for the political exchange model (see Table 3 appendix).

4.2.2.1 Interest and Preferred Positions Regarding Relevant Agricultural Policy Concerns

It is assumed that policy preferences over policy concerns (Z) can be represented by the following two-stage utility function:

$$U_{i}(Z) = \prod_{j \in M} (d_{ij}(Z_{ij})^{X_{ij}}, \sum_{j \in M} X_{ij} = 1$$

(5) *with*:

$$d_{ij}(Z_{ij}) = 1 - \sqrt{(Y_{ij} - Z_{ij})^2}$$

Thus, actor it's policy preferences can be characterized by his or her interest in relevant policy concerns X_{ij} and his or her preferred position Y_{ij} regarding these policy concerns. According to equation (5) it is assumed that each actor prefers that the final policy outcome comes as close as possible to his preferred position Y_{ij} for each and every policy concern. However, actor's intensities of interest varies over policy concerns. For example, it is conceivable that actor is mainly interested in the applied agricultural policy regime implying a farm structure that is orientated towards cooperative farms, while the impact of the agricultural policy regime on other concerns, e.g. the economic welfare generated in the agroprocessing sector or the welfare of urban consumers is of less interest. Note that interest and preferred position are generally not correlated, e.g. one might conceive two actors with the same intensity of interest regarding the farm structure, but the first might prefer a structure dominated by cooperative farms, while the other might prefer a structure that is more orientated towards private farms. The actual interests and policy positions of political actors are reported Table 1 and Table 2 of the appendix, respectively.

To give a descriptive overview of the Slovakian agricultural policy space, actors policy positions have been further aggregated into a two-dimensional policy space applying a factor analysis (Principal Component) to the empirically observed policy positions. The result is summarized in Graph 1. According to Graph 1 the agricultural policy space is determined by the following two dimensions:

Factor 1: Protection level of the Slovakian agro-complex: This dimension is characterized by a liberal position corresponding with a low protection level of the agro-complex on the one hand and a protectionistic position favoring a high protection level of the Slovakian agro-complex on the other hand.

Factor 2: Farm structure of the Slovakian Agriculture: This dimension corresponds to preferred farm structures that are orientated towards the cooperative farm sector, on the one hand and a farm structure that is oriented towards private farms on the other hand.

In the following the derived two-dimensional policy space should be discussed in more detail. In particular, the relation of factors to the main concerns of Slovakian agricultural policy and actual positions of different organizations within the policy space will be discussed and clarified.

According to the zero points of the two factors the total policy space can be subdivided into four quadrants:

- a) the liberal-private orientated (-,-)
- b) the liberal-cooperative orientated (-,+),
- c) the protective-cooperative oriented quadrant (+,+) and
- d) the protective-private orientated (+,-).

In the (-,-) guadrant, the liberal-private orientated, the Christian-democratic party CDM and the liberal party DU are found. Furthermore the Ministry of Finance, Ministry of Economy and Ministry for Foreign Relation are located in this quadrant. The policy regime corresponding to this quadrant is a liberal agricultural policy, i.e. no trade measures and no price interventions are applied. Thus, agricultural price levels correspond to world market price levels and also no or only a low level of state subsidies are paid to the farmers. Of course, such a policy regime would imply that more efficient farm types and farmers will expand while less efficient will vanish. Given the economic situation of most cooperatives (see FAO, 1997) this means that farm structure will be orientated towards more private and more efficient farm types⁶, while the dominance of cooperatives will vanish. Moreover, the liberal-private farm orientated guadrant corresponding to a general abstention of market interventions of the state implies c.p. low budget expenditures and c.p. an overall efficiency of the Slovakian economy. Empirically, this fact corresponds well with the structure of factor loadings of the single policy concerns presented in the appendix giving agricultural price levels the highest positive factor loading and economic efficiency a negative factor loading. Therefore, it seems reasonable that consumer interests (labeled Con in Graph 1) are also located in the (-,-) quadrant. An interesting empirical result can be seen in the location of the President of the Slovak Republic in the liberal-private orientated quadrant. Naturally, the observed policy position is strongly related to the

⁶ Note that a higher economic efficiency of private farm types in comparison with cooperative farms is an empirical fact in Slovakia (see FAO, 1997), but by no means can be derived theoretically. From a pure technological view point there are generally no differences between cooperative farm types and other private farm types.

individual person, ???Borislav??? Kovac, who generally demonstrates a much more liberal political orientation in comparison to Prime Minister Meciar.

In contrast, the liberal-cooperative orientated quadrant corresponds to policy regimes characterized by state interventions in terms of direct subsidy payments, while analogously to the (-,-) quadrant, the preferred level of price and market interventions is low. Moreover, given the specific situation of Slovakian agriculture, subsidy payments are socially legitimated and hence biased towards less efficient farm types and farmers, i.e. the cooperative farm sector. Typical representatives of this policy position are the Common Choice coalition of the social democratic and socialistic parties (CC). Their high interest in increasing the welfare of rural households generally suffering more from transition accompanied by a high interest in urban consumer's welfare explains the preference of the CC for an agricultural policy regime corresponding to high direct subsidy payments to agricultural cooperatives and relatively low price and market interventions. In the short run such a policy regime seemingly protects, at least from the narrow view point of voters, cooperative farm workers from massive lay-offs and high unemployment, without putting to much of a financial burden on urban consumer households. This holds true especially for low-income worker households with a high share of food expenditures and a relatively low share of tax payments in total income (see FAO, 1997). Thus, given the fact that especially low income worker households, rural and urban, are the main supporters of the CC, this political position seems rational from the view point of CC maximizing its' voter support.

Moreover, the MoA could be found in this quadrant. In comparison to the socialdemocratic coalition (CC) MoA focuses more on the second factor, i.e. policy regimes primarily favoring the cooperative sector. At the same time protective measures seem even less preferable to the MoA in comparison to CC. MoA's preference for a cooperative orientated farm sector underlines the persistence of old socialistic elites and value systems among staff members of MoA. Many personal interviews with MoA administratives emphasize the still existing strong affiliation with the cooperative farm sector. A serious challenge to the future dominance of the cooperative farm sector can be seen in two main points. Firstly, the establishment of a functioning land market resulting in reasonable land prices and secondly the abolishment of the direct subsidy payments granted through MoA administration biased in favor of cooperative farms (see FAO, 1997). Note that a too high protection of the agricultural sector resulting in relative high agricultural producer prices would certainly increase the economic pressure on the establishment of land markets. Hence, it seems reasonable for MoA administratives mainly interested in the maintainances of the cooperative farm sector to prefer direct subsidies vis-àvis high market interventions, since the latter can certainly be less effectively directed towards the cooperative sector alone.

The Hungarian Coalition (HC) is also located in the (-,+) quadrant, although the HC lies relatively close to the liberal-private orientated quadrant. According to the party programm of the HC the liberal orientation appears reasonable. At a first glance, an orientation towards the cooperative farm sector seems less understandable for HC. An explanation for this orientation of HC could be seen in the fact that most Hungarians live in the lowland area in the South-West of Slovakia along the Hungarian border in which the agro-complex has its' highest economic importance (FAO, 1997).

Finally, the interest organization of the cooperative managers (Coop) is located on the border line of the (-,+) and the (+,+) quadrant. According to it's clientele, it seems reasonable that Coop holds an extreme position regarding an orientation towards a cooperative farm structure.

The protective-cooperative orientated quadrant is defined by the two government parties, CDM and WAS, the Prime Minister (Meciar), the SPPK conceived as a peak organization, as well as the Coalition of the agroprocessing branch organizations (CAP) being members of SPPK. Analogously to actors located in the (-,+) quadrant, actors located in the (+,+) quadrant prefer a cooperative structure of Slovakian agriculture. But, actors located in the (+,+) quadrant have a higher preference for market and trade interventions. This holds especially true for the interest groups SPPK and CAP, while the political agents, MDS, WAS and MP are still relatively close to the liberal-cooperative orientated quadrant. A closer analysis of the policy positions of the MDS, WAS and PM indicates that the main difference between preferred policy positions held by these actors in comparison to HC and CC can be seen in a relative higher preference for rural vis-à-vis urban welfare resulting in a higher tolerance regarding high consumer prices for food. While CC and HC strictly prefer low food prices, MDS, WAS and PM have a clear preference for rural welfare derived economically from relative high prices for food. This position corresponds to the fact that the electoral base of the MDS and WAS clearly lies in the rural areas in Middle and East Slovakia.

An interesting result can be seen in the preference of the agroprocessing interest groups (CAP) for a cooperative dominated agricultural sector. This orientation seem less intelligible in comparison to a preference for higher protection of the agro-complex. An explanation for these structural preferences of CAP can be drawn from results derived from the PAM-analysis. According to PAM-results reported above and in the FAO-report (1997), the agroprocessing sector seems to profit from local market imperfections on agricultural output markets. These imperfections partly seem to result from the fact that trading is still channeled through networks persisting from the old socialistic command economy. Obviously, a change of the cooperative structure in the agricultural sector would imply a change of trading partners which in turn implies a dismantling of these old networks. Hence, economic profits of the agroprocessing industry derived from trading through old network channels are strongly related with a farm structure dominated by cooperative farms.

