

Education Policy as a factor of development

Uroš Pinterič



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Introduction

In the perspective to raise the awareness of the public policies in modern society this book is prepared with multiplicative effects in mind. First the book is to educate on public policies, which can be dismissed by the fact that there is long list of similar publications, which are developing from institutionalist towards behaviourist and to some degree even to constructivist approach. If there is one single characteristic of the public policies' theory is that from oversimplification in the early stage the theory reached the awareness of high level of complexity of the public policies as a subject of the research.

Second, the book deals with the education policy mix, exposing the role of the education policy for the present and future of the state. Usually discussed policies are in the field of the foreign affairs, economy, public finances, healthcare. Education and its influence is often overlooked by the authorities as well as by the individuals.

Third, the book is particularly concentrated on the Education policy of Slovenia. The forgotten case of the understanding Central and Eastern Europe, which changed its position from the model transition country

into the model case of bad policy management.

In this manner, book can be understood as the case analysis simulation of the theory in practice and at the same time it is also the evaluation of Slovenian education policy in broader context.

Additional importance of the work is connected to holistic approach to the topic, which shows the complexity of the policy and at the same time it shows also the centrality of the education policy.

Approaches to understand public policies

Political science deals with three main areas of research which are described in words polity, politics and policy. First one, polity describes so called political community/polis/politeia and represents normative-institutional frame of political (see Klimovský, 2008: 107).

Second aspects is described by politics and is process element of polity. It is developing in the frame of political community. Its main task is to balance different political powers among stakeholders as bearers of political ideas (Klimovský, 2008: 107-108). Basic political process, that is emerging in modern political systems with the task of change the balance of power is system of elections. Within the election procedures, political stakeholders (primary political parties) compete for the position of government (power). On the other hand, there are different civil society actors with their basic task is not to enter the competition for the position of power (government) but to enter political processes in order to carry out their own particular interests.

Third aspect of political is policy and it represents the field of political management of different substantial areas. In order to do so, relevant actors develop mutual relations in order to be able to regulate specific area of interest. In this case we speak about public policies as

set of rules and measures as a result of policy processes.

Public policies are one of broad areas of political science research interest. In this frame, political science is interested in research of different aspects of solving social issues within public institutions. Dye (1976: 1) defines public policies as answer to the question what the government does, why it does exactly what it does and what consequences this brings. In this context Parsons (2005: XV) warns from narrow understanding and suggests use of broad list of disciplines and approaches.

Policies are public in two main elements. First, it is about addressing the issue, which is of public and not private nature. Thus it concerns broader group of individuals within the social conditions of life. Second, public of policies is assumed via public addressing of the issue, in a sense that the solution is by definition under control of public and not private or tertiary sector. In this context public sector should adopt appropriate and adequate decisions, measures and legal acts in order to implement necessary measures or leave the implementation of measures to the private sector. In later case, competent decision-maker preserve its right to intervene into implementation process when necessary.

One can understand public policies as set of accepted activities or

measures, which shall, provide these societal activities, which would result in what is expected to be public interest, according to the belief of public sector. However, Geyer and Rihani (2010: 27) point out that policy actors (who shall) never really represent the society. In this manner they refer to authors who, in 1972, called the policy making approach as "garbage can model", where policy issues are selected by randomly picked solutions, which were enacted and then observed if they work (Geyer and Rihani, 2010: 27).

Speaking of public policies, one should distinct between different approaches to understanding of the concept itself. In this manner policies can initially denominate certain field of activities within which policy measures are carried out as set for providing holistic solution in certain policy field (see Hogwood, Gunn, 1984: 13-14). In this manner we usually speak of education policy, economic policy, health care policy, military policy, foreign policy, etc. By this we address sets of governmental regulations in certain areas, which define and direct development of state activities in individual fields of state interest. Set of individual measures can be understood as another definition of public policy (Hogwood, Gunn, 1984: 6). Additionally, public policy can be defined as desired state-of-the-art in certain area or expressed desire of the government to follow certain way of development in specific area (Hogwood, Gunn, 1984: 14-15).

Practically last case might be illustrated by government setting itself a goal to maintain low level of inflation and consequently all its activities and measures are synchronized in the direction to achieve this goal. Hogwood and Gunn (1984: 15) understand public policy also in a sense of addressing governing institutions by other actors with their demands and propositions how to set certain area. However, this option can be understood also just as modification of first two possible definitions of public policies. In this manner, policy as act of government decision can be also understood just as modification of first two definitions. Hogwood and Gunn (1984: 15) in the last case warn that public policy is in fact always more than just simple act of governing institutions decisions. After public policy is formally adopted / confirmed, gives legal power to competent institutions to implement certain activities. (Hogwood, Gunn, 1984: 16). One of most important definitions of public policies and it is not often discussed, is definition of public policies via consequences of the measures. In this context public policies might be defined as direct (outputs) and indirect (outcomes) consequences of policy measures. Hogwood and Gunn (1984: 16-17) see outputs and outcomes as two different approaches to the public policies' definition but on the other hand we prefer to understand these two concepts as consequence of implementation of policies and not as definitions.

Knoepfel et al (2011: 23) define public policy as a "power games in a specific institutional context played out between various public actors who make concerted effort to resolve a collective problem in collaboration or in opposition t para-state and private actors".

At the same time they remind that already by the 1980 there was more than 40 different definitions of public policies (Knoepfler et al, 2011: 23), which shows fast development of the filed and lack of any broader agreement among the scientists.

Theoretical models of public policies

Approaches to the understanding of public policies can be, according to John (2012), divided in five basic groups. First, there are institutionalist approaches, arguing that policies are outcome of institutional decision making. Second, there are groups and networks approaches, which pay most attention to the idea that policies are result of (predominantly informal) networks and connections among different involved actors. Exogenous approaches are third set, which pays more attention to external (policy environment) influences on policy outputs and outcomes. Fourth set is called rational actor approaches, and stresses that policy decisions are based on rational choice theory. Last set of approaches is "ideas-based" and develops the thesis that every policy issue produces first an idea of solving it

that develops and matures before actual policy process starts (on different types of approaches see John, 2012).

On the other hand, Dye (2002: 11-12) defines eight different research approaches to understand public policies. Even if most of the attention will be paid to process model (in a special chapter) we will shortly mention also institutional, rational, incremental elitist group (interest) model, public choice theory and games theory model.

Institutional model understands public policies as effect of institutional activities. In this manner it pays most of the attention to understanding of institutional activities and their relations as key to understand the way of policy-making. However, it mainly ignores content of public policies (see Dye, 2002: 12-14).

Rationalist model bases understanding of the policy-making on Pareto optimum assumption, where nobody can benefit more without somebody else start losing own benefits. However, rationality in policy-making shall be understood in limited extend since policy actors (due to the particular interests) do not have all relevant information. This makes each decision only limited rational (Dye, 2002: 16-19). One should be even more careful about issue of Pareto optimal solutions since theoretically definition is clear while in policy practice much less so. Usually we can see Pareto optimum issue in

questions such as; to which extend taxes should be raised in order to maintain public financing of healthcare and reverse; when reducing public health care has less negative effects than increasing the taxes.

Incremental model of public policies is mainly adopted in budgeting and is understood as series of small changes (adjustments) of certain policy since any strong reform can bring undesired effects (Dye, 2002: 19-21). Incrementalism developed in 1950s as response to increasing complexity of the modern world that was not suited for rigid long term plans but demanded higher level of flexibility by adopting small scale adjustments of policies, that can be constantly evaluated and adjusted (Geyer and Rihani, 2010: 27).

Group theory sees public policies as balance of interests and powers (resources) of different policy actors. Power is understood usually as human and financial resources and ability of individual actors to activate them in most efficient manner. Any change of public policy within this model is based on change in balance of powers.

In opposition to group model, elitist model understand policy-making as rather simple description of enactment (legalization) of desires and ideas of social/political/economic elites, since they have social power to do so. However, this is possible only in the conditions of political apathy of society which has no power nor interest to influence policy-

making processes (see Dye, 2002: 23-25).

Public choice theory is economic analysis of policy-making, where public policies are understood as collective decision on individual interests. In this manner government is understood to perform certain functions in the cases when market principle fails. In this manner government provides public good and it reduces or removes different externalities. In this manner government/political system provides collective decision (as the state) which limits or directs individuals (as private subjects, companies or any other individual organization) from causing harm to society. As in the case of rationalist approach, there is serious doubt about interests which are represented by state; is it society/public or is it elites and special pressure groups. Rational choice theory in a sense offers also the answer to the question, why political parties (or political candidates/politicians) are not able to provide appropriate policy alternatives. As Dye (2002: 26) noted, political parties and candidates are not interested in higher principles but they care only about winning the election. Their policy position is formed in a way to win the election and they do not win the election in order to create public policies.

Games theory basically puts rational choice theory into the conditions of competition (Dye, 2002: 27), in a sense that there is more possible

solutions, based on chosen option of individual policy actors (it works similar to the prisoners' dilemma, where result in certain field is consequence of standpoints of individual actors). If in rational choice theory result is understood as “only logical” in games theory, result is understood as product of individual decisions culminating into logical compromise.

Stakeholders and policy environment

Public policies do not develop in empty space just by different actors ideas how society should be organized. Sometimes policy issues as well as accepted solutions are strongly determined by different components of environment. Pal (1987: 117) in this sense defines six main categories of environmental characteristics, which increase the chances for issues to become policy issues and which also influence other phases of policy process.

Each policy process is defined by general cultural context of society, where it takes place. e.g. in conservative societies there, issue of family policy will be solved in preserving traditional family (discriminating different alternative forms of family as well as question of abortion will be predominantly solved in “pro-life” way). Demographics as second type of environmental characteristic defines especially certain policies which are age, education or economy related. Societies with higher share of old people will be strongly concerned in healthcare and retirement, while young population will more often address lack of jobs as main concern. Class conflict (since it sounds Marxist it can be called also social conflict) influences policy process in a sense that it emphasises the main biases in the society, it might be considered as political environment which promotes these issues that have stronger political impact (in a sense of electoral

result). As example one can see that in Slovenia during the economic crisis 2008-2014, political parties especially from “anti-communist pole” prefer to discuss topics that polarized society than to address issues from the constructive position. One of the latest case was strong opposition to property tax and when the tax failed they criticised government for taking supplementary measures in order to cover 200 mio. Eur budgetary revenues' reduction.

Nest level of environment is about the institutional practices. They define. By formal and informal, their ability to act as policy actors. If certain institution has relatively loosened norms it can adapt to different situation much faster than institutions with hierarchical and formalized forms behaviour. Close to this is also group strategies, which still should not be mixed with institutional practices. If institutional practices predominantly shape internal rules of conduct of policy actors, group strategies mainly define their way of response to external impulses. Mainly this response can vary from ignorance of impulses, attempts to negotiate and compromise and to oppose. In this manner certain behaviours are less acceptable than others, but they strongly vary on the resources that are available to individual policy actors. In this manner one can agree that negotiating position of Greenpeace is relatively limited in negotiation as long as they do not base their activities on demonstration of the power by guerilla

activities and protests. On the other hand governmental policy actors do not need to rely on such activities since they rely on their (more or less legitimate) power to govern. Last outer cycle of environmental influences over public policies belongs to individuals, with their habits, characters and interests. Individuals in this manner act as representatives of different institutions and indirectly influence policies. In some cases certain individuals, due to their position or reputation, are able to influence policy-making on their own without any institution attached to them. They are usually different opinion leaders who previously occupied important positions but maintained their charisma and influence even after leaving their positions of formal power. Next to these six factors that Pal (1987) defines as crucial environmental influences on public policies we are adding one, which can be considered obvious but legislative practice constantly proves it wrong. It is system of public policies itself. Public policies influence public policies. This is most visible when decision-makers believe that this is not the case. And since they have power that their beliefs can be enacted, state usually faces laws contradicting each other. This can be for instance seen in social policy and economic policy, especially if country needs to merge market oriented economy with strong social state and has no adequate resources to do so.

Policy arena and actors

In any writing on public policies there is no right space to deal with policy actors and arenas, since one needs to operate with this two concepts from the start but than again one has to explain some other basics first.

Main characteristic of policy actors and arenas is that any policy output and outcome is highly dependent on these two categories and their relations within the frame of individual public policies. At the same time, policy arenas are (as aggregate of individual actors and their environment) space in which individual public policies are developed.

Initially, policy actors (known also as players) can be divided in two main categories; governmental and non-governmental. Among governmental policy actors there are institutions of political representation (parliaments), institutions of executive branch (government, ministries, public agencies, etc.) public administration at different levels and political representation on sub-national level. Non-governmental actors are representatives of different interests (business and civil society groups), political parties /non-parliamnetary parts of them), expert public (which usually plays role of competent knowledge that supports certain interests or suggests

solutions) and mass media (see Pal, 1987: 107-115; Grdešić, 1995: 69-78 and Howlett and Ramesh, 2003: 52-84). Next to this, we are exposing also individual as policy actor, since there are individuals which are able, due to their social capital and other resources, to get involved into policy arenas as independent actors. Often they play role of moral and expert authority, which has certain level of influence over other actors or public. Individuals playing such role are often independent thinkers with long history of social activism or former influential politicians.

