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Victor A. Pestoff

Work environment, governance and service quality in Japanese healthcare

Abstract

Objectives: This paper explores the contribution of governance to work environment and service quality in Japanese healthcare.

Research design: Data for this project was collected by giving questionnaires to the staff at eight cooperative hospitals across Japan in 2016 and compared with similar data from the staff at two public hospitals in Osaka in 2017. The staff sample from these 10 hospitals was a total of 6,859, with a response rate of 72.1%.

Findings: Based on the “demand, control, support” model of Karasek & Theorell, we found that more staff control over their daily work life resulted in greater staff satisfaction and promoted better service quality. Governance proved to be an intervening factor of significant importance and this paper considered three differentiated models for governing the provision of healthcare in Japan. They were distinguished in terms of the autonomy given to the staff in their everyday work life as well as patient inclusion in hospital discussions and decision-making.

Implications: Greater staff autonomy and more patient inclusion can have a positive effect both on work environment and service quality. Governance models can, therefore, contribute to or detract from goals of achieving greater staff autonomy, better service quality and more patient inclusion.

Contribution: This study tapped into Japan’s unique healthcare system, with two user-owned co-operative healthcare providers that manage nearly 200 hospitals with almost 50,000 beds, in order to explore work environment, governance and service quality. Questionnaires given to nearly 7,000 hospital employees allowed us to explore in depth the contribution of governance to work environment and service quality in Japanese healthcare. These results can serve as a best practice for other healthcare providers in Japan and elsewhere.

Article classification: research article.

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Introduction

Weber’s ideal of modern public bureaucracy was based on a military-like hierarchal command-

and-control model. This model became the central point of reference for the development of the public sector for most of the 20th Century. It was also adopted as a key organisational concept by industry and manufacture in advanced countries and dominated business administration until recently. Yet it is increasingly apparent that it is both inadequate and inappropriate in the 21st Century,

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when services and work in the services sector have become the predominant form of production and employment. Ostrom (1996) and Osborne *et al.* (2013) underline the differences between producing goods and providing services. Unlike goods, services often require an input or active contribution from users or clients in the production process itself. This makes them co-producers of such services. Personal social services are often considered “relational goods” by economists. If they are long-term or “enduring welfare services”, dissatisfied users will often have few, if any, options to exit. This makes voice more important for expressing consumer dissatisfaction and/or making suggestions to improve the service experience (Pestoff, 1998).

Healthcare in Europe and many other developed countries is now facing a complex and partly contradictory mix of challenges. Fiscal strains combined with a New Public Management agenda have caused cutbacks and calls for improved efficiency in publicly funded healthcare. This development is a significant contributor to the growing concern about service quality in healthcare. Other developments, such as increased demand due to aging populations and an increased level of individualisation of services, also add to the mix. The proposed solutions to these challenges in European healthcare help illustrate the severity of the problems. One solution suggested by market proponents is to further concentrate resources in larger production units and increase efficiency in order to “provide more care with better quality”. The problem with this solution is that the Scandinavian countries already have some of the most streamlined healthcare sectors in the world and there is probably a limit to how “efficient” you can make healthcare services while maintaining acceptable levels of service quality. Another possible solution would be to increase public funding, but most European countries already have the highest taxes in the world. Thus, given these alternatives, a key issue for future healthcare in Europe is to find a way to provide high quality services to a greater number of patients at a reasonable and socially acceptable cost.

A different kind of solution is reflected in the growing interest in and practice of increasing public participation in healthcare. More than a decade ago the World Health Organization (WHO) maintained that there were basically three ways or mechanisms to channel public participation in healthcare governance: “choice”, “voice” and “representation”. Choice mostly applies to individual decisions when selecting insurance providers and/or services. Voice tends to be exercised at the group or collective level to express public or group views. Representation implies a formal, regulated and often obligatory role in the process of healthcare governance (2005). In the United Kingdom it was recently argued that public and patient engagement in healthcare is “an idea whose time has come” (Hudson, 2014), while the Office of Public Management states that “co-production is the new paradigm for effective health and social care” (Alakeson *et al.*, 2013). Moreover, co-production can potentially combine choice, voice and representation, by actively engaging citizens in the provision of public services, at the site of service delivery (Pestoff, 2008 and 2009).