The same argument applies, even if to a lower extent, for the preferred policy position of agricultural traders. Therefore, it seems reasonable that the preferred position of the interest groups of agricultural traders (Atrade) lies close to the protective and cooperative orientated quadrant. Nevertheless, traders are found to be less orientated towards a farm structure dominated by cooperative farms. This could partly be explained, since traders seem to be able to occupy powerful positions, even in new establishing domestic agricultural markets. The latter fact could be derived from high trade margins observed for the agroprocessing sector (see Input-Output-Table of Slovakian Economy, Statistical Office, 1996).

Beside agricultural traders, private farmer organizations (ACU) and the land owner organization (LO) are located in the protective-private farm orientated quadrant. Corresponding to the interpretation of the second factor, the land owner organization holds an extreme position opposite to that of the cooperative managers (Coop), i.e. preferring high land prices. Since high agricultural prices imply c.p high returns on land, land owners also prefer an extreme protectionistic position. Analogously, private farmers prefer agricultural policies resulting in high domestic price levels for farmers products and high returns on quasi fix inputs, i.e. land.

On the other hand, it can not be taken for granted that high agricultural prices imply high profits for agricultural traders. Due to actual consumer preferences, traders might profit or loose from high agricultural prices. In more specific terms, as long as consumer's price response is found to be inelastic traders profit from a higher price level. Since the latter obviously holds true for the average Slovakian consumer household (see estimated elasticities for food presented in FAO, 1997) a policy position of traders in the (+,-) quadrant makes sense.

Finally, the policy position of the SNP, the extreme right wing party of Slovakia and third member of the multi-party government, was found at the border of the (+,-) and the (-,-) quadrant. Thus, the SNP certainly prefers a more private farm orientated farm structure, while it stands for a more moderate protection level of the Slovakian agro-complex. Since the SNP received its highest voter support in Bratislava, it seems reasonable that the SNP, despite its general nationalistic orientation, prefers a more moderate protection of the agro-complex corresponding to a moderate domestic food price level. Regarding farm structure SNP's position seems mainly determined by it's generally liberal orientation towards economic policy. SNP only seems to oppose a liberal economic policy, when it comes into conflict with issues concerning national sovereignty.

4.2.2.2 Preferred Policy Positions Regarding a Slovakian EU-Accession

In this section preferred policy positions of relevant political actors regarding an EU-accession of the Slovak Republic will be analyzed. Of course, the political decision on an EU-membership is a fundamental decision with a significant impact on overall social, political and economic life of the Slovakian population. Hence, compared to agricultural policy decisions, the range of relevant political actors, governmental and non-governmental, can be expected much broader. To keep the empirical study work at bay, the analyses regarding EU-accession only take the most relevant political institutions into account, besides the identified actors in the agricultural policy domain. In detail, the Ministry for foreign relations (Mfor) and the Ministry of Labor, Social Affairs and Family (Mlab) have been taken into account in addition to the actors relevant in the agricultural policy domain.

Non-governmental organizations (NGO's) outside the agricultural policy domain, e.g. unions or entrepreneurial interest organizations operating in other policy domains, have not been taken into account explicitly. Only implicitly has the impact of these NGO's been taken into account, since the

experts have been asked to estimate positions regarding EU-accession preferred by relevant politicians including the political influence of interest groups having access to them. Only for MoA has the intrinsic position been estimated, since the relevant access network was available.

Moreover, analyses regarding EU-accession have been simplified by focusing on a one dimensional policy space. In particular, actor's positions have been estimated on a scale ranging from 0 to 1, where 0 indicates a total opposition against a Slovakian EU-accession and 1 indicates a position corresponding to an early EU-accession in 2006 with a short transition period. Finally, 0.5 indicates a medium position, i.e. a later EU-accession after 2006 with a relative long transition period before full membership will be reached.

• The results are reported in Graph 2. As can be seen from this Graph the extreme left wing party WAS is accompanied by interest groups of the agroprocessing sector (CAP), agricultural traders (Atrade), cooperative farm managers and consumers absolutely opposing an Slovakian EU-accession.

NGO's operating in the agricultural policy domain, conceive an Slovakian EU-accession in terms of implied states of the agricultural policy concerns. Thus, analyzing the impact different accession options have on the relevant agricultural policy concerns clarifies the anti-EU position of Coop, Atrade and CAP. An EU accession would certainly offset structural biases towards cooperatives as well as market imperfections in terms of local monopolies favoring the position of agricultural traders and agroprocessing industry. Moreover an EU-membership would offset any protection against competitiveness of Slovakian agroprocessing industries it seems more than reasonable that an EU-membership is opposed by most of the Slovakian agroprocessing industries. The anti-EU position of consumer organizations and unions needs further explanation.

Certainly, consumers not only conceive a Slovakian EU-accession in terms of agricultural policy concerns. One clear argument to oppose an EU-accession from the consumers point of view can be seen in the implied increase of food prices. Indeed, neglecting any transfer payments and also neglecting effects corresponding to induced direct investments, an EU-membership would lead to a lower growth rate of consumer's welfare in comparison to a non-membership (see results of CGE-runs in appendix) making consumers opposition to an EU-accession reasonable. On the other hand, it is easy to show that if one takes transfers and induced direct investment resulting from an EU-accession additionally into account this <u>might</u> change the picture. For example, calculations of Banse (1997) indicate that including positive shifts in direct foreign investments induced by an EU-membership might easily overcompensate welfare losses resulting from higher food price levels. Thus, consumers position vis-à-vis EU-accession depends on the expectation of the relative magnitude of the different opposing impacts.

As has been indicated above, consumers' expectations do not correspond to real economic situations, but to a large extent are the result of ideological perceptions. Thus, empirically speaking consumers' perception of the net-impact resulting from an EU-membership is negative resulting in an anti-EU position.

The same argumentation applies for the position of workers. The more workers believe that an EUaccession has an overall negative economic impact on Slovakian economy the more they support an anti-EU position. As will be clarified in more detail below, ideological perceptions of voters often do not correspond with real economic situations, but nevertheless these perceptions are relevant yardsticks for support seeking politicians and interest groups.

The anti-EU position of WAS is a logical consequence, as the main political aim of WAS is the return to the old socialistic system. The some what surprising success of WAS in the 1994 elections seems to be related to workers' perceptions of economic impact of transition. Especially workers employed in the state sector vote for WAS, e.g. WAS received highest share of votes in East Slovakia. In 1994 still over 60% of total working force was employed in the public sector.

Clear supporter of an early EU-accession are the Christian democrats (CDM), the liberals (DU, the Hungarian coalition (HC) and of course, private farmers and land owners. Moreover, this group is joined by the President and all Ministries, despite MoA and Mlab.

All other actors hold a medium position preferring an EU-accession in general, but at later stage and with a long transition period. In particular, this position is preferred by the MDS, the central governmental party including Prime Minister Meciar as well as by SNP. Note_that MoA prefers a medium position underlying once more its' affiliation to the cooperative farm sector which in contrast to private farmers certainly would extremely suffer from an early and rapid Slovakian EU-membership. Moreover, one has to realize that an EU-accession shifts most political authority regarding agricultural policies from the national to the supranational level, i.e. from MoA to Brussels. Therefore, an accession implies a loss of political control from the MoA view of point explaining the more moderate position towards an EU-accession.

Furthermore, CC prefers a moderate accession strategy. This could be explained by the fact that CC relates a longer transition period with a reduction of social and economic burden for the Slovakian population. Of course, economically this conclusion seems rather doubtful, but CC's electorate obviously believes in it. The same is true for Slovakian unions believing that a moderate transition path implies less harmful structural adjustments in terms of mass lay-offs. Note that in 1992 still over 40% of union members believed that the old socialistic system was preferable to a market economy (see Weßels, 1994: 363). Thus, the extreme moderate position of the Ministry of Labor seems to result from political influence of unions, who's main focus point of political access is of course the Ministry of Labor.

4.2.2.3 Relating Policy Regimes with Policy Concerns

In order to relate policy regimes (α), defined as a concrete set of policy instruments, with policy concerns, the set of policy instruments has to mapped into the Z-space of policy concerns. Theoretically, this mapping is defined as a political technology T(Z, α). Main determinants of the political technology are the specific structures of the economic sector. For example, applying structural adjustment policies to the agricultural sector aiming at the implementation of a functioning land market would certainly imply a shift of land from the cooperative to the private farm sector. Moreover, it would increase efficiency within the agricultural sector and therefore also average income of rural population. Thus, at it's core modeling political technology is modeling the economic sector. Moreover, the political ideology of voters restricts politicians to apply specific policies beyond existing economic restrictions. In this case an ideologically restricted political technology results in the relevant choice set of political actors.