Aforementioned institutionalist definition of policy actors is one of most common ways to understand participation in policy processed, based on rules of participation and different interests. Rules of inclusion of policy actors are subordinated to the rules of certain policy process (how the policy process is developed) and to institutional rules of individual policy actor which participates (how certain actor can behave, what are its competences). Rationalism of policy processes adds up also the question of interests, which is to be understood as rationalized system of desires for maximisation of benefits or protection from loses for individual actor. Logic of rationalization leans towards the policy solutions where all or majority benefits or towards the solutions that everybody tries to avoid potential loses (of power, position or other resources). In case

when such solution is not possible, involved actors try to at least minimize negative effects. What institutional-rational logic of policy analysis does not take into the account (or systematically underestimate) is question of irrationality of policy actors (as emotionality and as well as mental deprivation in logic). Irrationality can be consequence of lack of relevant information, irrationality of actors or of their absolute need to realize their idea at any cost and consequences. Incomplete information causes that actors' decisions are only limited rational within the information that is available to them. This can be simplified via following example; actor A within certain process decides for solution X based on information Z and lacking the information S. If this actor would have, at the time of deciding both information Z+S, he would decide for solution Y which is more rational but unavailable due to lack of information. Example of protecting interests at any costs can be understood as actor A pursuing solution X even if losing solution Y which is considered to be more beneficial on long run. Such behaviour is usually result of very particular interest which is of special importance (maybe being a mission or life goal) to that very actor even when everybody else see no value in solution X. By this we approach third aspect of irrational behaviour of policy actors, which is mainly left aside by most of the policy studies approaches. With other words, policy studies often fail to recognise the difference between institutionalized actors and their

personalized representatives (within the context of policy networks also van Warden, 1992:33, indicate need for awareness of this difference). Normative predictability of institutionalized actors provides comfort in understanding of basic development of certain process. At the same time it neglects individual specifics that often influence the policy solutions or development of the policy process. In the practice of policy-making, within the boundaries of normative context, focus is on communication of policy actors, which are, due to their personal psychological profiles, more or less compatible or attractive to one another (on interpersonal attractiveness see Forgas, 1987). These individuals with certain psychological profiles and social capital (as ability to enter and fruitfully participate in social relations) act on behalf of institutions. Missing this fact causes discrepancy between understanding the ideal processes, expected outcomes of public policies and reality. Consequences can be described by another case that can be applied to any goal oriented activity, not only in the field of policy processes.

For the purpose of keeping balanced social policy in Slovenia, systematic negotiation of so called social partners (government/competent ministry, workers' unions and representatives of business) is needed. In theory it is known also as social tripartite negotiation. Result should be sound social policy,

which influences economic development as well as social stability of the state and social welfare. However the discussion takes place among representatives of “social partners”, who are individual persons, which can be named in any given point of time and can be replaced (only taking into the account possibility of death), while institutions are staying the same. In following description of personal characteristics and describing special scenario we will try to illustrate basic problem of ignorance of so called human factor in policy-making.

As we mentioned before, even if some researchers are aware of the issue concerning the human factor they are mainly avoiding this field of research due to differentiation from accepted theoretical and empirical approaches in political science. Argument against recognising human factor as important part of policy actors activities is its complexity, unpredictable effect of its activity and demanding methodology of research. On the other hand, current approaches, even without taking into account human factor, still produce relatively robust and well supported understanding of policy activities. On the other side, argument for systematic research of human factor impact on public policies lies in the cases when apparently well prepared processes do not finish as they are planned according to the rules and reasons for such discrepancies should be

fund. At the same time, research of human factor impact on public policies would shift understanding of public policies from institutionalist to more constructivist approach, enabling deeper understanding of the reality.

Despite general fact that more or less anyone can become policy actor, only some of them are able to take the position of relevant (those who are listened to) actors. This is especially the case in regard to non-governmental actors, which are limited in their access to the policy arena and to relevant policy relations by governmental actors. Colebatch (2004: 36, 44) calls such actors with limited access outsiders. Their main characteristic is that they have no access to policy community or policy arena – space where policy-making takes place. Policy arena is in this sense protected by so called institutional gate-keepers, who are limiting the possibility to become part of certain arena, and consequently they are limiting the ability to become relevant policy actor. Policy gatekeepers are often central policy actors. However, they can be understood as system of (in)formal demands and conditions that shall be fulfilled by certain actor in order to be included in individual policy process.

Individuals as policy actors: between being me and representation

Public policies are given sets of activities accepted and executed in order to provide developmental directions of certain society or state. However, public policies do not happen just like this. They have to be negotiated, accepted and carried out by different subjects that are usually called policy actors, in certain conditions also decision-makers. However, Contemporary political science says almost nothing on sole nature of political actors. Authors such as Pal (1987) or Grdešić (1995) define different policy actors and group them in certain categories. According to the majority of public policy literature we can find two groups of policy actors; governmental and non-governmental. Some authors (e.g. Kotar), simplify governmental actors even further and argue that state as a whole can be understood as policy actor in relation to what can be called civil society actors. In order to understand the complexity of public policies or any given social activity in fact, one shall understand the internal and external complexity of actors. In this chapter we would like to develop discussion on what policy actors are in reality and how do they behave between classical theoretical models and real life policy/politics in polity.

Policy actors in theory

As an example we will try to show classical policy arena that can emerge in the case of some local policy issue. One can see governmental and non-governmental actors as two mayor categories that are working on different policy/politics/polity levels. It is obvious that policy actors in this sense are mainly understood as relevant institutions that are involved into policy processes. However, from such picture we still have no idea about how certain policy network will emerge and develop over time. Who will be crucial actor, will be one or will there be many of them and finally what will be resource that will make certain actor eligible for entrance into certain network or for taking over one of crucial positions.

Institutionalist approach towards public policies is not concerned with real nature of policy actors, despite some authors (e.g. van Waarden, 1992) are warning form simplification of understanding of policy actors. However, when discussing public policies in academia, usually there is only limited space available for actor analysis that could give us more precise understanding of decision-making in general. Partly, this is the consequence of narrow research interest of political scientists, usually interested in processes, institutions, policies, politics and they are not prepared to compromise their work with complex combination of understanding the situation.

In this manner, one who is mainly concerned about institutions, will in research stress the organization of institutions, their internal and external environment. All decisions will be logical consequences of institutional design and rules. Those interested in processes will focus on internal and external rules of procedures and general normative framework empowering different institutionalized actors for certain activities. Those interested in policies, will mainly add content to previously mentioned institutions and processes. Politics will question power relations and abilities of different institutionalized actors to subordinate others. They will in general forget about the role of individual if this individual has not instrumentalized/institutionalized position, such as president of republic or speaker of the parliament, giving him certain empowerments. Individual as person can be important in case of different moral authorities with access to communication channels, and such individuals are playing role of opinion makers, which is different form case to case. If opinion maker is person attached to certain institution he/she can be quickly recognised as voice of certain profession (mainly in case of academia or political commentators). It is very rare that some person become serious opinion maker without taking some formal power position first.

There is main question do we see trees or forest in case described

above. If we say that each described part is tree than we can see trees, but forest is reserved for joining different approaches together. However, each of the approaches at the same time provides forest for all parts working in the system that are usually understood as irrelevant and they usually attract no other attention than one, attached to the position they are occupying.

Administrative culture as human factor

Administrative science is explaining activities in public administration with given rules that should be applied and at the same time with administrative culture. Administrative culture can be seen as general pattern of informal practices, and behaviour of individuals within the organization in a way that sum of these individual patterns create more or less coherent activities of organizational behaviour. Organizational behaviour is usually subordinated normatively demanded activities. However, it can influence style of acting or in some cases can even dispute normative demands and creates its own definition of expected behaviour. In such cases institutional actors become unpredictable for normativists, for policy reality they become independent actors that can change the power relations and their prescribed position in network, especially in cases when they have additional resources and interests to act against expectations. Due to this reason it is important to understand how administrative culture is

developing and changing as we will see below.

Despite only rarely directly addressed, administrative culture is one of most important elements in whole organisational structure. Raman and Lunder (2003: 108) state that administrative culture can be often one of most relevant factors of successful work in public administration. Administrative culture can be partly understood as so called “human factor” and it is strongly connected to the institutional socialization of each new employee. Saxena (1996: 706) defines administrative culture as pattern of values and expectations that are common to all members of some organisation. Expectations and values create rules (norms) that very effectively create appropriate behaviour of individuals and groups in organisation. Older than administrative culture is, more values and norms are rooted and changes are harder to be carried out. Organisational culture is consequence of history of each organisation and its members who shaped it in the past. At the same time this is also the greatest barrier to changes in organisation (in our case in public administration). Saxena (1996: 705) presents special model with all elements that should be reformed in order to reform public administration.

Further on, Saxena (1996: 705) also explains direction of change. Despite initial model is explaining direction only for organisational structure, but we can argue that same direction of change is

applicable also in the case of other three elements. In the case of change of administrative culture in practice it means shift from situation where client was almost non-existing for public administration and when lower civil servants mostly served as executors of higher civil servants ideas to the situation where lower as well as higher civil servants will concentrate all their working efforts to servicing clients' needs and wishes.

Saxena (1996: 706) argues that bureaucratic rigidity, hierarchy and in some cases even autocracy are main reasons for bad solutions. As example it is exposed case when civil servants are strongly supporting value of paper documentation and archiving and who find use of electronic document too abstract for use in practice. Saxena (1996: 706) argues that despite technological innovations, such as e-mail, that can assure information not only just-in-time, but even ahead-of-time, in order to improve administrative procedures, are not easily and quickly introduced. The main reason for such situation is existing administrative culture that needs change in order to change of strategy of acting in order to introduce new technologies and finally also to adjust administrative structures as it was shown in picture 1.

In the context of administrative culture Klimovský (2008: 182-184) shows good example how within the formal hierarchical structure of organization is over driven by informal patterns of interpersonal

communication that can disturb organizationally predefined communication flows. These patterns can form specific informal sub-organizational structures and are not necessarily connected to institutional routines and can be even blocking them. Together with personal characteristics of individuals on different positions they create what can be called human factor. Due to this fact group of individualists with no external pressure on their work will be ineffective while group of team-oriented workers will be much more able to complete their task together.

Within policy area such elements as administrative culture create uncertainty at outcomes as well as at outputs. Normative solutions depend on interpretation by executive institutions and on discretion right of individual civil servants. By this they become strong individual policy actors, shaping policy reality and can influence changes in public policies, firstly in implementation and in second place, by good or bad performance at implementation, in corrections in public policies.

I, the actor

Classical political actors in shape of different institutions or institutionalized positions, behaving according to normative demands are hiding behind individuals. When talking about the individuals we have to concentrate on two psychological components. Every individual has different needs that can be theoretically connected to Maslow hierarchy of needs. These needs define in what extend individual will activate himself in certain process. Needs of higher level (self-realization) can be further connected to the Milbarth set of political activities. On the other hand each individual plays different life-roles. These roles will define their activities in certain environment and at the same time these social roles will simultaneously influence each other.

Participation was already in the previous historical eras important element of political/public. Most well known example of political participation in history is model of Athenian democracy (see Arendt, 1996: 29-35). Involvement of public in the political sphere was not only right but also important daily activity of Athenian citizens. In this manner Arendt (1996: 40-41) describes participation in public sphere as activity that gave human nature to human beings in Antics. Today's perception is directed to privacy of individual and based on Rousseau's romantic idea about value if intimate and private (Arendt,

1996: 41), when Antics defined private as not-free and unworthy of human. We cannot overlook the fact that model of political participation within Greek polis can only function with limited number of participants and any grater spreading of circle of participants in public affair is oriented towards more undemocratic models of government (representative democracy is less democratic than direct democracy) that provides easier management of political system.

Today's political participation can be expressed in different ways but basically is connected to the questions to be or not to be politically engaged, in which direction, how intense, and how long to act. According to type of activities we can distinguish following participation biases: transparent – hidden, autonomous – subordinated, sporadic – continuous, expressive – instrumental, verbal – nonverbal, social – unsocial (see Fink – Hafner, 2000: 3). Milbarth (1965: 16-22) in the context aforementioned combination for participation and its form defines hierarchy of political participation with five levels where each of the levels has specific list of activities characteristic for specific level. These activities are not present or conducted by participant on lower level (see table 1).

Table 1: Milbarths' hierarchy of political participation

Level of participation	Activity
Political apathy	No political engagement or activity
Observance	Active expose to political information Participation at elections Supporting political debate Convincing others to vote for specific candidate or party Wearing political badges, etc.
Transitional activities	Contact with political leaders Financial donations to political parties Participation at meetings
Gladiator activities	Active participation in political party Active membership in party Participation at party forums' meetings Collecting money for political party Application for public/party positions Holding public/party positions
Politics as profession	Career politician to whom politics is only source of survival

Milbarth, 1965: 16-22.

Milbarth in his hierarchy defines also two transitional activities in the passage to observation activities where individual starts to seek for political information and on the passage to gladiator activities when individual is trying to convince other to vote for "our" political party. We can see that there are no strictly defined forms of individuals' participation in administrative processes. This tells us that political

participation is covering only half of citizen which is appearing in public sphere as politically engaged citizen, but his other half that is user of public services is excluded from political-administrative processes that are by definition reserved for administrative apparatus of state (citizen in this connection is only passive receiver of services).