Peters (1996) states that mobilising and harnessing resources beyond the command and control of leaders in the public and private sectors is becoming increasingly crucial for the sustainability of society and the achieving of both public and private goals. Citizens provide critical resources today, so we need to consider how best to mobilise and harness their resources, both in their role as professional service providers and user/citizen or co-producers of public services. Moreover, he argues that in order to mobilise vast latent or currently unused resources in the public sector a participatory administration model should focus on empowering the lower echelons of the service providers and their clients, which would decentralise much of the decision-making to them. This should be reflected in their work environment, work satisfaction and how they perform their daily tasks.

Given the relational nature of many services, including healthcare, our study is premised on the assumption that work environment and service

quality are closely related or linked to each other. An employee who has tossed and turned all night worrying about work related problems, who feels tired and exhausted when he/she wakes in the morning, who dreads the idea of going to work because he/she has little or no control or influence on the what, when, why, where and how of his/her daily routines, who has little chance to learn new things or advance at work, such an employee will not provide as good quality service as one who has the opposite experience and feeling about his/her work. Likewise, a client who experiences an unhappy, stressed or disgruntled service professional will not experience as good service quality as one being served by an employee with the opposite feelings. We hope to shed more light on the importance of such mechanisms for the relationship between the staff and their clients and on how this is reflected in service quality in healthcare.

The optimal setting for exploring greater citizen participation in healthcare would be found in user-owned and controlled healthcare services. Unfortunately, there are very few examples of such services in Europe; however, Japan has a unique healthcare system with not just one, but two user-owned healthcare providers (United Nations, 1997). They are: the Agricultural Co-ops (Japan Agriculture, JA), or its health and social service affiliate, *Koseiren*, which mainly provides healthcare in rural areas; and the Medical Co-ops, which mostly provides healthcare in major urban areas. *Koseiren* provides healthcare services for its members and the public at 114 hospitals and 66 clinics nationwide, with a capacity of nearly 35,000 beds. Almost 40% of their hospitals are located in municipalities with populations of less than 50,000 people (Kurimoto, 2015 and 2018). In 2010 the Japanese Health and Welfare Co-op Federation (HeW CO-OP) brought together the medical co-ops associated with the Japanese Consumers' Co-operative Union (JCCU). Today it runs 75 hospitals with more than 12,000 beds nationwide. The Medical Co-ops also operate 267 clinics, 70 dental clinics and 187 visiting nurse stations nationwide.

Comparing these two user-owned health care groups with public providers of health care in Japan, enables us to identify and isolate the factors that facilitate greater staff control over their work life and active patient participation in their own healthcare. This research project on Co-production, Work Environment and Service Quality in Japanese Healthcare relies on several data sources. First is an organisation study that is comprised of interviews conducted in May 2013 with the CEOs and board members of the eight co-operative hospitals that agreed to take part in our study. Second is a staff study based on questionnaires developed to explore the relationship between work life and service quality at these eight co-operative hospitals in 2016 and the staff of two public hospitals in Osaka in 2017. In all we received 6,859 staff responses from these 10 hospitals, with a response rate of 72.1%. Third is the data collected by a patient study and volunteer study in 2017, also through questionnaires, at four of the co-operative hospitals included in the organization study and staff study. The patient study includes 631 respondents and the volunteer study resulted in 236 completed volunteer questionnaires being gathered at the four co-operative healthcare providers.¹

Previous research on work environment

This project proposes to explore the interplay between four meta variables in the provision of Japanese healthcare: work environment; service