Due to a general lack of sufficient data, no econometric estimation of the political technology relevant for the agricultural policy domain could be undertaken in the framework of the study at hand. Hence, the relevant choice set of politicians and interest groups (political technology) has been approximated by a point to point mapping of specific policy regimes into the Z-space of policy concerns. This point to point mapping has been undertaken on the basis of available economic analyses, namely PAM-analyses carried out in the course of the PHARE-project as well as a FAO-project (FAO, 1997). Moreover, a five sector SAM-analysis and a corresponding five sector recursive dynamic CGE model⁷ formulated by Banse (Banse, 1996) have been used to relate policy regimes with policy concerns.

Of course, the point to point mappings are only rough approximations of the political technology, i.e. the real choice set relevant for political actors, but still these mappings should deliver results corresponding at least qualitatively with real on-going political processes. In detail, estimated mappings are reported in the appendix (Table 6).

4.2.2 4 Dynamics of Policy Preferences

So far political preferences of politicians and interest groups have been interpreted as exogenously fixed parameters of the politico-economic system. Conceptually policy preferences of politicians and interest groups have been derived from actor's maximization of political or member support received from voters, respectively. Since voters' support of organizations depends on voters ideological perception on how specific policies are related with policy concerns, i.e. voters' ideological

⁷ The SAM has been estimated on the basis of an Input-Output table for 1993 from the Statistical Office and a household survey from 1993 and 1994. The CGE-model has been estimated by Dr. Banse, University of Göttingen, on the basis of the provided SAM. I would like to thank Dr. Banse for his very helpful support.

perceptions of the political technology, a shift in voters ideological perception implies a shift in political preferences of politicians and interest groups. Substantively speaking, dynamics of political preferences are derived from dynamics of voters' ideology.

In this context, in the following it will be demonstrated how transition policies might lead into a vicious circle of self-enforcing anti-reform or reform blocking policies in the absence of efficient political institutions mediating the political technology to voters (see also Figure 2):

- 1. In general the voter's support of political agents is conceptualized as a function of the expected welfare path (Wt) induced by supplied policies. The transformation of supplied policies follows a political ideology (It), which is a more or less precise image of the true political technology T. Moreover, it is assumed that the political ideology varies over time. In more specific terms it is assumed that the political ideology It relevant in a period t is derived from an adaptation of the ideology of the former period (t-1) according to the observed difference of ideologically expected and realized welfare levels in t-1. Furthermore, the political ideology can be manipulated by various political actors, i.e. political parties, interest groups or the mass media.
- 2. Although different voter segments, e.g. rural and urban population, might be separated through different political ideologies and by different degrees of openness regarding manipulation efforts of various political actors, the process of political support formation can be assumed to follow the same pattern for all voter segments. In particular, it is assumed that in the beginning of transition a majority of voters prefers an optimal transition policy α^T if they would have known the true political technology "T" (see figure 2, below)⁸. Moreover, it is assumed that a majority of voters believes in a political ideology (I₀) which even favors transition in comparison to the true political technology (T) inducing a path of positive welfare gains right from the beginning of transition.
- 3. Thus, in the beginning of transition a pro-reform government party will be set into power supplying a optimal transition policy α^{T} . The government is assumed to have the majority in parliament, i.e. would be able to approve the relevant legislative acts corresponding to α^{T} . It is assumed that the government does not have full political control at the implementation level, i.e. approved policies can only be implemented and enforced to a limited extent. This is the result of the political influence of anti-reform actors in the bureaucracy as well as anti-reform interest groups (old elites) and specific rent seeking exclusive economic interests groups, e.g. large foreign firms or trade companies, which mainly intervene in the implementation arena.
- 4. The higher the political control or influence of the anti-reform actors at the implementation level, the less effective the approved reform policy will be enforced and thus, the higher are the induced welfare losses of voters.

⁸ Technically, this implies that: $\sum_{i=0}^{\infty} W_t(\boldsymbol{a}^T) e^{-\boldsymbol{d}_t} \ge \sum_{i=0}^{\infty} W_t(\boldsymbol{a}^g) e^{-\boldsymbol{d}_t} \quad \forall g \in M^a$, i.e. the optimal transition policy

implies the maximal net present welfare value for all voters. δ denotes voters discount rate and M α denotes the set of all feasible policies.

- 5. Due to the observed welfare difference in the time period (t-1), the voters shift their political ideology from I₀ to I₁. It is assumed that an observed negative (positive) difference will shift the new political ideology in such a way that a) a later (earlier) turn-off point, e.g. the time period when a positive welfare growth starts, b) a later (earlier) break-even point, e.g. the time period when the realized welfare level equals the welfare level realized at the beginning of transition and c) a lower (higher) long run growth rate, e.g. the growth rate of welfare under an implemented market economy, when main restructuring will have taken place, will be expected (see Figure 2). Hence, an observed negative difference between the realized and expected welfare level c.p. shifts the welfare path expected under the optimal transition policy in such a manner that the valley of transition, e.g. the period of time in which the realized welfare level is below the welfare level at the beginning of reforms, will be both deeper and wider. Moreover, the transition gains after the valley of transition has been crossed, e.g. the realized undiscounted welfare surplus in comparison to the welfare path realized under a socialistic command economy, will be reduced, as a lower long run growth rate is expected. In addition the ideology shift implies a lower net-present value of realized welfare gains, since the break-even point is shifted to a later time period.
- 6. The shift will be all the more stronger the higher the manipulation power of anti-reform actors, in particular old elites, and the lower the manipulation power of pro-reform actors, e.g. standard economic interest groups, interest groups of small and medium entrepreneurs or pro-reform parties. Moreover, the shift is c.p. the higher the higher the observed welfare difference in (t-1). Finally, it seems also reasonable to assume that the manipulation power of anti-reform actors c.p. increases with the absolute value of the observed welfare difference in the period (t-1).
- 7. Overall, political support of political agents supplying the optimal transition policy α^T will c.p. be reduced, as soon as voters apply the new shifted political ideology I₁ in comparison to the original ideology I₀. This in turn has two main implications. Firstly, the reform policy supplied by pro-reform political agents, i.e. their policy preferences, will be shifted towards a suboptimal transition policy corresponding to a reduced speed of structural adjustment and a compensation policy aiming to reduce ideologically expected welfare losses implied by structural adjustments. Secondly, the political support of anti-reform parties will c.p. be increased. Overall the induced shift of the political ideology strengthens the anti-reform position in the legislative and implementation arena.
- 8. In contrast to ideologically expected impacts, according to real economic structures a shift away from an optimal reform policy induces c.p. a stagnation or even an additional reduction of realized welfare levels in the period t.
- 9. This leads to a new shift of the political ideology from I₁ to I₂ which is analogous to the shift described under point 5 and the adaptation process described under point 6-8 applies again.
- 10.If the induced recursive shifts of the political ideology are strong enough it is easy to show that a path of political equilibrium can be reached eventually leading to an opposition of transition. Formally, this follows guite plainly, if the recursive shifts of the political ideology finally correspond to a valley of transition overcompensating the gain of transition given specific discount rates of the voter segments. Note that this holds true, even under the assumption that the majority of voters ideologically prefers the transition in the beginning of reforms and would also consider a structural adjustment policy α^{T} as the optimal transition policy assuming they know the true political technology. In political reality voters only have a limited rationality due to a general lack of information. Therefore, voters have to rely on their manipulated political ideology, and thus, may finally prefer a reform policy corresponding to a lower speed of structural adjustment and a compensation policy aiming at the reduction of welfare losses induced by structural adjustment processes. This follows, as long as voters ideologically expect a higher net present value of overall welfare from moderate reform policy due to their bounded rationality which in fact often appears as an anti-reform or at least "blocking reform" policy. Note, that even pro-reform political agents knowing the true political technology might tend to adapt their politically preferred policy positions to suboptimal transition policies. This also holds true for a support seeking politician, as long as his or her manipulation power is not strong enough to shift voters ideology towards an optimal transition policy.
- 11. The situation described above is interpreted as a *lobbying trap*, since the probability that a transition society will end up in a path of politico-economic equilibrium leading to an anti-reform or reform blocking policy, is c.p. higher the more the actual structure of interest mediation is biased against standard economic interest, e.g. labor and capital. In particular, the higher the implementation and manipulation power of anti-reform interests or exclusive rent seeking interest groups in comparison to standard economic interest of a capitalistic system the higher the probability that a) optimal transition policies fail to be efficiently implemented and b) the true political technology is (ideologically) intermediated to the voters.

- 12.Another possibility to avoid the lobbying trap of transition policy can be seen in a strong charismatic policy leader who has the power and is intrinsically willing to intermediate the true political technology to the voters, e.g. a President in a semi-presidential or a presidential system. However, in contrast to a strong representation of standard economic interest, a charismatic policy leader who also prefers intrinsically a transition, can only be considered as a lucky coincidence, but can not be reached by any intended action of rational actors in the sense of institutional engineering.
- 13. Finally, it should be noted that also other structural properties of the politico-economic systems determine the endogenous path of transition policies. For example, it seems reasonable that urban populations in comparison to rural populations in general face lower welfare losses during transition and are c.p. less open to manipulation efforts of anti-reform actors. Thus, the higher the share of urban voters in comparison to rural voters the lower c.p. the probability of the lobbying trap. Analogously, the less the economic sector is biased against economic efficiency, the lower the level of needed structural adjustments and thus the lower are c.p. the induced welfare losses in the beginning of transition.