However, each attempt to participate in politics or policies is usually motivated by different interests and in first place by needs of individuals. In this sense we can consult Maslows' idea (1954) on hierarchy of needs/values that individual has. Idea is that our needs are composed into pyramid of needs and each level is reserved for smaller number of individuals. First level are biological needs that we all share – we all need food and beverage in order to survive, also security is very crucial for almost everybody. However, love/belonging is already not so necessary to survive, despite it is also relatively common to majority of people. Respect is next step; many people do not care about respect. Only very limited number of people has need for self-actualization and these people are usually taking most important positions in society, trying to systematically change or influence social reality. Last two groups of needs are driving people to become active and start activities within Milbarth (1965) hierarchy of political activities, or to become active in any other given field, where more than their own survival is at stake. In this sense we have to

understand that all people act as individuals, according to Hobbes definition of man, we are selfish. This means that we will try to take care for us in the first place and only then we will help to others. Theory and practice of altruism can dispute this statement, but mainly on the level of general population in life-saving situations.

According to selfish nature, anyone at certain position will try to secure best position in the system. IN order to fulfil this interest, one will take all necessary activities to achieve appropriate position and power relations within own networks that will serve own interest. Moral standards and fear from sanctions of individual will limit such person in activities such as bribing, corruption, information filtration and generation. Higher the level of self-confidence is, more aggressive are methods to fulfil own interests. Typically such activities are present in political networks, business networks (typical cases are connected to the last economic crisis, where number of misleading financial reports was found in big corporations, showing different financial situation than it was in reality), etc. Such situation can be linked also to different associations with limited membership that serve mainly their own interest. Van Waarden (1992) in this manner starts talking about clientelism, statism, captured statism and other forms of policy networks where specific relation between state and private policy actors appear. He briefly (ibid) indicates that such

things happen due to fluctuation of individuals between different power positions. However, since then, we skip this part and just argue that actors have stronger or weaker power position. We are simply overlooking that in fact certain individuals are occupying these positions.

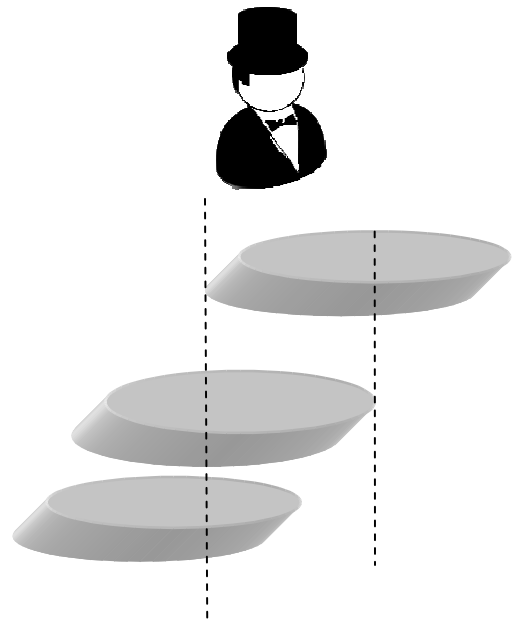
Understanding of individuals of political actors in manner shown above, has numerous consequences for understanding reality and its complexity. Reductionism of individuals to institutionalised actors gives researches comfort of predictability of activities and enables them to logically explain the general picture and course of development. However, those interested in processes are rarely interested in output, and vice versa. When explaining illogical outcomes or atypical process development they will generally referee to noise in communication or as power relation result. Only rarely we will be able to see explanation of situation in the manner of societal complexity. If we introduce complex understanding of individuals' roles in a system we get real life mess that is partly revealed only in journalistic discovering different affairs and their assumptions why certain things happened or were blocked.

Individual

Individuals' political network

Individuals' economic network

Individuals' private network

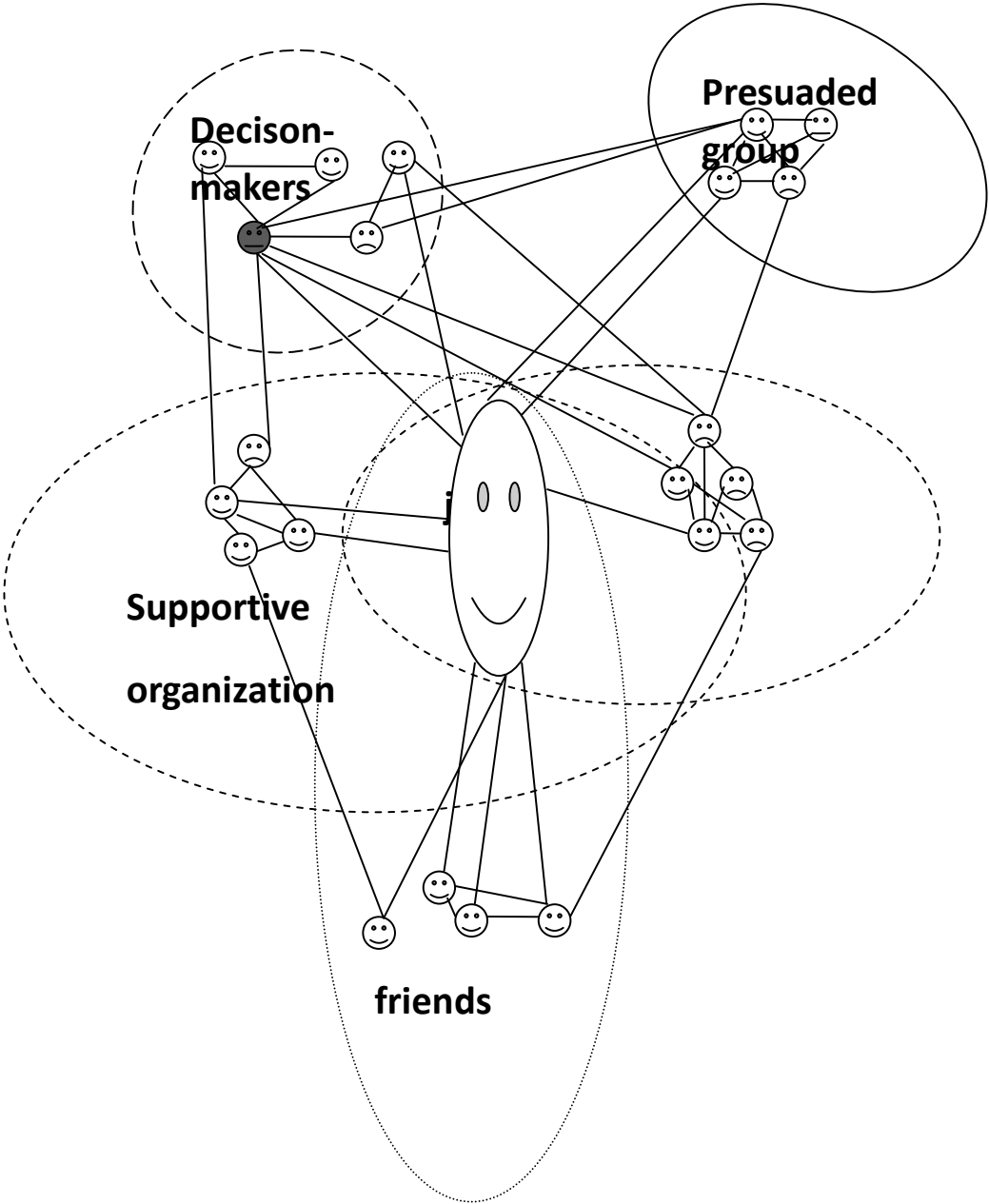


Picture above tries to symbolize how individual belongs to different networks at the same time. Certainly one could add additional networks, such as friends, association membership etc. the fact is that belonging to certain networks will influence on one hand activities of certain person as well as his activities will due to membership in different social networks influence his behaviour in other networks as well. Size of networks is shown by size of ellipses, position of ellipses shows how different networks are overlapping. It is obvious that he has part of private network which is separated from economic and even larger part separated from political network, part

of his private network is also part of political network but it is not part of his economic network. Part of his network is overlapping on all three indicated areas and we can assume that this part is his strongest factor of influence. Commonly this can be group of co-workers with same political affiliation that spends also private time together as friends. If individual is opposing certain political idea there is much stronger possibility that respective political group will be able to convince him by asking his closest group to talk to him, compared to other relevant persons within political network. And on the other hand, individual will be able to bring in new idea much easier within this connected group of people than by explaining idea to the boss who is part of his economic network but with whom individual is not connected within any other social network. Picture above is again simplification – we shall draw series of nets with different patterns allowing that certain person fails to be also part of individuals' private network. In this sense our model is not exact as picture but we are not assuming that all members of economic network are members of private network as well.

In practice, only people who are usually using this method of understanding policy/politics mix are journalist. And they are usually accused of lack of credibility and especially lack of scientific approach. However, their way seems to be proper one to completely

understand complexity of networks and individuals roles within it.



Picture above shows complexity of individuals' network and can be helpful at understanding of what is going in solution finding for certain problem, situation or interest. Expression on the face represents connection with our individual (big face), who is playing three roles (friend, worker, member of organization). From circles we can understand how he is included in different organisations, while lines among individuals show personal ties. We can understand meaning of group of friends, job organization, decision-maker institution. For better explanation supportive organizations are usually associations – stronger (Rotary or Lions club) or weaker (NGO). Pressured group (not pressure group) is, in our case, institutionalized player that shall do something.

Classical institutionalist/ normative/ process approach will explain situation where group of friends wants to change something as such. Number of individuals is trying to change situation, they form specific group of the same interest, trying to engage another groups, get issue on the agenda. Decision maker and their supportive institutions will accept decision on if and how the issue will be regulated or changed. What we are usually missing is; understanding how this will really happen.

Friends will define certain issue and seek the best way to solve it. They will try to use different channels to get to the decision-makers

and make them to accept appropriate solution.

Our “big face” will talk to his colleague at job and ask him about the solution. Unfortunately this colleague is talking to other co-workers, who are mainly not keen on the idea, and one of them has good relationship with the institutionalized player that will be affected and even worse, with one who is against the idea on issue. Luckily that colleague of “big face” is talking also to positively oriented co-worker who has direct contact to main decision-maker.

“big face” will try to neutralize damage in effected institution by explaining situation to his colleagues there and they will try to settle thing down at least for a while.

In meantime of act 3. “big face” and one of his friends represent the issue at the supportive organization, big face as member and other friend as relative of one of other members.

“big face” meets main decision-maker by accident (or his co-worker arranged meeting for him), and he has opportunity to explain the thing. However, decision-maker has also different opinions on the issue and he sees issue as not generally relevant. However two of supporting staff are in favour of idea. In general he has five positive opinions and three negative. But he owes a favour to one of his advisers who is against the proposed solution of the issue and he has

friend in “supportive group” of our “big face” who is against as well.

Decision maker in this case is smart and decides to stay neutral. But according to the number of our emotions, her ignored demand of majority in order not to harm relations with those with whom he has some common interest.

And that is the part of complexity in political science that is systematically overlooked or translated on the level of elites, where main finding is usually that interests of elites are usually different (reverse) than those from general population. However, for understanding public policies in reality we will have to pay more attention to personal networks within institutionalized decision-making.

Policy networks

Policy networks are considered to be specific field of policy analysis, which tries to explain and define different types (patterns) of relations between policy actors, who cooperate in policy-making, based on their co-dependency (Kickert, Kljin, Koppejan, 1997: 6). From the perspective that we paid special attention to policy actors before, in this chapter we are merging them together in the net of their relations. Despite today there are many approaches to understand policy networks, their conceptual base originates in van

Waardens' article (1992) "Dimensions and types of policy networks". Due to methodological importance of this article we will mainly just add few commentaries to summary of aforementioned article. First remark goes to the point that even if van Waarden (1992: 29) mainly analyse relations between political-administrative structure and economy, it is possible to use the article in theoretical dimension for relations among all policy actors.

All different relations which can be called networks between two or more policy actors have certain characteristics that can be present in different degrees, measurable and they define the nature of network itself. According to van Waarden (1992: 32) these characteristics of networks are:

- actors
- functions
- structure
- institutionalization
- rules of management
- power relations

- strategies of individual actors.

Each of aforementioned characteristics can have more elements or dimensions which define nature of certain characteristic and of network itself.

Number of actors defines the size and character of network. Later is as well influenced by type of involved actors. Actors in this sense are primary institutions and on executive level, their representatives. For policy networks it is characteristic that they consist of state administrative and political institutions and civil society institutions (such as interest groups, associations, etc.). Actors who want to enter the network, need to have certain predispositions such as interests, demands, structure, sources, certain degree of professionalism (providing institution with well trained representatives) and mandate that allows representatives to represent the institution. These predispositions enable them protection or realization of their interests (van Waarden, 1992: 33).

Networks are, in reality, communication channels among actors. They have functions adjusted to the needs, intentions, resource, and strategies of individual participating actors. By the degree of intensity of communication/relation within networks, most common functions are managing the access to policy-making, consultancy and

information exchange, negotiations and mobilization of resources, coordination of individual activities, cooperation in policy making, implementation and legitimation of policies (see van Waarden 1992: 33). Within bigger picture, aforementioned has the role of establishing common position of different actors and understanding for differences among them at the same time. Function of policy networks is often dependent on the sole nature of the relations. In this manner negotiations assume conflict or competition of ideas. Van Waarden (1992: 34) as one of the functions of policy networks exposes also lobbying and combination of coordination and discussion as a way to synchronise different approaches. This function he names “concertation” since the product should be synchronised concert of interests. Lobbying differs from joint activities of participating actors in a sense that it does not tend to directly participate in the probes but rather it tries to influence its development as well as its content. However, one should note that the difference between participating as part of the network and lobbying is thin one and not well specified (van Waarden, 1992: 34).