Applying the derived *lobbying trap* to Slovakian agricultural policy it seems that especially the relative strong opposition against structural reforms which includes the central governmental actors, MoA and the PM as well as the central legislative actor, the MDS can be explained on the basis of derived dynamics of the lobbying trap. In the absence of efficient lobby structures guaranteeing a mediation of the real political technology to the voters, it was mainly the rural population, the anti-reform forces within and outside of the MDS that were strengthened. Thus the MDS was forced to take on more and more policy positions opposing an optimal agricultural transition policy

To what extent the MDS already favored an agricultural policy position opposing structural adjustments in the beginning of transition could not been analyzed in detail. Nevertheless, presented analyses certainly imply that the observed agricultural policy position of the MDS opposing structural adjustments in the agro-complex was strengthened during transition due to dynamic processes of policy preference formation corresponding to the lobbying trap described above.

4.3 Computation of Politico-Economic Equilibria

4.3.1 Computed Policy Scenarios

The political exchange model has been applied to the different institutional scenarios specified above including a specific institutional scenario "cabinet" assuming that governmental decision making follows the cabinet principle as specified in the constitution. Furthermore, shifts of the actual lobbying structure have been simulated. In detail, three scenarios have been run. Firstly, the impact of a higher political influence of private farmers (labeled "farm" in the following) vis-à-vis cooperative managers and agroprocessing has been simulated. Secondly, the static impact of a strong political influence of consumer lobbying groups, i.e. consumer organizations and unions, has been simulated (labeled "consumer"). Technically, both scenarios have been derived from a shift of relative access structures towards MoA (as reported in Table 4 of the appendix).

The third scenario (labeled "trap" in the following) focuses on the dynamic impact implied by a general change of existing lobbying structures towards strong unions and consumer lobbying groups mediating the true political technology to voters. Technically, the dynamic impact of this structural change in the agricultural policy domain has been simulated by a shift of the policy positions of the MDS and the PM towards an optimal agricultural transition policy. The simulated position shifts are reported in detail in the appendix Table 5.

4.3.1 Results

According to the logic of the political exchange model the politico-economic equilibrium corresponds to equilibrium prices of political control resources for the different policy concerns. Furthermore, actors' equilibrium control demand and the corresponding equilibrium positions on the different policy concerns have been calculated. In detail, model outputs for the different political scenarios are reported in the appendix.

In the following main results regarding policy decisions corresponding to politico-economic equilibria derived under the various policy scenarios will be summarized, while implied political feasibility of different policy regimes will be discussed in the next chapter.

In Graph 3 the equilibrium policy outcomes under the various policy scenarios are mapped into the two-dimensional agricultural policy space. Moreover, the position of the derived optimal agricultural transition policy (labeled by "Opt") as well as the policy output corresponding to an agricultural policy under the actual CAP (labeled by "EU-CAP") and under Agenda 2000 (labeled by "Agenda") after a simulated Slovakian EU-accession, respectively, are mapped into the two-dimensional policy space in Graph 3.

As can be seen from Graph 3, neglecting the political equilibrium under scenario "trap", all equilibrium policy outputs are located in an ellipse with its two focus points lying in the (-,+) and (+,-) quadrant, respectively. The ellipse is biased towards the (-,+) quadrant, i.e. its center as well as the majority of scenario equilibria lie in the (-,+) quadrant (see Graph 3). Thus, political equilibria clearly correspond to a policy regime characterized by a high level of state interventions biased in favor of the co-operative farm sector. The protection of the agro-complex is relatively low, since interventions mainly correspond to direct subsidy payments. Analyzing the interest and power structures in the Slovakian agricultural policy domain, the resulted political equilibrium turns out as a compromise between two powerful actor sets.

On the one hand, a set of actors comprising of MDS and PM accompanied by WAS as well as the interest groups SPPK and CAP is located in (+,+) quadrant. On the other hand, a second set of actors comprising Mfin, ME accompanied by CDM and DU as well as the President, who is only powerful under scenarios assuming a semi-presidential instead of a parliamentary system for Slovakia, is located in the (-,+) quadrant. As the first set is relatively more interested in policy concerns mainly related to farm structure and the second set is relatively more interested in policy concerns mainly related to the protection level of agro-processing complex and implied consumer price levels, a compromise in the (-,+) quadrant seems a logical consequence.

In some ways the private interests of cooperative farm managers (Coop) as well as agroprocessing industry profit from the actual interest and power setting in the Slovakian policy domain. This results

from the fact that the two powerful actor subsets partly outweigh each others political interests, while Coop, Atrade and CAP focus their political control mainly on farm structure (75% of its total control expenditures are directed on this concern) and the agricultural price level, respectively, thereby taking advantage of a power vacuum created by the two opposing subsets. Hence, in equilibrium Coop manages to control the final policy position regarding farm structure by a degree of 18% under the institutional scenario "legimp", although overall Coop controls less than 5% of total political control resources.

Analogously, Atrade and CAP together control the policy concern regarding the price level of the agro-complex by a degree of 35% under the "legimp" scenario, while their overall political control only amounts to 7%.

As could be seen from the equilibrium prices political discussion is mainly concerned with farm structure and welfare distributions among rural and urban households, while the policy concerns regarding economic efficiency or the agricultural price level seems less important given relatively lower equilibrium prices for these policy concerns. Moreover, the policy concern regarding land prices is negligible given prices below 0.1 for all scenarios (see Table 7 in the appendix).

This pattern especially holds true for the legislative arena where a clear peak for the price of the policy concern "welfare of rural households" can be observed followed by the price of the policy concern dominance of the cooperative farm sector (see prices reported in Table 7 in the appendix).

In contrast, political discussion in the implementation arena is more or less concerned with all policy impacts. Again, an exception is the concern about land prices for which a low price resulted under the scenario "imp".

Finally, it can be seen from Graph 3 that institutions play a major role regarding the final policy outcome. Comparing the equilibrium outcomes under different political scenarios with the optimal transition policy (labeled by "opt") in Graph 3, the following conclusions can be drawn:

- the more agricultural policy making occurs in the legislative arena, i.e. the more agricultural policies are specified by legislative acts leaving no or only little political leeway for the implementing institutions, the more the policy outcome would be shifted towards an optimal policy. In particular, the bias in favor of the cooperative farm sector would be reduced significantly.
- 2. the greater the actual legislative power of the president, the closer the politico-economic equilibrium would come to an optimal transition policy. Thus, substantively speaking a institutional reform implementing a semi-presidential system would c.p. result in a more optimal agricultural policy. However, this result has to be interpreted with caution, since it crucially depends on the actual policy position held by the President. In fact, a strong President recruited from the left wing of MDS or even from WAS or SNP would certainly shift the agricultural equilibrium away from an optimal policy. Moreover, in a more dynamic context, a strong President, e.g. elected directly by the population, always bears the danger of political instability, especially in young establishing democracies, as could be learned from experiences made in many southamerican countries.
- 3. A dominance of the cabinet principle, i.e. governmental decision making follows a majority vote by all members of the government, vis-à-vis the resort principle actually applied in political practice, i.e. political decision making resides solely in the hands of the implementing Ministry and the Prime Minister, would shift the politico-equilibrium towards an optimal transition policy. Although the shift would go in the right direction, most important policy concerns would not change significantly. At least a harmonization of policies implemented by different Ministries, namely MoA and ME, would take place.
- 4. Interestingly, in quantitative terms, shifts of the lobbying structure generally have higher impacts on the politico-equilibrium than institutional changes. This holds especially true in a more dynamic context.
- 5. Thus, assuming the existence of efficient union or consumer organizations would result in a significant shift of the politico-economic equilibrium towards an optimal agricultural transition policy. In particular, the equilibrium under the scenario "trap" corresponds to a policy regime comprising of structural adjustment policies aiming to offset structural imperfection in the agrocomplex and to improve overall economic efficiency. This could be derived from the computed equilibrium decisions regarding the single policy concern, in particular efficiency, urban and rural welfare as well as farm structure. Moreover, the policy regime corresponds to comparatively high land prices (see Table 8 in the appendix). Nevertheless, the politico-economic equilibrium under

the "trap" scenario still differs from an optimal agricultural policy, since it corresponds to a comparatively higher protection of the agro-complex (see Table 8 of the appendix). In more specific terms protection of the agro-complex mainly results from direct transfers to producers, e.g. subsidy payments to outputs or inputs, while market and trade interventions will be less applied under the policy scenario "trap". This logic holds true, since the political equilibrium under the "trap" scenario simultaneously corresponds to a relatively high welfare of urban households.

6. Interestingly, also a strong lobbying position of the private farmers would improve present agricultural policy. Compared to the "trap" scenario improvements are less significant, especially regarding economic efficiency and structural bias towards the cooperative farm sector. This follows quite plainly, due to the fact that under the farm scenario political influence of private farm lobby is generally limited by institutional control of MoA, the only point of access for the farm lobby. Of course, a very strong lobbying position of the private farmers, as it is certainly the case in the EU, would again lead to a political equilibrium far away from an optimal agricultural policy. This could clearly be seen in the location of the policy output resulting from an application of the present Common agricultural policy regime of the EU (labeled by EU-CAP in Graph 3)

Regarding the political decision on a Slovakian EU-accession the model outputs are summarized in Graph 4. Under the EU-game scenario corresponding to the actual decision procedure to be applied according to the constitution, the equilibrium outcome would come closest to an early EU-accession (see Graph 4). Thus, it can be concluded that present institutional arrangements clearly favor a Slovakian EU-accession, at least at the national Slovakian level, while decision-making within the EU is neglected in the framework of the study at hand.

Two main reasons imply this result. First, according to the constitutional rules the institutional power of the pro-reform group comprising of the President, Ministries Mfin, ME, Mfor as well as the standard political parties CDM, DU accompanied by the Hungarian Coalition, is relatively higher in comparison to the standard decision procedure applied to agricultural policy decision making. Secondly, in contrast to agricultural policy regarding the EU-accession the second power block comprising of the Prime Minister (PM) and MDS does not hold an extreme position in opposition to the pro-reform block. This position is held by comparatively less powerful actors, namely WAS accompanied by Coop, Atrade, CAP as well as the unions and consumers.

Analogously to optimal agricultural policy reforms most political opposition against EU-accession can be found in the implementation arena, thus under the "imp" scenario EU-accession would certainly be delayed beyond 2006 and a long transition period would be envisaged.

Overall, institutional arrangements certainly matter regarding the political decision of an EUaccession. However, once again the most significant shift would result under the "trap" scenario, i.e. the establishment of an efficient lobbying structure mediating the true political technology to voters. A closer analysis implies that especially a shift of political preferences of the MDS towards Slovakian EU-accession would have a major impact shifting the final political equilibrium to 0.91. Knowing that the MDS still is a rather heterogeneous party with two clearly distincted right and left wings, these results underline the importance of future developments of political forces within the MDS. The more the pro-reform movements within the MDS manage to integrate pro-reform forces inside and outside the MDS the more probable is Slovakian transition towards a democratic market economy within an enlarged EU. Looking at it the other way around, the more pro-reform movements in the MDS fail to integrate their political forces, the higher i the probability that Slovakian transition process will be stuck in the middle. On the one hand a clear transition towards market economy integrated in the EU is thwarted by a anti-reform group around the left wing of MDS and WAS politically supported by workers employed in the public sector and on the other hand a return to the socialistic system is blocked by political forces around the right wing of MDS and the standard democratic parties, namely CDM and DU, as well as the HC based on electorate support mainly received from new established socio-economic classes of a market economy in the city centers, namely Bratislava and Kosice.

4.4 Economic Efficiency and Political Feasibility of Policies

4.4.1 Optimal Agricultural Transition Policy

According to equation (4) a political feasibility index for the optimal agricultural transition policy has been calculated for each policy scenario. The political feasibility indices are reported in Figure 4 (calculated values are presented in Table 9 in the appendix). According to the exposition stated in chapter 4.1.1 the political feasibility index can be interpreted as the probability that a specific policy, e.g. the optimal agricultural transition policy in the context here, would be the final policy output of a given political feasibility of a specific policy, i.e. the higher the probability that the policy would be the final output of the political system and vice versa, the lower the index the more a policy has to be considered as infeasible, e.g. the probability that it would be the outcome of the political system is rather low.

According to Figure 5 the political feasibility of an optimal agricultural policy, i.e. the application of structural adjustment policies, is rather low ranging from 0.513 up to 0.701 on average. Under actual politico-economic settings, i.e. the "legimp" scenario, the political feasibility reached a meager 0.571 indicating once again that the actual politico-economic equilibrium in the Slovakian agricultural policy domain is far away from an implementation of policy regime focusing on structural adjustment policies. The highest political feasibility index is observed for the "trap" scenario underlining the importance of an efficient lobbying system mediating the true political technology to voters. However, given a feasibility index of 0.720 for the trap scenario, even under most optimistic institutional settings, the implementation of an optimal policy regime in the agricultural sector would still not be guaranteed. This result indicates that within the Slovakian agricultural policy domain fundamental interest and power structures persist which impede optimal policy outputs. In particular, these structures correspond to the following features:

- 1) powerful positions of old socialistic elites in the implementation arena;
- 2) existence of clientilistic network structures supplying privileged access of small private interest groups to governmental institutions in the implementation arena, namely MoA;
- 3) existence of a stable core electorate of anti-reform parties, e.g. WAS, in particular in rural disadvantaged areas;
- 4) extreme unfavorable economic structures in the agricultural sector, mainly in disadvantaged areas in Middle and East Slovakia implying strong economic cuts and mass-lay offs accompanied with transition of the agricultural sector. For example, calculations presented in a FAO-report (1997) indicate that a transition towards optimal economic structures would imply a lay-off of up to 50% of the agricultural working force;

Moreover, political feasibility of optimal agricultural policy would be improved by introducing the cabinet principle into political practice of governmental decision making (see Figure 5), while a shift towards a semi-presidential or presidential system would have comparatively low impact on political feasibility. The feasibility index would only shift from 0.571 to 0.607 whereas improving access structures of consumer organizations and unions to MoA would increase the political feasibility index by 22% (see Figure 5).

So far the political feasibility of an optimal agricultural policy has been analyzed. Another interesting topic would be to identify policy regimes that are feasible under the different policy scenarios and maximize overall economic efficiency. To this end, an economic efficiency index has been constructed. In particular, the normalized equilibrium decision regarding the policy concern "economic efficiency" has been taken as an indicator of economic efficiency of the politico-equilibria derived under the various policy scenarios. The results are reported in figure 6.

According to figure 6 the highest economic efficiency could be found for a policy regime corresponding with the proposals summarized under Agenda 2000 followed by the politico-equilibrium under the "trap" scenario. In contrast, the lowest economic efficiency could be found for an agricultural policy regime resulting from a high influence of private farmers, i.e. under the "farm" scenario as well as for the actual policy regime of the EU (EU-CAP). According to the construction of the scale of the efficiency concern (see appendix), an agricultural policy regime derived under the

"farm" scenario implies overall efficiency losses amounting to 7% of total GDP. In contrast, a policy regime corresponding to Agenda 2000 would imply an efficiency loss of less than 1% of total Slovakian GDP. Note, that the constructed index of economic efficiency is rather simple and thus has to be interpreted with caution. However, it certainly reacts in the right direction and can at least give a correct order of policy regimes regarding their implied economic efficiency.

4.4.2 EU-Accession

According to Figure 5 a Slovakian EU-accession seems absolutely feasible as far as the national Slovakian side is concerned. This holds especially true for an moderate accession after 2006 with a relative long transition period given a political feasibility index ranging above 0.7 for all policy scenarios despite the "trap" scenario. However, it should be noted that under the trap scenario the accession option corresponding to a rapid accession in 2006 is the most feasible option. In contrast, the anti-EU option appears rather unrealistic with political feasibility indices below 0.5 for all policy scenarios. For the "EU-game" scenario, corresponding to the relevant constitutional decision procedures, the option of a rapid accession is only slightly less feasible compared to the moderate accession option (see Figure 5).

A very interesting point can be seen in the fact that in comparison to an optimal agricultural transition policy, an EU-accession appears much more politically feasible, while at the same time economic efficiency of the agricultural policy regime corresponding to Agenda 2000 does come rather close to an optimal policy. Thus, an EU-accession could be understood as a second best agricultural policy that can be considered as politically feasible, while an optimal first best agricultural policy was found to be politically infeasible given the present structure of the Slovakian agricultural policy domain. Note that economic efficiency measured by the index suggested above even neglects transfer payments among EU and Slovakia. Hence, given the fact that Slovakia can expect to be a net-receiver of these transfers, i.e. once Slovakia becomes a full member of the EU its budget contributions will be overcompensated by transfers received from Brussels under the various policy programs. An EU-membership could even turn out as a first best policy, at least from the national point of view of Slovakia.

5 Final Conclusions

The main scope of the study was to analyze to what extent economically efficient agricultural policies are politically feasible, i.e. will actually be implemented in the given Slovakian politico-economic system. In particular, the analysis consists of an evaluation of the political feasibility and implementation requirements of reforms economically needed by the processing industry given the actual structure of the Slovakian politico-economic system. In addition, it has been analyzed to what extent EU-accession can be considered as a second best policy leading to sub-optimal results from an economic point of view in comparison to first best policies. However, being politically feasible it can thus be considered just as preferable as first best policies, which are found to be politically infeasible. Moreover, specific changes of structural or institutional conditions of the political sector have been identified which shift the politico-economic equilibrium towards first best policies.