Structure of policy networks defines patterns of relations among different actors. Patterns of relations can be observed via following categories (see van Waarden, 1992: 34-35):

- number of participating actors

- openness of the network for new member and ability of actors to move between networks
- membership type (compulsory or voluntary)
- pattern of relations (chaotic or organized)
- power of relations (measured ans frequency and duration of interactions)
- density (number of different relations of individual actor within network)
- symmetry or reciprocity of relations
- grouping and differentiation (creation of sub-networks on networks within network)
- pattern of connection or type of coordination (hierarchical authority, horizontal negotiation, fluctuation of membership, common leadership, often fluctuation of membership)
- centrality (does not exist, multi-centric (common committees) or central unit (main policy actor in the network))
- extend of dispersion of decision-making competences to central

units

- type of the relations (conflict, cooperation, competition)
- stability.

Degree of institutionalization is specific characteristic of policy networks that defines formality and stability of individual network. Tendencies towards institutionalization are increased in the case of closed networks with compulsory membership, organized and intense relations among actors with high level of connectivity and reciprocity. More institutionalized networks also tend to have connected leaderships of different participating actors and overlapping membership. On the other hand there are ad hoc, informal policy networks and in between there is set of different types of networks with different level of institutionalization (van Waarden, 1992: 35).

Policy networks are defined also by the agreement on communication among actors and on principles of work. These agreements are based on perception, interests, social and intellectual education of individual participating actors. Rules of conduct within the network are in broader, indirect, sense based on political and administrative culture. Institutionalized networks have bigger potential to develop their own rules of conduct than ad hoc networks. Actors can usually develop following biased forms of behaviour within the network:

- readiness of negotiations over mutually recognised conflict of interests with expectation that opportunism is part of the normal process vs. search for consensus, adjustments and reconciliation
- general understanding for public interest and welfare vs. pursuing narrow particular interests
- secrecy vs openness
- politicking vs common agreement on the need that subject in matter should be depoliticised
- rational pragmatism vs. ideological conflicts (van Waarden, 1992: 36).

Power relations are typical element of policy networks and are connected to the dispersion of sources and needs among participating actors, as well as they are part of common organizational structure of the network. According to van Waarden (1992: 36) relations between state and business can exist in four different types of domination:

- overtake (control) of state by business – clientelism.
- state autonomy in relation to organized interests

- institutionalization/ overtake of pf private sector by the state – state corporatism
- cohabitation or relative balance of power within relatively intense relation.

These divisions of power are not only significantly influencing the networks themselves but are also one of the main causes for structural changes in society (see van Waarden, 1992: 36).

Strategies of policy actors are carried out on the level of individual actor within the network as well as between the actors within the network. Policy actors create and use networks for fulfilling their now needs interests and goals while using strategies of interdependency and relation management (van Waarden, 1992: 37).

All the previously mentioned dimensions are interconnected and in different combinations of characteristics create so called typology of policy networks. Based on this van Waarden (1992: 38) tries to organize networks created between state and organized interests according to differences in characteristics. According to his study and findings of other authors van Waarden (1992: 39-41) defines eleven basic types of policy networks that emerge between state and business actors:

-statism (pantouflage)

- captured statism

- clientelism

- pressure pluralism

- sector corporatism

- macro corporatism

- state corporatism

- sponsored pluralism

- parantele

- iron triangle

- issue networks.

Main characteristic of statism is that there are none or only limited relations between state institutions and organized interests. These relations, if existing, are mainly attempts to exclude organized social interest groups from policy networks and decision-making. statism can have two different sub-types, based on the amount of state's

meddling into business. In the first case, state tries to stay out of economic activities and leaves the economy to free market principles, since it (state) believes that *laissez faire* economy answers economic problems better than state interventionism. Second sub-type is etatism and behaves as system of intense state interventions in economy without option that later would cooperate in the process (we can best see it in Soviet model of plan economy). Only option that private/business interests can have certain influence over economic policy which is actively run by the state is pantouflage. The main characteristic of this type of network is that part of civil servants leave their positions for positions in private sector. They still keep their contacts with their previous institutions and they still identify by them (see van Waarden, 1992:42) and for sure they have no problem to ask old co-workers for some help. From the moral point of view, this type of networks is questionable, since civil servant is able to take over the company that s/he followed it before as part of public administration within previous duties. This opens opportunity for corruption as it is obvious from the explanation.

Captured statism, reverse to pantouflage, enables former business interests to take over the state by occupying high positions as members of public administration. Historically such case can be Canada or USA during the second world war time. Both countries

hired businessmen to run countries' crisis economies and reform public administration which was not able to respond to crisis. At the same time those businessmen kept their contacts with private sector and were able to help their business friends by different state interventions (see van Waarden, 1992: 42-43).

Clientelism is the type of network relations where certain pressure group takes central position in individual issue according to belief of governmental actors. Such virtual monopoly enables that overestimated interest group capture the state actors, since they completely depend on their information and they are not able to confront different organized interests if they exist. In certain field there is truly only one interest organization, it will suppress all other attempts of interest organization and will try to present itself as general interest perspective within the field in question. If state agrees to recognise such interest as general it will face dissatisfaction within the public. In the case of clientelism, state agencies are still policy decision-makers, but under strong influence of certain organized interests. Clientelism has tendency to develop into iron triangles (van Waarden, 1992, 43-44).

Pressure pluralism create policy networks which are mainly influenced by different interest groups, which are trying to enter into the network and later to gain influence over it. Interest groups in this

sense compete among themselves for the attention of state actors and are relatively free to move in and out networks. High level of politicking and weak institutionalisations of such networks are their main characteristics. State actors often have only the role of coordinator who is trying to settle different interest and translate them from the level of particularity to the level of generality (van Waarden, 1992: 44-45).

Parantele is form of policy network with predominant role of certain political party. If other interest groups want to have their interests fulfilled they need to gain legitimacy from that certain party which should recognise these interests as important before they are able to reach their goals. In this manner party membership is more important than the nature of the interests and arguments. This type of policy networks is often present in single party system or in systems with predominant party (van Waarden, 1992: 45).

Iron triangle is modified parantele. It is based on active participation of political parties or individual members, who play role as mediators between different interests groups and state actors. However, in this case party is not dominant as in the case of parantele. Iron triangle is usually understood as upgrade of clientelism since it often copy the characteristics of the later. In this manner iron triangle has relatively closed borders of the network, relations are highly intensified, certain

interests are usually represented by monopolistic interest groups. Within such network there are strong tendencies towards cooperation and consensus based on complementary interests (van Waarden, 1992: 45-46).

Issue networks strongly differ from most of the aforementioned types of policy networks in at least three key aspects. First, they have extremely open boundaries (enabling free movement of actors in and out of the network), second, they can accept virtually unlimited number of participating actors and third, representatives of the interests tend to be also representatives of different expert opinions and they serve as well as channels of communication and influence in policy processes. In such situation van Waarden (1992: 46) argues that it is hard to define the real decision-maker, since resources and powers are strongly dispersed.

Corporatism differs from clientelism or pluralism especially because it includes interest groups not only or primarily into the negotiation processes but also into implementation stage. This gives interest groups certain level of state authority in the implementation phase. In exchange for participating in implementation, state gives these groups certain privileges. In this manner certain private interests gain part of state sovereignty, additionally state awards them privileged access to state actors and monopoly over representation of certain

interests.

At the same time, monopoly over representation of certain interest is precondition for sectoral corporatism. Previously mentioned co-implementation of public policies by interest groups creates higher level of codependency of state and interest groups that can lead towards symmetric relations and can leads towards clientelism. Corporatist networks are relatively stable and have rather institutionalised relations with (often) compulsory membership, they are centralized, oriented towards searching for consensus and avoiding politicking of issues (see van Waarden, 1992:46-47).

Macro-corporatism or concentrated corporatism has more than one main interest group, with antagonistic demands. These different interests manage their conflicts and try to synchronise them with the system needs of national economy. The conflict of participating interests does not necessary follow the cleavage between capital and work, but it can also be between producers and consumers, sellers and producers, etc. In these relations also state can actively interfere with the institutions, which, however, are not connected to the conflict as part of the sector but they play their functional role. Occasionally, these state actors can be even the initiator of the conflict when they manage market relations in order to protect public interest. Networks of corporatist concentration try to resolve societal

conflicts, which influences the communication processes within such network itself. Due to constant search of consensus and compromise, which demands aggregation of interests, negotiation and discussion, relations in such networks are highly complex and relatively highly institutionalized. Representative bodies of the state are often understood as mediators between conflicting interests, which increases their autonomy in relation to competing interests. Concentrated corporatism builds its position on assumption that bureaucracy is an autonomous form different interests. However if this is the case, it is more the consequence than the precondition of existence of such network (van Waarden, 1992: 47-48).

State corporatism, compared to other types of corporatism assumes a strong role of the state. Main purpose of such network is not to include private interests into policy implementation, but more to control these interests by the state. State corporatism is often a product of authoritarian state and in this manner predominantly known in fascism. Structure of the network is highly formalized, with clear and closed boundaries, with compulsory membership and often overlapping leaderships (high civil servants are at the same time also representatives of interest groups), issues are depoliticised, delegation of co-development and co-implementation is limited, legitimacy of the network and representation is highly questionable

(van Waarden, 1992: 48).

Sponsored pluralism is policy network type with participation of many different actors. State actors support such plurality due to different reasons. Often in their own attempt to increase relative power of state actors. If the amount of interest groups is limited, they are relatively stronger in relation to the state actors, but when their number increases, they lose the power due to internal differences among different interests. On the other hand, it is possible that in certain field there is no predominant actor (or smaller number of actors) which leaves state with inability to have predominant interest group actor as partner in negotiation. Sponsored pluralism has many similarities with pressure pluralism but in opposition to the later it is much more unstable since state tries to reduce the number of corresponding actors over time (van Waarden, 1992: 48-49).

Van Waarden (1992:50) creates general overview of networks in table as presented below, with two main dimensions, number and type of the actors versus their function and relations.

Public policies

From the perspective of defining public policies as it was provided in the beginning, one can define two basic sets of public policies, connected to state-building and state-service roles of the individual state. State building policies are foreign policy, defence policy, economic policy, monetary policy and internal policy. On the other hand healthcare, education, culture, sports, transport and infrastructure, agriculture and other policies are considered to be state service policies unless not treated as part of the aforementioned state-building policies. As we indicted before policies are strategic and legal frame of policy tools for advancement of specific field. However, at the same time policies are as well result of the compromise between different solutions based on the communication and power relations between the actors and are influenced by the environmental factors. From this perspective they are subject to certain level of instability and changes, not only due to the changes in environment but also due to the changes in the power relations among participating actors.

Evaluation of public policies

Public policy process has, according to different authors, different number of stages, basically ordered as indication, solution, decision-

making, implementation and control. Despite we are not entering into the details, it is necessary (from the perspective of the writing) to pay some attention to the control phase. According to classical political process, control can be divided in the steps of monitoring and evaluation. Monitoring is simple control of implementation by verifying that planned activities are carried out according to the regulations. However, monitoring does not provide any information on the quality of the result of certain policy measures from the perspective of the indicated problem, which shall be addressed by the policy. If monitoring is check of the correctness of the implementation, evaluation is the check of the effects of the accepted solution on the initial policy issue. Due to many factors mentioned before (from cultural, social and economic environment to the compromise as a consequence of balance of powers), any policy is in immanent danger to be hostage of incapability of decision-makers, prejudices or political interests. Due to this evaluation is of utmost importance for effective corrections of missteps on the way of addressing certain issue. From the scientific perspective, evaluation studies represent whole field of research searching for optimised evaluation tools as well as they deal with assessment of certain policies or only individual parts of it. The very nature of modern science with the demand for specialisation, reduced the power of evaluation. Evaluation shall be overall assessment taking into the

account the broadest possible range of variables and factors and not limiting itself on particularities.

In this manner Slovenia can be systematically criticised for the lack of evaluation in first place. While adopting individual policies, we are missing total assessment of the field from perspective of time as well as from the perspective of spill-over effects. Due to such attitude, also changes of the public policies are often consequence of the political compromise, with weak (if any) understanding of the background and reasons of the problem. And consequently at many occasions it is visible that the policy measures have inadequate or even opposite results. In this manner one should take into the account while preparing the evaluation following elements:

- policy environment,
- other public policies
- real reasons of the problem
- possible (contra) effects of the policy measures
- different political interests
- desired improvement.

In this manner, complete evaluation should not avoid ideological issues and isolate itself from them. As well as it should provide information on the spill-over effects of other policies and real background issues. Evaluation should always also compare actual results with desired improvement.