Overall the undertaken positive analysis of the agricultural policy domain gave the following picture: *Structural Patterns*

Within the Slovakian agricultural policy domain fundamental interest and power structures exist which impede optimal policy outputs. In particular, these structures correspond to the following features:

- Powerful positions of old socialistic elites in the implementation arena. In particular, the interest representation of cooperative managers (Coop) observe direct access to MoA over the SPPK which participates regularly in internal decision making processes of MoA;
- 2) Existence of clientilistic network structures supplying privileged access of small private interest groups to governmental institutions in the implementation arena. Namely agroprocessing industry and agricultural trade organizations have strong access to MoA through SPPK, while private farmers' organizations and agricultural unions rather observe no intraorganizational power within SPPK.
- 3) Existence of a stable core electorate of anti-reform parties, e.g. WAS and the left wing of MDS, in particular in rural disadvantaged areas;
- 4) In a dynamic perspective biased lobbying structure, e.g. strong (agricultural) unions or consumer organizations mediating the true political technology to rural voters, imply that anti-reform forces within and outside of the MDS have been strengthened and the MDS was forced to adapt its originally preferred pro-reform position to positions at least partly opposing an optimal agricultural transition policy. Perhaps, these dynamics can be seen as the most adverse impact on agricultural policy.
- 5) Extreme unfavorable economic structures in the agricultural sector, mainly in disadvantaged areas in Middle and East Slovakia implying strong economic cuts and mass lay-offs accompanied with transition of the agricultural sector. For example, calculations presented in a FAO-report (1997) indicate that a transition towards optimal economic structures would imply a lay-off of up to 50% of the agricultural working force;

Institutional structures

- 1. In contrast to constitutional rules in political practice the resort principle dominates the cabinet principle regarding governmental decision making. Therefore, the MoA and the PM mainly control implementation and formulation of agricultural policies.
- 2. According to given distribution of parliamentary seats, the MDS is the central legislative actor controlling over 60% of total legislative power. Given the identified ideological party space, it seems realistic that the MDS will defeat its central position. In particular, there is only a low probability that future governments will exist without a participation of the MDS. Therefore, it is crucial how political forces within the MDS will develop. Regarding a more optimal agricultural transition policy as well as an EU-accession in the near future, it is of importance that the proreform forces around President Kovac manage to integrate in order to control political activities slowing down economic reforms mainly suggested by the left wing MDS around Meciar, the Prime Minister, so that short term losses from restructuring the public sector can be reduced.

Simulation results of the applied Politico-Economic Model

 Agricultural Policy is mainly concerned with three issues: a) the structural dominance of agricultural cooperatives; b) welfare distribution among rural and urban population, while policy concerns regarding general economic efficiency or welfare of agroprocessing industry as well as of land owners is of comparatively low interest.

- 2. The more agricultural policy making occurs in the legislative arena, i.e. the more agricultural policies are specified by legislative acts leaving no or only little political leeway for the implementing institutions, the more the policy outcome would be shifted towards an optimal policy. In particular, the bias favoring the cooperative farm sector would be reduced significantly.
- 3. The greater the actual legislative power of the president, the closer the politico-economic equilibrium would come to an optimal transition policy. Thus, substantively speaking a institutional reform implementing a semi-presidential system would c.p. result in a more optimal agricultural policy. However, this result has to be interpreted with caution, since it crucially depends on the actual policy position held by the President. In fact, a strong President recruited by the left wing of MDS or even by WAS or SNP would certainly shift the agricultural equilibrium away from an optimal policy. Moreover, in a more dynamic context, a strong president, e.g. elected directly by the population, always bears the danger of political instability, especially in young establishing democracies, as could be learned from experiences made in many south-american countries.
- 4. A dominance of the cabinet principle, i.e. governmental decision making follows a majority vote by all members of the government, vis-à-vis the resort principle actually applied in political practice, i.e. political decision making resides solely in the hands of the implementing Ministry and the Prime Minister, would shift the politico-equilibrium towards an optimal transition policy. Although the shift would go in the right direction, most important policy concerns would not change significantly. At least a harmonization of policies implemented by different Ministries, namely MoA and ME, would take place.
- 5. Interestingly, in quantitative terms, shifts of the lobbying structure generally have higher impacts on the politico-equilibrium than institutional changes. This holds especially true in a more dynamic context.
- 6. Thus, assuming the existence of efficient unions or consumer organizations ("trap" scenario) would result in a significant shift of the politico-economic equilibrium towards an optimal agricultural transition policy. In particular, the equilibrium under the scenario "trap" corresponds to a policy regime comprising of structural adjustment policies aiming to offset structural imperfection in the agro-complex and to improve overall economic efficiency. Moreover, the policy regime corresponds to comparatively high land prices. Nevertheless, the politico-economic equilibrium under the "trap" scenario still differs from an optimal agricultural policy, since it corresponds to a comparatively higher protection of the agro-complex. In more specific terms protection of the agro-complex mainly results from direct transfers to producers, e.g. subsidy payments to outputs or inputs, while market and trade interventions will be applied to a lesser extent under the policy scenario "trap". This results, since the political equilibrium under the "trap" scenario simultaneously corresponds to a relatively high welfare of urban households.
- 7. Interestingly, a strong lobbying position of the private farmers would also improve present agricultural policy. Compared to the "trap" scenario improvements are less significant, especially regarding economic efficiency and structural bias towards the cooperative farm sector. This follows quite plainly, since under the farm scenario political influence of private farm lobby is generally limited by institutional control of MoA, the only point of access for the farm lobby. Of course, a very strong lobbying position of the private farmers, as it is certainly the case in the EU, would again lead to a political equilibrium being far away from an optimal agricultural policy.
- 8. Regarding the political decision on a Slovakian EU-accession the model outputs imply that under the EU-game scenario corresponding to the actual constitutional decision procedure the equilibrium outcome would come closest to an early EU-accession. Thus, it can be concluded that present institutional arrangements clearly favor a Slovakian EU-accession, at least on the national Slovakian level, while decision-making within the EU is neglected in the framework of the study at hand.
- 9. Two main reasons imply this result. First, according to the constitutional rules the institutional power of the pro-reform group comprising of the President, Ministries Mfin, ME, Mfor as well as the standard political parties CDM, DU accompanied by the Hungarian Coalition, is relatively higher in comparison to the standard decision procedure applied to agricultural policy decision making. Secondly, in contrast to agricultural policy regarding the EU-accession the second power block comprising of the Prime Minister (PM) and MDS does not hold an extreme position in opposition to the pro-reform block. This position is held by comparatively less powerful actors, namely WAS accompanied by Coop, Atrade, CAP as well as the unions and consumers.
- 10.Regarding political feasibility an optimal agricultural transition policy seems rather infeasible under all policy scenarios. In contrast EU-accession appears much more politically feasible, while at the same time economic efficiency of the agricultural policy regime corresponding to Agenda 2000 comes comparatively close to an optimal policy, especially regarding an abolishment of the protection of an inefficient cooperative sector. Thus, an EU-accession could be understood as a second best agricultural policy that can be considered as politically feasible, while an optimal first

best agricultural policy was found to be politically infeasible given the present structure of the Slovakian agricultural policy domain. Note that economic efficiency measured by the index suggested above even neglects transfer payments among EU and Slovakia. Hence, given the fact that Slovakia can expect to be a net-receiver of these transfers, i.e. once Slovakia becomes a full member of the EU its budget contributions will be overcompensated by transfers received from Brussels under the various policy programs. An EU-membership could even turn out as a first best policy, at least from the national point of view of Slovakia.

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ANNEX I Graphs



Graph 1: Positions of political organizations in the agricultural policy space of Slovakia



Graph 2: Positions of political organizations regarding EU-accession of Slovakia



Graph 3: Positions of political organizations in the agricultural policy space of Slovakia



Graph 4: Positions of political organizations regarding EU-accession of Slovakia



1= politically feasible

0= politically infeasible



Figure 4: Economic Efficiency of Politico-Economic Equilibria under different Policy Scenarios

1= high economic efficiency 0= low economic efficiency

| Political Actor | Policy Concern | | | | | | |
|-----------------|----------------|-------|-------|--------|--------|-------|--------|
| | wland | wcoop | wagro | wrural | wurban | effic | budget |
| PM | 0,11 | 0,14 | 0,05 | 0,25 | 0,15 | 0,15 | 0,15 |
| MOA | 0,01 | 0,15 | 0,22 | 0,20 | 0,15 | 0,02 | 0,25 |
| ME | 0,00 | 0,00 | 0,05 | 0,20 | 0,25 | 0,30 | 0,20 |
| MFin | 0,00 | 0,00 | 0,05 | 0,20 | 0,25 | 0,30 | 0,20 |
| Mlab | 0,00 | 0,05 | 0,00 | 0,35 | 0,40 | 0,10 | 0,10 |
| Mfor | 0,00 | 0,00 | 0,05 | 0,20 | 0,25 | 0,30 | 0,20 |
| MDS | 0,00 | 0,25 | 0,10 | 0,35 | 0,10 | 0,05 | 0,15 |
| WAS | 0,00 | 0,40 | 0,05 | 0,40 | 0,05 | 0,05 | 0,05 |
| SNP | 0,05 | 0,05 | 0,05 | 0,30 | 0,20 | 0,10 | 0,25 |
| CC | 0,00 | 0,35 | 0,05 | 0,25 | 0,20 | 0,05 | 0,10 |
| CDM | 0,05 | 0,00 | 0,05 | 0,15 | 0,30 | 0,25 | 0,20 |
| HC | 0,01 | 0,04 | 0,05 | 0,40 | 0,20 | 0,15 | 0,15 |
| DU | 0,01 | 0,00 | 0,04 | 0,10 | 0,40 | 0,25 | 0,20 |
| Pre | 0,05 | 0,15 | 0,05 | 0,19 | 0,24 | 0,12 | 0,20 |
| SPPK | 0,05 | 0,35 | 0,49 | 0,05 | 0,00 | 0,07 | 0,00 |
| Соор | 0,05 | 0,75 | 0,05 | 0,15 | 0,00 | 0,00 | 0,00 |
| LO | 0,80 | 0,20 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| ACU | 0,40 | 0,40 | 0,05 | 0,10 | 0,00 | 0,05 | 0,00 |
| CAP | 0,00 | 0,10 | 0,80 | 0,00 | 0,00 | 0,10 | 0,00 |
| Atrade | 0,10 | 0,40 | 0,40 | 0,00 | 0,00 | 0,10 | 0,00 |
| con | 0,10 | 0,10 | 0,00 | 0,30 | 0,50 | 0,00 | 0,00 |

 Table 1: Political Interest of political actors in agricultural policy concerns

| | Policy Concerns | | | | | | | |
|------------------|-----------------|-------|-------|-------|--------|--------|-------|-----------|
| Political actors | budget | wland | wcoop | wagro | wrural | wurban | effic | EU- |
| | | | | | | | | accession |
| MP | 5 | 5 | 1 | 1 | 3 | 1 | 2,000 | 0,5 |
| MOA | 7 | 2 | 1 | 1 | 1 | 1 | 3,000 | 0,5 |
| ME | 1 | 4 | 1 | 1 | 3 | 1 | 1,000 | 1 |
| MFin | 2 | 4 | 1 | 1 | 1 | 1 | 2,000 | 1 |
| Mlab | 4 | 3 | 6 | 2 | 4 | 2 | 3,000 | 0,4 |
| Mfor | 2 | 4 | 1 | 1,5 | 3 | 1 | 1,000 | 1 |
| SFMR | 7 | 4 | 5 | 2,5 | 5 | 4 | 5,000 | 0 |
| SSFAF | 7 | 4 | 5 | 2,5 | 4 | 4 | 5,000 | 0,000 |
| MDS | 6 | 3 | 5 | 4 | 6 | 3 | 4,000 | 0,5 |
| WAS | 7 | 3 | 7 | 4 | 7 | 4 | 4,000 | 0 |
| SNP | 4 | 6 | 3 | 2 | 3 | 3 | 2,000 | 0,5 |
| CC | 5 | 4 | 5 | 2 | 4 | 2 | 4,000 | 0,5 |
| HC | 1,5 | 6 | 2 | 1 | 2 | 1 | 1,500 | 1 |
| CDM | 4 | 4 | 4 | 2 | 5 | 2 | 4,000 | 1 |
| DU | 1 | 7 | 1 | 1 | 1 | 1 | 1,000 | 1 |
| Р | 3 | 4 | 3 | 1,5 | 4 | 2 | 2,500 | 1 |
| SPPK | 6,22 | 2,4 | 5,38 | 4,92 | 4,29 | 4,62 | 5,490 | 0,4 |
| Соор | 7 | 2 | 7 | 3 | 5 | 3 | 6,000 | 0 |
| CAP | 5 | 1 | 2 | 7 | 3 | 4 | 5,000 | 0 |
| Trade | 5 | 3 | 5 | 7 | 3 | 7 | 5,000 | 0 |
| LO | 5 | 7 | 1 | 5 | 6 | 5 | 4,000 | 1 |
| ACU | 6 | 6 | 1 | 4 | 6 | 4 | 5,000 | 1 |
| consumer | 1 | 7 | 1 | 1 | 4 | 1 | 1,000 | 0 |

Table 2: Preferred Policy Positions in Slovakian Agricultural Policy of political actors

| | | | Power | | | | | | | |
|--------|------|------|------------|---------|----------|------|-------|--------|--------|---------|
| Actors | imp | farm | legim p | legimpP | cabinett | con | legis | legisP | trap | EU-Game |
| MP | 0,35 | 0,18 | 0,18 | 0,16 | 0,08 | 0,18 | 0 | 0 | 0,04 | 0,04 |
| MOA | 0,07 | 0,04 | 0,04 | 0,03 | 0,02 | 0,04 | 0 | 0 | 0,004 | 0,004 |
| ME | 0,1 | 0,05 | 0,05 | 0,05 | 0,08 | 0,05 | 0 | 0 | 0,02 | 0,02 |
| MFin | 0,15 | 0,08 | 0,08 | 0,07 | 0,08 | 0,08 | 0 | 0 | 0,04 | 0,04 |
| Mlab | 0,05 | 0,03 | 0,03 | 0,02 | 0,08 | 0,03 | 0 | 0 | 0,02 | 0,02 |
| Mfor | 0 | 0 | 0 | 0 | 0,08 | 0 | 0 | 0 | 0,06 | 0,06 |
| SFMR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSFAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MDS | 0 | 0,31 | 0,31 | 0,28 | 0,31 | 0,31 | 0,62 | 0,5 | 0,372 | 0,372 |
| WAS | 0 | 0,01 | 0,01 | 0,01 | 0,01 | 0,01 | 0,02 | 0,02 | 0,0114 | 0,0114 |
| SNP | 0 | 0,01 | 0,01 | 0,01 | 0,01 | 0,01 | 0,02 | 0,02 | 0,0114 | 0,0114 |
| CC | 0 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,09 | 0,07 | 0,0516 | 0,0516 |
| CDM | 0 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,09 | 0,07 | 0,0516 | 0,0516 |
| HC | 0 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,09 | 0,07 | 0,0516 | 0,0516 |
| DU | 0 | 0,04 | 0,04 | 0,04 | 0,04 | 0,04 | 0,09 | 0,07 | 0,0516 | 0,0516 |
| Pre | 0 | 0 | 0 | 0,1 | 0 | 0 | 0 | 0,2 | 0,2 | 0,2 |
| SPPK | 0,03 | 0 | 0,01 | 0,01 | 0,01 | 0 | 0 | 0 | 0,0016 | 0,0016 |
| Соор | 0,1 | 0 | 0,05 | 0,04 | 0,02 | 0 | 0 | 0 | 0,0056 | 0,0056 |
| CAP | 0,1 | 0 | 0,05 | 0,04 | 0,02 | 0 | 0 | 0 | 0 | 0 |
| ATrade | 0,06 | 0 | 0,03 | 0,03 | 0,01 | 0 | 0 | 0 | 0 | 0 |
| LO | 0 | 0,03 | 0 | 0 | 0 | 0 | 0 | 0 | 0,0056 | 0,0056 |
| ACU | 0 | 0,1 | 0 | 0 | 0 | 0,04 | 0 | 0 | 0,0032 | 0,0032 |
| con | 0 | 0 | 0 | 0 | 0 | 0,09 | 0 | 0 | 0 | 0 |

Table 3:Political Control of Governmental and Non-Governmental Organisations
under variuos institutional and lobbying scenarios

| Access to MOA | Scenarios | | | | | |
|-----------------|-----------|-------|----------|--|--|--|
| Organizations | basic | farm | consumer | | | |
| SPPK | 0,100 | 0,000 | 0,000 | | | |
| Соор | 0,350 | 0,000 | 0,000 | | | |
| CAP | 0,350 | 0,000 | 0,000 | | | |
| Atrade | 0,200 | 0,000 | 0,000 | | | |
| LO | 0,000 | 0,286 | 0,000 | | | |
| ACU | 0,000 | 0,714 | 0,000 | | | |
| consumer | 0,000 | 0,000 | 1,000 | | | |
| | 1,000 | 0,000 | 0,000 | | | |
| own control MOA | 0,300 | 0,300 | 0,300 | | | |

Table 4: Simulated access structures in the agricultural policy domain

Table 5: Simulated policy position of the MDS and the Prime Minister

| | | budget | wland | wcoop | wagro | wrural | wurban | effic |
|----------------|-----------|--------|-------|-------|-------|--------|--------|-------|
| Prime Minister | present | 6,49 | 2,00 | 6,00 | 4,00 | 6,00 | 4,00 | 4,50 |
| | simulated | 2,88 | 6,00 | 1,00 | 1,00 | 4,00 | 1,00 | 2,00 |
| MDS | present | 5,65 | 3,00 | 5,00 | 4,00 | 6,00 | 3,00 | 4,00 |
| | simulated | 2,86 | 5,00 | 1,00 | 1,00 | 4,00 | 1,00 | 2,00 |

Table 6: Approximated political technology of the Slovakian agricultural policy domain

| Policy Concerns | Policy Regimes | | | | | |
|---------------------|----------------|--------|---------|---------|--|--|
| | CAP | Agenda | Optimal | Present | | |
| WLAND | 7 | 7 | 6 | 1 | | |
| WCOOP | 1 | 1 | 1 | 7 | | |
| WAGRO | 1 | 1 | 1 | 4 | | |
| WRURAL | 5 | 3,5 | 4 | 5 | | |
| WURBAN | 5 | 3 | 1 | 2 | | |
| EFFIC | 4 | 1,5 | 1 | 3 | | |
| Budget ¹ | 6,121 | 2,974 | 2,119 | 4,054 | | |

1= Budget has been calculated accorrding the following estimated linear budget function B=Min_{α} T(Z, α):

$$(6) \qquad B = \sum_{I} \boldsymbol{g}_{JB} \boldsymbol{Z}_{J} + \boldsymbol{g}_{0}$$

The coefficients (γ) in eq. (6) have been estimated on the basis of the preferred policy positions of the various actors derived from expert informations. In detail the estimation results are reported in Table 9a below.