Four main stages of research policy are indicated: input, activities, output and outcomes (Kavlie and Sleenckx, 2011: 8). We are able to identify the input (resources), activities (research and training itself), outcomes (publications, awarded diplomas, patents, etc) but it is very difficult to measure the outcomes (indirect effects of output of resource activation). Measuring the research output can be relatively easy. Relatively simple and usable tool was presented by Kavlie and Sleenckx (2011). Efforts to measure impact or at least role of research policy can be traced back in the past (e.i. Katz, 1986). Also debate on state financing of the research and attempts to connect it to the industry has long tradition (see Phillimore 1989). However, over the time, evaluation of research policy measures had different focal points. Katz (1986) was mainly interested in impact and role of research and development in companies, Katz and Martin (1997) questioned the term of collaboration in research which can be understood as methodological issue what and how one should

measure at all. Xu (2010) followed the modern trend of university-business research cooperation as basis for innovation and imposed the question of academia-economy networking as factor of innovation. Aksnes et al. (2012) were on the other hand testing cooperation just between two institutions based on publications output. Gunnarsson (n.d.) on the other hand prepared interesting analysis of use of the bibliometrical data as evaluation tool of research policy for Nordic countries. Between these examples of different fields of interests and showing the historical time span of more than 20 years there is an enormous number of different studies, unique or following one of aforementioned approaches. Among other relevant existing researches one can find Eisend, Schmidt (2014) arguing that internationalization of German business scholars is important factor of better output results especially in the case of inexperienced scholars, with low level knowledge and writing conceptual works. Similarly, Li, Liao, Yen (2013) measure the importance of co-authorship networking for the improvement of publication records in terms of publications as well as of citations. Using this they justify importance of academic networking. Groot, García-Valderrama (2006) show, in the case of Dutch research programs in the field of economics, that bigger research groups will achieve better results in publication output concerning the quality and productivity. They also proved that higher level of applied

sciences funding will result in decreasing quality of publications. General literature overview of infometrics was done by Bar-Ilan in 2008.

In the case of Swiss, Bolli and Smogyi (2011) show that change from state to more private and third-party funding has no influence on teaching output but increases the publication output. At the same time they find out that private funding increases the technology transfers.

For the case of Norway, evaluations of funding and research performance show few interesting points (Gulbrandsen, Smeby, 2005): most of applied research is industry funded and basic research is usually funded from different non-industrial grants. Academic publishing and commercial outputs are not significantly correlated in any direction. This somehow confirms findings of other researchers on differences between academia and development.

Pérez, Gaudin (2014: 751) define three different sets of instruments in research policy: institutional frame; financing and promotion of cooperation. We will be focused predominantly on financing and promotion of cooperation.

Moed, Burger, Fankfort, van Raan (1985) use SCI database and analyse the bibliometrical data and question this method from the

perspective of measurement as well as from the perspective of importance. Hall (2011) criticizes the system of bibliometrics due to the system which favours natural sciences over social sciences and within this also some particular areas (such as tourism) are even more under-rated. In order to resolve this issue rating of the content is suggested instead of rating of the journals (what over where is published).

Social and economic role of the education

In last few years, European Union member states and applicant countries are facing serious higher education reform that should unify higher education systems in the area into something that can be called European higher education space and what should lead to more comparable levels of education and consequently, according to the Lisbon strategy increase individuals' competitiveness on labour market. In reality there are two basic effect of this reform that are already showing their results, especially in Central and Eastern European EU member states and also in some applicant countries. In general, states that have no tradition in private education system are facing increasing numbers of different high schools, faculties and universities with questionable quality and on the other hand level of knowledge in general population is falling, despite increasing number of university degrees awarded. However, this chapter is mostly concerned on what is going on with relations in certain policy arena in aforementioned framework. Despite one can argue that observations are valid for all Central and Eastern European countries as well as for South-West European countries (or better, all transitional countries with communist past, who are trying to place themselves in to EU context), all basic information are mainly gathered on the case of Slovenia.

All former communist/socialist countries had state run educational system, not only for welfare society reasons but also with more or less strong interest in systematic indoctrination of children and youth into “right values system”. No private schools at any level were allowed. After fall of communist regimes in Central and Eastern Europe with greater or smaller support of international community first private schools were established. This support was mainly through different demands of international organizations “to democratize” and to “liberate” all spheres of life, and they were generally more successful in transitional countries with higher debts to IMF, WB (like Slovakia), while countries with lower level of foreign debt, like Slovenia, could effort to stay more independent in their transitional path. In 2004, majority of Central and Eastern European Countries entered into the European Union. And at the same time European Union introduced Bologna reform that shattered higher education system, especially in countries with long tradition of strong national educational system, based on “hardcore” theoretical knowledge redistributed generally with “ex cathedra” approach and lack of practical work. Bologna reform demanded unification of educational system on the basis of ECTS credits and higher mobility of students among different institution, with mutual recognition of knowledge and skills gained at other institutions.

Main time-frame for the implementation of the reform in national practices was until 2010 and states started to prepare necessary legal foundations. However, one is not allowed to forget that Central and Eastern European Countries were at that time and still are today transitional countries or at least not consolidated democracies in terms of Lijpharts, definition. For changing one of most important elements of state Ideological apparatus (see Althusser 2008), transitional period is not very appropriate time. This can be especially truth for ideologically divided states such as Slovenia, where cleavages concerning Second World War and communist past are still very lively. However, in situation of ideologically divided politics, relatively small number of private higher education institutions and fresh EU membership, Bologna reform started.

Bologna reform caused new wave, in some cases like Slovenia also first wave, of privatization and liberalization of higher education space. New higher education institutions were established, mostly as private faculties, with one public exception so far in Slovenia. Before 2004, few different faculties were established or developed from high schools and later on connected together into third public university. 2004 in Slovenia created few different circumstances that changed picture of higher education space. First, Slovenia entered the European Union and got the obligation to reform higher education

system, second, in autumn national elections changed political profile of government from 12-year left wing coalition to right wing coalition. This caused serious changes in public administration and government agencies and ministries. Despite higher education legislation was not substantially changed, aforementioned elements changed reading of legal framework, by new government and higher civil servants, who were also generally educated on public universities but their political ties to left wing majority in academia were much weaker. They were much more open to new ideas and attempts to decentralize higher education space, with establishing institutions fulfilling minimal legal demands. Decentralization was rather intense. Two new universities were established (next to three state and one private university from the pre-2004 period), and about 20 different higher education institutions (academies (they usually refer to arts), high schools (they refer to lower rank higher education system – not comparable with Anglo-Saxon understanding of high school) and faculties). With one exception, all newly established institutions are private and spread all over the country, while previously they were mainly present in four major centres (Ljubljana, Maribor, Koper and Nova Gorica). Ljubljana University as oldest and biggest in Slovenia has 26 faculties and almost 60.000 students with yearly population of students around 114.000 in time period between 2004 and 2008. With second biggest university (University of Maribor with 18 faculties and around 23.000

students) they have more than 70% of students, what can be understood as strong negotiating position especially in combination with great majority of study programs (about 80-90%). With such predisposition, and with awareness that third state university is adding some additional percents to data presented above, we can understand the extend of centralization of higher education system in Slovenia, supported by continuity of political elite and system of personal bonds with people in governmental agencies.

Networks in higher education

Depending on country, but still common to all European post-communist countries is that there was strong system of public universities, that had certain level of quality and who produced competent (but more or less indoctrinated) experts. After 1990, as it was mentioned, slow liberalization of higher education started with introduction of first private higher education institutions. These private institutions lacked of appropriate teachers and researchers, and were usually not recognised by public universities. However, in many cases, teachers from public universities established or at least worked for such private institutions as additional source of earning. State financially supported also private higher education institutions from budget, what lowered sum for public higher education institutions. In different public agencies or their working bodies that

were sitting mainly members of public universities (later also few members of private higher education institutions), government representatives and civil servants. Public was excluded as incompetent. Many civil servants and government representatives were previous students from (logically) public universities, and some professors were also strongly politically active (as members of parliaments or governments).

According to the van Waarden (1992) typology of policy networks we can evidently see existence of something that can be called combination of, captured statism, and clientelism (for in-depth exploitation of clientelistic relations see Einstadt and Roniger 1984). In all cases we can talk about strong relation among recognised relevant actors in certain policy area and state actors. However, it is hard to undoubtedly recognise what pattern of relations is prevailing and most influencing the results of higher education policy. Captured statism and clientelism are present in combination when on one hand state as relevant partners in higher education policy recognises only public higher education institutions and at the same time state actors are more or less depending on public higher education institutions due to the fact that they represent about 80-90% of higher education sphere.

Such stable interlocking relation between (public) higher education and state actors in Slovenia was partly destabilized after national higher education reforms, when state (under right wing government) tolerated and supported first private higher education institutions and due to that reason cut part of finances to the public higher education institutions directly or by changing the rules of higher education financing. Most common method was to change from financing by study program or number of employees to pay part of the sum on the basis of number of students, what caused emergence of intense campaigning for students.

Higher education is not only about education on higher level but it is also or mostly about state perception of certain values and knowledge needs as well as about interpretation of reality. And from this point of view, higher education has strong political connotation and is also one of policy fields covered by specific policy networks where actors are entering in different relations that cause certain type of higher education policy. Policy networks can be relatively closed, with limited number of actors who hardly enter the arena and will try to stay within as long as possible. On the other hand arenas can be relatively opened to anyone, number of actors will be due to this reason much bigger, but they will stay within as long as necessary in order to possibly fulfil their own interest. State can invite certain

actors and exclude others and at the same time can play important role in deciding who to invite (and legitimize such actor as representative) and who to exclude. However in certain types of policy networks state can play important role as captured actor, who is surrounded by more powerful actors who are trying to fulfil their interests via state support that can be gained or forced (see van Waarden 1992). Despite van Waarden (1992) characterise only some combinations of previously mentioned elements, in flexibility of today's world, at least occasionally, some less common combinations occur.

Despite institutional approach to policy networks is present in general, already van Waarden (1992) warned that one has to be aware that relations in policy (applicable also to other types) networks are based on interpersonal relations among representatives of institutions. This element introduces psychological dimension of networks, where interpersonal relations based on individuals' characters', (lack of) mutual thrust and negotiation capabilities are of crucial importance for composition and work of policy networks as well as for public policies as result of processes within the network. Simplified, we can talk about human factor in policy networks.

Higher education policy network is reality that should be understood in formal and informal way when talking about named policy. Black

box model is far from sufficient to understand results of higher education policy and it does not even try to include all processes that take place. On one hand formal structure of policy network is generally defined by European and national legislation that defines legally acceptable output and outcomes. In this sense source of trust is belief that all involved actors will play within the legal frame, it is trust in institutions and institutionalized processes. However, involved actors (despite institutionalized) are motivated by different particular interests (that are not always in sound with legislation) that can be interests of certain institutions or of individual members of these institutions. Policy reality usually allows different outputs and has certainly and necessary different outcomes. Outcomes are understood in this context as direct consequence of policy implementation and can be represented by governmental act establishing new faculty or so while outcome in this sense is better access or higher level of knowledge produced by newly established institution. Searching for the solution, its adoption and implementation is strongly burdened by informal relations that can take different forms of policy advocacy forms such as lobbying, expertise, information filtration, etc. Through such activities different representatives of actors are able to influence firstly the normative frame of policy and further on they can also interpret legislation if interpretation is possible. In such informal relations trust in legislation

is relatively weak and all the participants in network are mostly counting on personal networks and attempts to adjust institutional framework to particular interests.

Cultural background

Previously mentioned reforms caused changes in expected activities. If previously, different attempts to create new, usually private, faculties were relatively successfully blocked or postponed by governmental agencies due to pressures from public universities and faculties (usually those from the scientific field), change of governing coalition and high civil servants brought substantial change in policy implementation¹. If previously public faculty was able to prevent or postpone public college to become faculty (even if formal conditions were fulfilled) and both institutions were members of the same public university, after Bologna reform such practices were less and less effective. Or better, if such practices were possible within the public university, they were not possible for institutions that act as independent public/private institutions. This increased possibilities for potential new higher education institutions to become recognised by the state without effective political suppression carried out by

1

Here we are not referring in one way or another about the quality of 'old' and 'new' higher education institutions.

institutions with longer tradition.

Previously (pre-reform) developed relation on institutional level was, due to long term contact between individuals, representing different institution, developed into friendship on personal level of trust, where institutional activities were gaining mutual legitimacy due to serving each others' interests (institutional and also personal). After the changes, new way of behaviour, sometimes connected also with change of institutions' representatives (mainly on side of government agencies) caused lowering the level of personal trust on the individuals' level of contacts, what caused formalization of relations back to institutional behaviour, where individuals are not important in any other manner than representatives of institutions. At the same time in the sphere of personal trust connected to the institutional behaviour, legitimacy of certain institutions dropped due to change in relation to interests of previously important actors. However, same situation on the other hand meant return to the system of rule of law, where same situations are managed in same way and institutions (especially government agencies) started to perform activities according to the legal principles not taking into account legitimacy aspect that was claimed by long-present actors in network and was previously respected.

In Slovenia in 2008 ruling coalition and government turned back to

left wing and situation in higher education policy network changed again in direction of pre 2004 relations, where public universities had higher level of influence on higher education policy implementation. Due to relatively short period of change in political coalition old dominance of public universities was re-established, blocking one of previously mentioned private universities, and accreditation of new higher education institutions and programs that were not developed in the frame of public universities.

The last case showing the influence of public universities is draft Act on university that was submitted to the public debate only few weeks after the parliamentary election in 2008. If we concentrate on trust/power relations only on basis of analysis of this document, prepared by Rectors' conference (informal institution of rectors of Ljubljana, Maribor, Primorska and Nova Gorica University) we can find different elements that are showing predominance of public universities. First element presented as framework was attack on Act on higher education with intent to split universities and other higher education institutions as two separated higher education systems. This difference shall be ground for differentiation on programs. According to the draft, all higher education institutions not included into universities shall not teach so called university but only high school programs. This is strongly limiting different private faculties to

abandon university programs (which are more demanding than high school ones). Further on existing public universities demands exclusion of public sector system but simultaneously they insist on public financing. Same draft is proposing that already established universities are required to give consent to establish new university. At the same time newly established Agency for higher education quality should control if following (among others) conditions are fulfilled; appropriate infrastructure (classrooms, labs, library with 50.000 titles, etc.), that proposed university will conduct research at least in five major FRASCATI fields and that it will have at least 100 professors and other teaching staff and at least 1500 students (1000 full time students). Other criteria are connected to the quality of work and are not important for our case, because there is no significant difference in quality of employees, but we have to examine abovementioned criteria more in details.

First, conducting research in five out of six major fields of FRASCATI method is automatically eliminating the possibility for small universities, especially if oriented in one or few fields. Capacities to fulfil this criterion have only Ljubljana, Maribor and Primorska University. For other two universities or set of institutions trying to establish university such criteria is automatically blocking all the formal chances, because, most of newly established institutions are

systematically concentrated on social sciences and natural sciences while leaving other areas more or less aside.

Second providing all necessary infrastructure for private institutions can be additional burden because they do not have own buildings but mostly hire them, while buildings of established universities were build under communist regime with public money, what sets additional unfair condition for establishing new university.

Third, employing at least 100 professors and other teaching staff is not possible, due to the employment expenses. Majority of teaching staff at new higher education institutions is hired and paid on contract for lecturing and cooperation in research project. On the other hand public universities have guaranteed payment for teaching staff from state budget.

Fourth, 1500 students and 1000 of them regularly enrolled² is another barrier providing impossibility for newly established institutions to create university as educational structure and not only as loosely connection among different independent faculties and high schools. Even Nova Gorica University is only on half way to fulfil this

2 There are two regimes. Regular enrolment is full time study, while other type of enrolment is most comparable to part time study, where students have shorter extend of lectures and other study activities. Later type is generally designed for those who want to study while employed, but is widely misused by those who are not able to enrol regularly but are willing to pay tuition fee.

criterion with about 800 students in 2008/09. Such criteria can be reached in few decades.

There are also different quality criteria that are less problematic, due to need to provide appropriate level of quality that should be in fact main criterion for establishing new university.

When reading draft act, things are developed more in details, however aforementioned elements are providing enough information to see initial idea of rectors' conference to block any attempt to establish new universities that could be focused in one or few particular areas with no intent to become so called higher education mastodon³ with few thousand employees, more ten thousands students and no flexibility in institution management.

Such draft act did create panic among different independent faculties and high schools, not only because of proposed conditions for university establishment, but also because three to four major actors in network try to degrade efforts by simple act prohibiting use of common program names as "university", consequently it means also degradation of educational level achieved at such institutions and opens possibility to dispute the right to conduct MA/MSc and PhD

3 Relatively common Slovenian description for oversized and inflexible system blocked in development by its own characteristics.

level studies. Under such circumstances, no development of Slovenian higher education is possible, due to fear of or greed of three institutions holding 90% of students, that more flexible and smaller institutions will take over their students (and also part of finances), due to smaller study groups and more applicable knowledge.

Under such circumstances no possibility for institutional cooperation exist as well as no institutional trust, due to fear from particular interest involved in redefinition of public interest for better education on higher level in order to keep existing study programs even in cases when it is proven that students with degree in such programs hardly find job (and almost never in the field of their study). Such conditions in policy network are leading to polarization of higher education sphere in line with left/right political cleavage and further on (according to the Slovenian specific), to the question of ideological differences back to the relation towards communist past. Such politization of higher education sphere (despite mainly originating in (lack of) support for higher education decentralization) can certainly affect possibilities for cooperation (that is necessary for quality of research) and also overall quality of knowledge that will be burdened with political views and redistribution of public money available for national research grants. Policy and research arena can in this

perspective become political arena (or at least part of it), that will cause drop of Slovenian knowledge quality in world ranking.

In order to prevent this, there is strong need to reshape higher education system with splitting big state universities to the extent that normal size is provided⁴ and where some kind of power decentralization is implied in order to open policy network to modern issue network instead of keeping it on the level of captured statism. After mid-term period of such relations one can expect that old personal trust based relations will be changed with institutional trust based relations, where power of any particular interest will be weak enough to be blocked by others if it will not be in broader interest.

4 Ljubljana University could be divided into three universities for Social Sciences, Natural sciences and Humanistic. Such ideas are emerging every few years but so far there was no significant effort to apply such ideas

The downfall of the knowledge

Functioning of state is based on numerous policies that are directing short, mid and long term development. Despite all policies are directed towards future of the state, some of them are still more present based (such as internal security and health care) while others are (or at least should be) more future based (economics, research and development). Each policy consists of strategic base, legal framework and implementation activities. According to classical policy process approach one can indicate solution option in respective strategy, decision-making phase resulting in legislation and implementation as set of activities.

Policy monitoring and evaluation is usually the weakest point of the system. Hereby we are trying to contribute to evaluation of Slovenian research and development policy. Based on Slovenian strategic documents, we list activities that Slovenia carried out in order to achieve strategic goals and provide evaluation of the results of these activities, based on different types of research output and outcomes.

Education system in Slovenia is considered to be traditional, as the consequence of historical fact, that the territory was systematically included in political systems, which placed knowledge in the key position for societal progress. This is valid for enlightenment reforms

of Maria Teresa and Joseph II. Hapsburg, for the Napoleon's understanding of the role of the education in the period of Ilirian provinces as well as for socialist period of "soviet factographic" education. Education's primary role is to provide knowledge. However, under the state control, it provides also the level and selectivity of that knowledge and thus it contributes to the level of societal development and general frame for perception of the reality. States were always interested to keep certain degree of control over the knowledge by applying different procedures and institutional settings. Nowadays such control is often executed through the state defined curricula or/and accreditation of educational institutions and their study programmes. If in the field of primary and secondary level of education state executes higher level of the control over the curricula, in the field of tertiary education state controls the "appropriateness" of the knowledge by accreditation processes of institutions and study programmes (this is still considered as higher level autonomy of the development of curricula). Giving them public validity makes them more attractive and recognised as the official education. Thus all other forms of education are called irregular and are not recognised in the sense of formal education.

Despite state in recent period (after independence and especially after the Bologna reform) supports private education institutions, this

sector is rather limited and strongly controlled. Its effect in the share of power over the new generations is rather limited. Most of the population involved in the education process at any level still attends public schools/universities. In this manner most of the developing personalities are under constant state control of the knowledge and thought process. Certain flexibility of gathering knowledge is available only at the tertiary level, where study abroad is available as less uniformity of the study contents. In the spirit of democratic transformation Slovenia carried out different reforms, including the reforms of the educational system. The reforms started with the lower level and continued to tertiary education. First the primary schools were extended to 9 years and children were obliged to attend them year earlier. At the same time, the general curricula changed in the contents as well as in the assessment measures. The main issues were the questions of introduction new subjects, more time spent on some subjects with simultaneous reduction of the factographic knowledge demand and reduction of the assessment rigidity (especially in the first three years of education). Lack of clear (numeric) assessment was substituted by descriptive assessment, leaving space for lowering the standard of assessment. Different topics were taken out of the curriculum of individual courses under the assumption that they are useless for general knowledge. Despite repetitive factographic knowledge has limited value, it can still provide better

understanding of the reality in later years in combination with life experience or additional study. At the same time more basic knowledge increases the potential to more easily follow the contents on higher level of education. Compulsory external examination, which enabled rigid comparison of the level of knowledge, was abandoned and replaced by voluntary participation in external tests. Such changes are not critical from the initial perspective. However, when we place them in the context of general situation in the country and the world. When we take broader perspective, it becomes very important how state defines the set of information and knowledge. By doing this, state creates the prism, which defines how people understand themselves and the surrounding world. Consequently this also influences the citizens/voters' assessment of the activities of the state and politics. One of most typical modern cases is, how the state redefines education in social sciences. In this perspective, Slovenia changed its prism from values of previous regime towards supporting new, democratic political setting, while simultaneously condemning the previous regime. However, little attention is paid to questioning the practices of the democratic system from the point of use of undemocratic methods. By assigning the obligatory knowledge and processes of justification, state assures, on the central level, proper indoctrination of the citizens. By doing so it creates so called social normality, which supports societal status quo and reduces the deviant

behaviour and thinking.

Education policy is only one in the set of public policies composing the state-service role. Each public policy creates own policy arena full of different stakeholders, following their particular interests and perspective on regulation of the field. The final solution can be understood as compromise, based on their power relations and ability to force other actors to accept certain non-optimal solution (see Grdešič, 1995). Among main relevant actors in the education policy we can understand workers' unions in the field of education, parents, representatives of education institutions and education institutions themselves, Government (especially ministry competent for the education, as well as for public finances), Parliament, political parties and mass media. On the secondary level we can indicate also the representatives of the economic interests, who, by shaping economic policy, dictate future demand for different profiles of knowledge or skills and thus they influence the labour market. Thus, economic interests have strong influence over the education policy. In recent years states (including Slovenia) often limited the potential of certain knowledge or study field by following the demands of economy instead of supporting the possibility for open possibility to study and support for innovative economic approaches.

Under such circumstances education policy includes significant group

of underprivileged objects, which future is determined by the power play of economy, politics and cultural context of the country. Due to the lack of the experience, this group of objects (properly named pupils, students) has only limited role in the policy process under the normal conditions of state functioning. Their main ability is ad-hoc action when they feel endangered in their very basic privileges. However change of the generation and socialisation in democratic obedience, the understanding of their rights changed significantly. If in past period occasional demonstration was not unusual, nowadays most of the reforms of educational system passed without any critical upraise and demand for better conditions. So far, different political actions of students and pupils had only limited success. However, the results were much more positive in the case of demonstration. However, such events usually took place only when their basic social privileges (to work as student, to have discounted prices of food, etc.) were endangered. We can name these participants objects, since subjects in the political process have ability to use other measures in order to achieve the compromise, which would reflect their actual power. This includes negotiations as well as silent resistance or practice of so called civic disobedience in order to achieve the goals.

The table 2 indicates different types of actors in Slovenian education policy with their primary interests. It shows main interests of

individual groups of actors involved in the education policy. However, this list does not exclude other institutions as potential actors, in the sense of more specific institutions or institutions, which were overlooked. Most of additional actors could be probably characterised as at hoc actors with limited power to influence the education policy, or as actors, which are participating only in individual phases of policy process.

Table 2: Main policy actors and their interests in education policy of Republic of Slovenia

actor	interest
pupils, students	increase social privileges and minimize the study load for any given competence, title
parents	to reduce costs of education, to participate in education process (by defining the curricula and competences of the teachers, to increase prolong the parental control over teachers.
educational institutions and their members	to increase revenues, reduce workload of the teachers and to reduce the cost of the educational process. To reduce the private competition (in case of public schools) or to increase the freedom of education services (in case of private institutions)
ministry competent for education	to control the curricula and the "proper" education

ministry of finance	to reduce budget for the education
government	search for the consensus
parliament	to confirm the consensus or to adjust the government decision
political parties	to define the "sensitive" content of curriculum (especially in parts where knowledge shapes the citizens' perception)
representatives of business/economy	to gain cheap workforce with proper knowledge, enabling fast socialisation in working environment with limited additional costs
mass media	to increase their own presence in the environment by biased reports on potential ideologically issues.

If aforementioned actors are composed in the network within the policy arena, one can see minimal common denominator, or general interest, which influences the quality of the education process as well as the quality of knowledge.

The state actors can (this was shown in the past years: see part on financial support for research). Second such attempt is connected to the political pressure to control the curricula in public as well as in the private schools (via accreditation procedure or defining the national curricula for primary and secondary schools). Also Apple (1992: 47-51, 121-123) points out this potential treat when arguing that so defined programmes are strongly connected to control and always implicate interests of the government and economic stakeholders.

Economy usually plays passive and indirect role, mainly by demand for certain education profiles.

From the situation, when providers of education and students can find the consensus on lowering the standards, the first trap, which can be enacted also by education policy, arises. In such situation we can face removal of certain contents from the curricula of individual subjects (in Slovenia, such case was integrals from the mathematics in gymnasium), the grading standards can be decreased (in Slovenia, such case is descriptive assessment in the primary school, which disables clear comparison among pupils and at the same time blurs the criteria). On the other hand politico-administrative structure defines educational policy based on their own priorities, often supported by certain electoral campaign promises (those public as well as those given under the table and hidden from the public, but very much existing). If we take some distance from Slovenian practices, we can see such politically connected business in the case of Italian case of systemic historical revisionism in the case of history textbooks. This attempt tried to re-assess the role of Italy in the second world war in order to reduce the importance of the fascist oppression and aggression as well as to minimize the role of the communist resistance. Similar case can be seen as attempt to define the term "deviation" in the textbooks on citizens' culture, where

Bezenšek (1999: 40-41) defines deviation but does not discuss it in the perspective of "all different – all equal" as well as she does not defines civic disobedience as type of legitimate deviation, which is needed as expression of democratic society. By doing so her definition systematically denies positive deviations and consequently supports the uniformity and blind subordination of society to the norms.

Parents and the private sector have pro-form important role in shaping the education policy. However their actual ability to act is rather limited due to the insufficient understanding of the topic and resources. In most cases they participate only as (tax)payors (with the interest to gain most benefits for the child/potential worker for lowest investment) and supporters (especially at the lower levels of education), which support their protégées in their demand for lower learning burden. Economic subjects, despite high hidden interests in education policy, they are unwilling to support their demands for future workforce. Consequently they are overridden by the state supported accreditation of education programs, which are often inappropriate for their specific needs. This leads in the situation of high level unemployment among young population and high initial costs for the economy in the case of employment of fresh graduates.