Table 9a: Estimated coefficients of budget function

| Regression results | |
|-----------------------------|--------|
| Multiple correlation | 0.9628 |
| coefficient | |
| R ² | 0.9269 |
| Adjustierted R ² | 0.9087 |
| standard error | 0.5855 |
| number of cases | 31 |

| | coefficients [g] | standard error | t-statistics |
|--------|---------------------|-------------------|--------------|
| γο | -0.6286 | 0.6517 | -0.9645 |
| wland | 0.0279 | 0.1059 | 0.2639 |
| wcoop | 0.1598 | 0.0871 | 1.8354 |
| wagro | -0.2494 | 0.1224 | -2.0377 |
| wrural | 0.3960 | 0.0902 | 4.3913 |
| wurban | 0.3212 | 0.1404 | 2.2871 |
| effic | 0.7644 | 0.1443 | 5.2984 |

Given the construction of the scales measuring the different policy concerns (see questionaire below) the estimated coefficents generally corresponds with the theoretically expected signs. Thus, the negative sign for the domestic market price level of food (wagro) indicates that a higher price level reduces c.p. budgetary outlays, as the agro-complex receives more transfers directly from the market. Applying the same argument one should also expect a negative sign for the consumer food price level (wurban). In contrast, the estimated sign is positive implying that a higher consumer price level corresponds technically with a higher state budget. Obviously, this result holds not ture in general underlining that the estimation method is only a rough linear approximation of the true non-linear political technology.

| Policy | Policy Scenarios | | | | | | | | |
|----------|------------------|-------|-------|--------|---------|-------|----------|----------|-------|
| Concerns | | | | | | | | | |
| | legimp | legis | imp | legisP | legimpP | farm | consumer | cabinett | trap |
| WLAND | 0.034 | 0.009 | 0.054 | 0.036 | 0.043 | 0.097 | 0.042 | 0.029 | 0,034 |
| WCOOP | 0.192 | 0.229 | 0.171 | 0.208 | 0.189 | 0.182 | 0.151 | 0.166 | 0,192 |
| WAGRO | 0.136 | 0.095 | 0.169 | 0.079 | 0.111 | 0.085 | 0.080 | 0.124 | 0,136 |
| WRURAL | 0.280 | 0.361 | 0.221 | 0.300 | 0.266 | 0.282 | 0.312 | 0.278 | 0,280 |
| WURBAN | 0.190 | 0.193 | 0.183 | 0.246 | 0.228 | 0.190 | 0.256 | 0.208 | 0,190 |
| EFFIC | 0.168 | 0.114 | 0.201 | 0.132 | 0.163 | 0.164 | 0.160 | 0.196 | 0,168 |

Table 7: Prices

Table & Decision

| Policy Concerns | Policy Scenarios | | | | | | | | |
|--------------------|------------------|-------|-------|--------|---------|-------|----------|----------|------|
| | legimp | legis | imp | legisP | legimpP | farm | consumer | cabinett | trap |
| WLAND | 2,500 | 5,891 | 2,095 | 4,233 | 3,232 | 5,286 | 3,912 | 2,534 | 5,34 |
| WCOOP | 5,263 | 5,041 | 5,479 | 3,226 | 3,843 | 3,963 | 4,585 | 5,248 | 2,88 |
| WAGRO | 4,264 | 3,458 | 4,644 | 2,680 | 3,717 | 2,702 | 2,627 | 4,009 | 3,35 |
| WRURAL | 4,796 | 5,388 | 4,192 | 4,839 | 4,534 | 4,832 | 4,692 | 4,462 | 3,65 |
| WURBAN | 1,958 | 2,024 | 1,966 | 2,010 | 1,961 | 1,958 | 1,712 | 1,755 | 1,12 |
| EFFIC | 2,604 | 2,655 | 2,657 | 2,567 | 2,549 | 2,550 | 2,479 | 2,307 | 1,93 |

Table 9: Political Feasibility Indices

| Political Scenario | | Polictical Feasibility Index of different Policies | | | | |
|-----------------------|--------------------------------|---|----------------------------|---------------------|--|--|
| | Optimal Agricultural Policy | EU-accession in 2006 | EU-accession after 2006 | No EU- accession | | |
| imp | 0,51 | 0,49 | 0,99 | 0,51 | | |
| farm | 0,58 | 0,68 | 0,82 | 0,32 | | |
| legimp | 0,57 | 0,56 | 0,94 | 0,44 | | |
| legimpP | 0,61 | 0,61 | 0,89 | 0,39 | | |
| cabinett | 0,66 | 0,63 | 0,87 | 0,37 | | |
| con | 0,70 | 0,59 | 0,91 | 0,41 | | |
| legis | 0,61 | 0,64 | 0,87 | 0,37 | | |
| legisP | 0,67 | 0,71 | 0,80 | 0,30 | | |
| trap | 0,72 | 0,93 | 0,57 | 0,07 | | |
| EU-Game | - | 0,73 | 0,77 | 0,27 | | |

Table 10: Economic Efficency Index

| Political Scenario | Economic efficiency |
|--------------------|---------------------|
| imp | 0,67 |
| farm | 0,30 |
| legimp | 0,81 |
| legimpP | 0,70 |
| cabinett | 0,80 |
| con | 0,71 |
| legis | 0,73 |
| legisP | 0,73 |
| EU-CAP | 0,50 |
| trap | 0,85 |
| EU-Agenda | 0,92 |
| opt | 1,00 |

Table 11: Results of the factor anaylsis of Policy Positions of the relevant political actors

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | | |
|---|--------------------|---------|
| | | ,789 |
| | | |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 100,964 |
| | df | 21 |
| | Sig. | ,000 |

Total Variance Explained

| | Initial Eigenvalues | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | | |
|-----------|---------------------|----------|-------------------------------------|-------|----------|-----------------------------------|-------|----------|------------|
| | | % of | Cumulative | | % of | Cumulative | | % of | Cumulative |
| Component | Total | Variance | % | Total | Variance | % | Total | Variance | % |
| 1 | 4,514 | 64,481 | 64,481 | 4,514 | 64,481 | 64,481 | 3,010 | 43,000 | 43,000 |
| 2 | 1,048 | 14,966 | 79,447 | 1,048 | 14,966 | 79,447 | 2,551 | 36,446 | 79,447 |
| 3 | ,689 | 9,841 | 89,287 | | | | | | |
| 4 | ,360 | 5,137 | 94,424 | | | | | | |
| 5 | ,217 | 3,100 | 97,525 | | | | | | |
| 6 | ,115 | 1,646 | 99,170 | | | | | | |
| 7 | 5,808E-02 | ,830 | 100,000 | | | | | | |

Extraction Method: Principal Component Analysis.

Component Score Coefficient Matrix

| | Component | | | | |
|--------|-----------|-------|--|--|--|
| | 1 | 2 | | | |
| BUDGET | ,029 | ,265 | | | |
| EFFIC | ,183 | ,109 | | | |
| WAGRO | ,422 | -,205 | | | |
| WCOOP | -,068 | ,347 | | | |
| WLAND | ,312 | -,570 | | | |
| WRURAL | ,127 | ,078 | | | |
| WURBAN | ,458 | -,246 | | | |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Component Scores.



Graph 5: Results of CGE-run under different Policy scenarios of EU-accession: Total welfare of average Slovakian Consumer Household





REAL GDP



Graph 7: Results of CGE-run under different Policy scenarios of EU-accession: Share of agicultural production in total industrial production



Graph 8: Results of CGE-run under different Policy scenarios of EU-accession: Share of agroprocessing in total industrial production

Source: Banse, M. and Henning, Ch. (1997): A recursive quasi-dynamic CGE for Slovakia. Internal working paper. Model specifications are available in Banse, M. (1996).