The current form of accreditation rules and process strongly limits the

possibility to establish new and innovative study programmes, not only by developing the network of public universities but also by preventing development of private educational sector that could better support the needs of the economy. However, it is necessary to say that vast majority of private education institutions are trying to relocate the expenses of the study at the state (which by providing such opportunity supports this). System of so called concessions (where state pays the private institution for carrying out the state role) should be absolutely banished. In the current situation we can hardly understand any private institution, receiving state payment for implementation of the study program as truly private. Combination of less limited (by change of accreditation process) and private (by abolishing state subsidies to private faculties for study programmes) education would create better competition for the students, based on the quality and not only on the marketing. In such situation role of the accreditation commission could change towards more objective body, assessing the quality of the study programme. Quality assurance can be achieved through the final exams, which were in Slovenia abolished in primary school, they exist at the secondary level education and are to certain degree known also in the tertiary level of education (as diploma exam). In such conditions, public system of education could gain more finances from the budget and simultaneously provide opportunity for education based not only on

previous knowledge assessment, but also the economic and social situation of the applying students.

Proper privatisation of education system (with simultaneous network of public schools) could also answer the dilemma on regionalisation of the educational system. From the population perspective any further decentralisation of education system is not necessary, and even less reasonable from budgetary perspective. However, under certain conditions, such as maintenance of national standards of education and privatisation of the education with no involvement of the state in the financial aspects, there should be no obstacles for establishment private educational institutions. The quality measuring through the ease mobility between education and employment could answer the question of the quality and not that much the question of prestige. However, entrance exams or final exams under the control of the national authority could set the minimal standards as in the case of gymnasium final exams. On the other side establishment, of additional administrative structures of the control has only limited value compared to the budgetary costs. Any new administrative structure for the supervision of the educational system has primary the role to control the education process from the authoritative perspective, and thus it represents the institution of ideological apparatus of the state, which is trying to influence the long term

"proper" characteristics of the society. Such setting of regional offices for education could be considered as gatekeepers to filter the demands of the educational institutions in relation to the national level. On the other hand it is (at least in the case of Slovenia) hard to imagine that the national level could decentralize educational system, due to the size of the country as well as due to the political interests to have control over the "proper" knowledge in the central perspective.

When talking about changes higher education network we have to answer also what are the real reasons for all changes in relations among actors. Roughly about five percent of Slovenian population is enrolled to higher education in other words it is systematically more than 110.000 students in any given moment for last decade. Previously they had no real chance to choose (they had possibility to go to Ljubljana or Maribor university) since 2003 they could enrol to Primorska university and in 2006 University in Nova Gorica was established (last two institutions have few years longer tradition in the form of different faculties that were merged together). However all the time 70-80% of student population was enrolling to major universities, which are publicly financed for conducting study process and additionally for research via research grants. However, faculties from overlapping education and research areas were competing for

money. Same argument is valid even within individual faculties between research groups (it is no unusual that faculty within Ljubljana university has more than 3000 students, 200 employees and more than 20 different research groups). With no understanding for such internal competition or even rivalry, all project documentations had to be signed by university rector, research group leader and leading researcher of the project. Such bureaucratization is strong obstacle to effective project work. On the other hand due to ex cathedra lectures, not rarely for 400 and more students is far from providing individual approach and possibility to manage knowledge in most suitable way for students. However, number of students is (after Bologna reform even more) influencing the amount of money. State is setting limit to enrolment quotas, but 20 students is much less money than 40. In such conditions, state under the impression of political change liberalizes access into the higher education arena. Number of small and relatively flexible faculties is established with clear vision to decentralize higher education opportunities and to provide highly qualitative knowledge⁵ based on research. These institutions have legal ability to apply for same grants as research groups from main public universities. However, their administrative flexibility and dependence on non-granted money is adding additional motivation

5 This general idea is producing also different free riders who are trying to make additional money and shows whole process in mixed position.

to systematic work on grant applying and they can compete for the money that previously belonged to one of 4 major research institutions. From the institutional point of view grant funds were not so decentralized, because research groups within universities were still only part of the universities. Emergence of new institutions caused significant decentralization and absolute loss of money for major higher education institutions. Due to inability to rearrange institutional framework of public universities without losing key positions in network and money the only possibility that was available was to use trusted peers in state agencies in order to keep established patterns of work. However, politically caused changes in government agencies resulted in smaller effectiveness for such lobbying. Recognition of the situation caused lowering the level of personal trust in established informal networks and started additional efforts to block decentralization of higher education system, usually under the guise of lack of quality of newly established educational system, despite national measures of research quality show that research groups of newly established institutions can equally compete with old research groups in the field (see table 3: all data are indicative and are subject to daily change).

Table 3: Research groups major research groups by main national quality indicators on 2.August 2009 compared to 17 November 2015

institution/ research group	Number of researchers		points		points/ researcher		Points of leading researcher		Citations/ researcher	
	2009	2015	2009	2015	2009	2015	2009	2015	2009	2015
Faculty of organisational studies	3	8	1332	4096	444	512	692	1334	0,33	15,25
UL FSS- Centre for political research	16	10	7006	6149	437	615	927	1232	0,25	3,2
UL FSS- Centre theoretical sociology	2	1	711	860	355	860	501	860	7,00	119
UL FSS- Centre for critical political science	8	-	1847	-	230	-	580	-	0,13	-
Faculty of Applied Social Studies	19	17	3351	9383	176	552	931	1186	1,21	9,53
UL - Faculty of economics	154	157	24278	56306	157	359	485	1632	1,57	19,58
UMb - Faculty of organization	53	38	8164	10679	154	281	548	769	6,09	15,05
UL - Faculty of public administration	40	35	5780	18545	144	530	789	2966	3,10	14,5
School of business and management Novo mesto	14	11	1940	4300	138	391	410	780	0,00	0,27
International faculty for business and social studies	17	19	2173	8594	127	452	388	1796	1,47	18,26
UL FSS - Centre for evaluation and strategic research	3	-	320	-	106	-	135	-	1,33	-

<http://sicris.izum.si/default.aspx?lang=eng>

Table 3 is composed from selected research groups (as it is evident,

some institutions have more, some only one, not all research groups for FSS are included, some of them were cancelled between 2009 and 2015, and with very small number of exceptions, they were reduced in number of members), that are active in main areas of social sciences. Additionally another 100 of similar research groups could be included but result would not differ significantly. Among 12 different research groups of institutions from higher education we choose four of those who were established after 2005 and have active research group (none of them has more than one research group). On the other side there is eight research groups from two major universities and one private high school, established prior 2005. No matter which indicator we take we can see that output of newly established research groups is not systematically worse than of those with longer reputation. It is obvious that scientific output pre group member is even better in newly established research groups (75% of new research groups are in first half among chosen research groups). If we use as measure quality and recognition of research work (measured by Web of Science indexed articles cited in Web of Science indexed articles), we can see that first and last three research groups belong to group of pre-2005 established while younger research groups are taking the middle part of the ladder. And if we try to rearrange research groups by individual researcher with greatest output we can face that again 75% of new research groups are in first half of

selected pattern. In both, older and new research groups, researchers with longer tradition as well as young ones are participating. Analysing all 797 research institutions in Slovenia with approximately 1500 research groups would place newly established research groups and/or institutions even higher (in relative terms) by represented national indicators. Understanding this qualitative picture that is also part of any research grant criteria it is obvious that old research groups are under pressure of concurrence what causes different attempts of limiting the possibilities to participate independently in higher education policy network for newly established institutions.

Research and development strategies and goals in Slovenia

Slovenia's development strategy (SDS) that was accepted in 2005 by the government of Republic of Slovenia for the period of 2006-2013 defines main national development priorities including creation of competitive economy, effective knowledge generation, two-way flow and application of the knowledge needed for economic development and quality jobs.

These priorities should be achieved by several actions including fostering entrepreneurship, increasing competitiveness, raising economic effectiveness and the level of investments in R&D and improving the education quality and life-long learning processes.

SDS considers in this manner initial situation as reasonable good in the field of R&D investments and even better in the field of education (SDS, 2005: 9).

In 2005 also National Program of R&D for period 2006-2010 based on previously mentioned SDS was accepted. The main priorities were increasing cooperation between academic institutions and private sector, increasing the financing of the R&D to reach 3% GDP until 2010 (private sector 2% and budget 1% of GDP), setting the level of R&D to the internationally comparable standards and internationalization of R&D sector. Government obliged itself to (i) increase the number of young researchers from 250 to 350 per year (majority of them moving to private sector), (ii) develop three technical-industrial zones near universities, (iii) support higher share of highly quoted international publications, (iv) increase the incentives to popularize natural and technical sciences in media and within the educational system, etc.

In the paper we review how the ambitious and nice-sounding sentences were implemented by measuring (i) the real financial investments into R&D in the period 2007-2012 and (ii) the scientific output, expressed in numbers of publications, citations and stable networks. Moreover, we review three out of seven competence centres by considering the growth of their network and their

productivity in order to see if this instrument turns out to be successful.

Evaluation of the research output based on Slovenian research/bibliographical databases Cobiss and Sicris, different reports and public finances analysis. Cobiss is a general bibliographical database in Slovenia while Sicris is database of Slovenian researchers and research institutions. Both are maintained by Institute of information science and financed by Slovenian research agency.

In order to measure the financial support for R&D policy we use data on state financing of different sciences and financial contributions of different sectors for R&D. R&D output is measured by number of Web of Sciences publications and quotations, and by overview of the most productive (by the highest number of published articles) and the most influential institutions (by number of quotations). Additionally, we calculated the development of stable networks (including at least three co-authors with at least five joint publications)⁶ in last 13 years. By doing so we are able to show the changes in cooperation and internationalization of Slovenian research sphere.

In the second part of the evaluation, we pay special attention to one

6 Three co-authors can be considered as minimal network and not just collaborating pair. At the same time we consider five publications as minimal threshold of organized and not just ad-hoc collaboration.

of policy measures, so called competence centres, which were planned to bring together academic and economic institutions in order to support R&D for economic development and were considered as one of main R&D policy measures in recent years.

Main issue of the evaluation is that there is no systematic data availability on patents from private/business sector which would enable us to evaluate R&D policy from the perspective of economic development. In this manner, evaluation mainly shows changes in academic research over time while it has little explanatory power in understanding transfer of new knowledge into the social and economic sphere.

Financial aspects of Slovenian research policy

Research excellence is often based on internal motivation of researchers, but on national level the overall results are strongly related to the level of financial input, which was planned in SDS to be increased up to 3 % GDP, including 1% of GDP from the public sources.

Table 4 shows official statistical data, showing the financial basis of the Slovenian research policy. We can see that the goal of 3% has not been reached but the overall investments in R&D in all sectors almost doubled in the period 2007-2013, where private sector increased the

investment in R&D for two times and foreign sources were increased for three times.

Table 4: Gross domestic expenses⁷ for R&D by source (in mio Euro and as share of GDP)

	2007	2008	2009	2010	2011	2012	2013
GDP	34.594	37.244	35.556	35.607	36.172	35.319	35.646
private sector	292	387	381	435	548	578	597
% of GDP	0,84	1,04	1,07	1,22	1,51	1,64	1,67
state sources⁸	178	192	234	263	282	266	251
% of GDP	0,51	0,52	0,66	0,74	0,78	0,75	0,70
higher education	1.78	1.80	1.89	2.12	2.06	4.02	3.20
% of GDP	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
non-profit	0.06	0.07	0.20	0.46	0.10	0.99	0.19
% of GDP	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
foreign sources	29	34	40	45	63	79	83
% of GDP	0,08	0,09	0,11	0,13	0,17	0,22	0,23
Total	501	615	657	746	895	928	935
% of GDP	1,45	1,65	1,85	2,10	2,47	2,63	2,62

Source: Statistical Office of the Republic of Slovenia 2

⁷ Total expenses for R&D in the territory of Slovenia, excluding Slovenian expenditure for research used abroad.

⁸ Next from state budgetary sources includes also sources from municipalities. This also creates the difference in amounts between GDP from the public sources and the information in the Table 5.

Private financing of the research represents approximately 60% (62,8% in 2008 as a peak) of total R&D funding in Slovenia between 2007 and 2013, state financed approximately 33% (with low point of 28,1% in 2012) in the same period, while the rest was financed by non-profit or foreign funding. If we consider some of world most developed countries, where share of state based funding also dropped over the same time period, Slovenia can be compared to the UK, which keeps about 40% of state science funding, while countries like Germany, Sweden, Finland Netherlands, etc. keep the level of state research funding over 40% (see Auranen, Niemine, 2010: 829). According to Padilla-Pérez and Gaudin (2014: 751-752, 755), Slovenia still invest in total for R&D more than Central and Latin America (total R&D expenditure in CLA is approximately the same as Slovenian budgetary R&D expenditure). On the other hand, despite taxation burden of GDP is comparable to Sweden, Slovenia invests about 25% less than Sweden.

Table 5: Budgetary financing⁹ of R&D in Slovenia for 2007-2013 (in mio Euro) by scientific discipline

	2007	2008	2009	2010	2011	2012	2013
GDP	34,594	37,244	35,556	35,607	36,172	35,319	35,646
R&D share of GDP (%)	0.52	0.51	0.69	0.61	0.55	0.54	0.49
Natural sciences	59.6	65.5	60.4	50.9	38.4	43.5	42.5
Technical sciences	59.0	52.0	91.8	57.9	41.4	58.7	48.5
Medicine	15.3	16.9	20.7	17.8	13.5	15.2	16.2
Agriculture	12.0	17.8	19.8	12.1	10.5	10.3	9.5
Social sciences	18.7	17.6	19.6	18.3	12.4	12.3	11.7
Humanities	15.7	19.9	25.0	15.4	14.0	15.0	12.4
Other/interdisciplinary	/	0.1	7.7	45.4	70.6	34.4	33.5
Total	180.3	189.6	245.0	217.9	200.7	190.0	174.3

Source: Statistical Office of the Republic of Slovenia 2.

Table 5 shows some important aspects of budgetary financing of research. First, one can see increasing financing of R&D until 2009 and fast drop in 2010 - 2013 which is strongly related to economic situation in the state. Second, state gives relatively big support to technical and natural sciences (in initial year 2007 their share of total R&D fund from the state budget is almost 66% of total R&D state budget which drops to 40% in 2011 and increases to 53% in 2013.

9 Total expenses for R&D form budget of Slovenia including sources used abroad.

These fluctuations are balanced with additional funding of interdisciplinary research, which includes support to technical and natural sciences as well. However, the total sum of budgetary financing does not reach 1% of GDP in 2010, as declared by SDS, but it varies between 0,5 and 0,7% of GDP.

Scientific output and outcome of Slovenian scholars

In this section we consider the output of Slovenian scholars measured by the number of good (WOS) publications and the research outcome measured by (i) the number of WOS citations and (ii) the number of stable scientific networks.

Table 6 shows distribution of academic results and their recognition (as number of citations) compared to two periods of financial distribution that shows shift from natural and technical sciences to interdisciplinary sciences. Since the scientific part of the outputs indicate financial effectiveness and efficiency of natural and medical sciences, we can see that the technical and social sciences, humanities and interdisciplinary research produce much less scientifically important outcomes compared to the share of financial support.

Table 6: Scientific output of top 100 researchers by field of research (cumulative data since 1970) compared to state financing

Field of research	Number of WOS publications, % and bottom value			Number of citations, % and bottom value			Share of state finances, based on table 2 (2007-2010/2011-2013)	
Natural sciences	22.651	41,5 %	120	453.791	50,7 %	1.736	28,4 %	22,0 %
Technical sciences	10.770	19,7 %	58	131.234	14,7 %	588	31,3 %	26,3 %
Medicine	10.573	19,4 %	64	192.288	21,5 %	820	8,5 %	7,9 %
Agriculture	5.418	9,9 %	31	72.687	8,1 %	299	7,4 %	5,4 %
Social sciences	2.531	4,6 %	13	18.333	2,0 %	54	8,9 %	6,4 %
Humanities	1.282	2,3 %	7	5.628	0,6 %	5	9,1 %	7,3 %
Other/interdisciplinary	1.402	2,6 %	2	20.849	2,3 %	2	6,4 %	24,5 %
Total	54.627	100 %	-	894.810	100%	-	100,0	100,0 %

Source: SICRIS, 2nd February 2015.

For interdisciplinary research this can be explained by the fact that interdisciplinary projects include researchers from different areas which at the end produce publications which are still classified as natural or technical or social science etc. research. We do not have appropriate data to evaluate the size of this effect.

Table 7 contains time series data about the number of publications and citations of Slovenian researchers (those included in national database Sicris) for the period 2000-2013 (we point out that the

number of citations for 2013 still varies a lot due to slow data collection). For each year we report (i) the number of publications published in each year in journals included in WOS and (ii) how many times all WOS publications from 1970 to the current year were cited in WOS indexed journals in the current year.

Table 7: High quality output and peer recognition of researchers included in national evidence

YearWOS publications (published in individual year)	WOS publications (published in individual year)	Citations (of all WOS publications from authors in evidence for all texts since 1970 quoted in individual year)
2000	2.053	35.893
2001	2.004	35.874
2002	2.189	40.464
2003	2.403	46.464
2004	2.531	42.883
2005	2.869	45.556
2006	2.878	51.977
2007	3.523	48.169
2008	4.105	51.412
2009	4.403	60.641
2010	4.361	46.798
2011	4.759	38.377
2012	4.915	33.348
2013	4.824	16.403

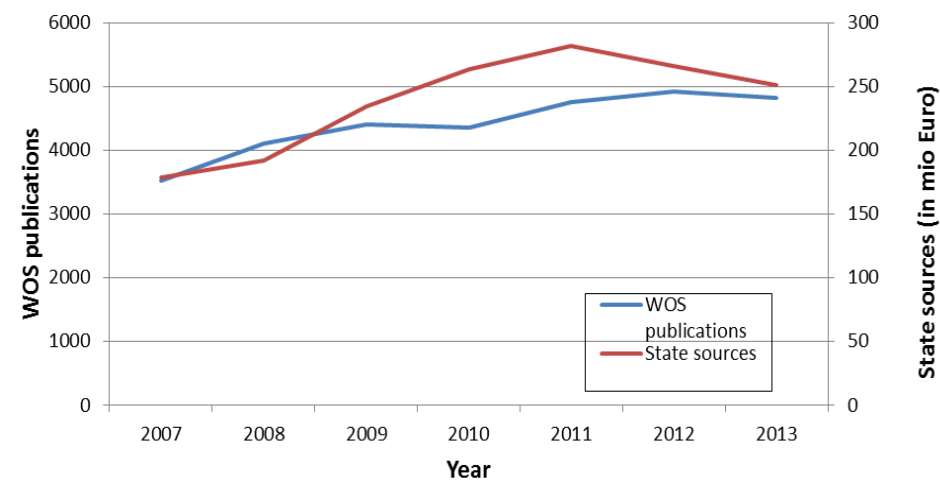
Source: SICRIS, 30th June 2015. Data are subject of daily change.

We can see that the number of WOS publications increases from year to year while the number of citations increases till 2009 and decreases in 2010-2012. One of possible reasons for this phenomenon is that the quality of publications did not follow the quantity of publications.

Relations between WOS publications and citations (Table 7) and state financing (row "state sources" from table 4) for 2007-2013 can be observed on Graph1 and Graph 2. Pearson correlation coefficient between number of WOS publications and state financing for 2007-2013 period is 0,88, while the correlation coefficient between state sources and the number of citations (Table 7) in the time period up to 2012 (we excluded 2013 because of incomplete data for this year) is -0,54. However, due to clear nonlinear relation (see Graph 2) between citations and state financing D Pearson correlation is not a good measure, therefore we computed also Spearman's correlation coefficient which is for the same period equal to -0,71. We are aware of the fact that publications need time, on average longer than 1 year, to be quoted, so the correlation between the number of citations and the financial input for the same year cannot serve as a reasonable measure for state financing efficiency. However, our time series are too short to compute correlations with few years delay.

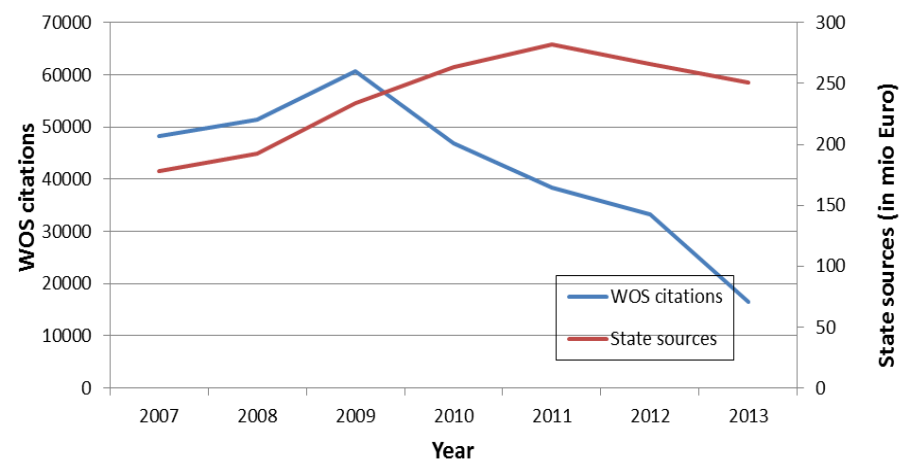
In the case of Slovenia, the populist parole “Publish or perish” has been systematically implemented in the last decade. Researchers at higher education or research institutions have been strongly stimulated to produce a lot of publications through the system of promotions and the system of research projects approving. Due to the scoring systems at the higher educational institutions or at Slovene science foundation WOS publications (in recent years also Scopus) were most rewarding – much more than writing monographs or text books for good publishing houses. Citations are also included in the scoring systems, but have real effect only when researcher wants to get a research project at Slovene science foundation. Fulfilling criteria related to citation for university promotion is not very difficult.

Graph 1: WOS publications and state financing in 2007-2012



Source: Table 4 and Table 7

Graph 2: WOS citations and state financing in 2007-2012



Source: Table 4 and Table 7

Non-correlation between funding and scientific output can be seen in the cases of Sweden, Germany, Netherlands, Norway, UK and Australia (see Auranen, Nieminen, 2010), which confirms that publishing output is not directly connected to financing.

Conclusions

Any activity connected to the increasing the number of the institutions in the field of education can be considered redundant. Especially in the situation when additional budgetary sources are required. On the other hand any reorganisation of the educational system in Slovenia should be carried out with strict reservation when it comes to changing the contents and control of quality. Any hasty change in the education standards can have irreversible consequences on the knowledge and competitiveness of the state. Classic case of this is Bologna reform, which, on behalf of unification of knowledge standards, reduces the criteria of knowledge and simultaneously reduces the value of the education. This enables existence of long list of the graduates who have much more limited knowledge than the graduates from the pre-Bologna higher education study programmes. This reduces the critical potential needed for the competitiveness of the national economy as well as it reduces the critical stance of the population towards the political and social situation in the state. This leads to the change of knowledge society into the no-knowledge society, which could on the other hand serve well to the interests of polit-economic elites. By lack of knowledge in the general society they are able to silence critical

thinking and unpleasant questions to become too loud. This makes the question, raised by Phillimore (1989: 270) about the autonomy of academia when forced to change their way of work and financial security is still relevant.

Slovenian case shows that in the case of higher education network there were different elements of strong connection between governmental and non-governmental actors, stable for longer period of time and network had relatively closed boundaries, not allowing entrance of new actors (even not creation of them). This created strong trust relations not based on formal (legal) relations but mostly on personal relations between representatives of different institutions. With change in political arena old policy network was decomposed what caused decrease in trust among old policy actors while new ones rely mostly on institutional conditioned (legal) trust.

When talking about role of trust in development of higher education system we should ask firstly what kind of trust we are talking about and what desirability of different forms of trust is. As it was shown in this chapter for development of certain policy (in this case higher education) area not all kinds of trust are equally valuable and

certainly have different aspects. Form of trust is connected to the previous level of development of policy issue and of socio-demographic characteristics of environment where certain policy will be implemented. In the environment where population is relatively small and all relevant actors/their representatives know each other, there is much more space for personal trust based on friendship that can result in different favours, especially if certain policy network is relatively closed to new actors. On the other hand, different barriers that keep representatives of intense personal contacts can maintain weak personal forms of trust and can keep also network more open for new actors under the same conditions of establishment and participation as they are set by legislation.

Slovenia faced economic crisis in 2008. SDS was prepared in 2005, based on positive estimations of economic growth and incremental positive budgeting. From this perspective one should understand negative budgeting results as unpredicted element in SDS. However, one can also argue that SDS and its subordinated documents and measures did not manage to reduce the crisis impact in all crucial fields of development of Slovenia, which might be most rigidly presented as shrink of total GDP that dropped to pre-2007 level in 2013.

According to the SDS goals we can argue that:

Slovenia did not meet financial aspects of R&D policy, despite of increase of R&D financing by the state and economy, 3% of GDP was not reached in 2010, nor in 2013 as last available data. Despite the Slovenian development strategy advocates increasing budget for R&D, in reality state investment into R&D was significantly reduced after 2011.

Slovenia moved the shift from social sciences to natural and technical sciences in the sense of financing. Data on media campaigning are not available.

Summing up, even though Slovenia did not meet the goal of 3 % of GDP for R&D and the amount of state resources Slovenia spent for R&D in 2012 and 2013 decreased most of the indicators of the research output that we considered were increasing in the time period 2007-2013 (even from 2000 on). Since after 2007 new standards for academic promotion were introduced and also National science foundation started in the last decade to reward researchers with a lot of publications we believe this is the reason why Slovenian scholars increase the quantitative criteria while the quality and relevance, measured through citations, are the second priority.

Redistribution of knowledge breakthroughs form academic to non-academic sector, opens the danger that the state by creating science-

business funding opportunities destroys science potential, as was the case in US nanotechnology sector (see Jung, Lee, 2013). Likewise, Jong and Slavova (2014) on the other hand show that cooperation between science and private sector (in the field of biotechnology in the UK) has positive influence on private sector products but on the other hand has also possible drawback for the private sector, because academic sector needs to publish the research results and therefore possibly reduces competitive edge of the non-academic sector ((Gittelman,Kogut ,2003) in Jong, Slavova (2014)).

Based on these observations, the government of Slovenia will have to reconsider its education policy. The difference between private and public and the basic and applied science will have to be cleared up. State shall finance public institutions and basic research while private users shall finance applied research conducted at private and public institutions. A special focus should be devoted to stimulate relevant and top quality research.

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