¹ The data collection was financed by the Japanese Society for the Promotion of Science (JSPS) and the Mitsubishi Foundation, and it was supervised by Prof. Yayoi Saito, Osaka University and the Consumer Co-operative Institute of Japan (CCIJ). The project is conducted within the framework of an established co-operation between senior researchers at Ersta Sköndal Bräcke University College in Stockholm (Prof. V. Pestoff & Dr J. Vamstad) and the Faculty of Human Sciences, Osaka University (Prof. Y. Saito). This interdisciplinary group of Swedish and Japanese researchers is supported by a reference group of the relevant cooperative healthcare providers in Japan, *Koseiren* and the Japanese Health and Welfare Co-operative Federation HeW CO-OP JAPAN.

quality; models of stakeholder governance; and co-production. This report only deals with the first three of those; co-production will be considered in more detail elsewhere. Here we will begin our theoretical discussion with work environment and service quality. Karasek & Theorell (1990) note that work life stress is related both to physical illness and lower productivity. They developed a two-dimensional demand/control model to understand, analyse and explain the work environment and its physical and psychosocial impacts on workers and organisations. Combining these two dimensions results in the four-fold classification of jobs illustrated below, where demands are expressed by the columns. Low demands combined with high levels of control result in low-strain jobs, while low demands and low levels of control lead to passive jobs. High demands combined with high levels of control result in active jobs, but when control is low it produces high-strain jobs. The latter are usually considered most debilitating in work life.

They expand their model by adding a third dimension, “social support” at work. That refers to overall levels of helpful social interaction available on the job from both co-workers and supervisors (*ibid.* p. 69). They note that social support appears to provide buffering mechanisms between psychological stressors at work and adverse health outcomes. Thus social contacts and social structure affect the basic physiological processes important both to the maintenance of long-term health and the acquisition of new knowledge. Accordingly, they note that “... together, these three dimensions of work activity – demand, control and social support – are capable of predicting much of the range of total variation in depression symptoms in the US population”. Such symptoms

increase in probability from 6% to 41%, given the right or wrong combination of these factors. (Karasek & Theorell, 1990, p. 72). Later a fourth work-life dimension concerning the nature and intensity of contacts with clients was proposed by Pestoff (1998).

Governance at the macro, meso and micro levels

Governance became a buzz word about 25 years ago. Today it is used in many different contexts. It is employed differently at the macro, meso and micro levels, yet there are some notable similarities between the usage at various levels. From a macro perspective participatory governance is related to concepts such as network governance, New Public Governance and co-governance and it concerns public policy-making. In a multi-level European context it is seen as “a method or mechanism for dealing with a broad range of problems or conflicts in which actors regularly arrive at mutual satisfactory and binding decisions by negotiating with each other and co-operating in the implementation of these decisions.” (Schmitter, 2002, p. 53). It is posited on horizontal forms of interaction between actors who are sufficiently *independent* of each other so that neither can impose a solution on the other and yet sufficiently *interdependent* that both would lose if no solution were to be found. Their regular interaction results in trust and mutual accommodation (Schmitter, 2002, p. 53). Participatory governance usually emerges as an attractive, yet second-best solution when there is significant *market* and/or *state failure*. (Schmitter, 2002, p. 54). It implies flexible combinations of both public and private authority by representatives

Work life demands and decision latitude or control:	Low	High
High	<i>low strain</i>	<i>active</i>
Low	<i>passive</i>	<i>high-strain</i>

Figure 1. Psychological demand/decision latitude model

Source: Karasek & Theorell, 1990, p. 32.

of those collectivities that will be affected by the policy adopted, many of whom will be found in civil society. (Schmitter, 2002, p. 56) However, other roles than citizenship come into focus in participative governance, including those of rights-holders, stakeholders, shareholders, etc.

At the meso level interactive governance refers to jointly managed networks and/or collaborative governance, co-management, etc. Ostrom (1993) maintains that citizenship was confined for too long to voting and consumption of public services. She notes that limiting citizens either to being voters or clients constrains them to passive roles that leave them in the hands of others, rather than being something which they can control. The latter can be achieved when citizens are attributed a more active role as co-producers of public services. Therefore, she proposes a more collaborative and functional governance model that emphasizes a horizontal, two-way relationship among various participants in the community-local process, in contrast to the traditional hierarchal command-and-control model of public administration (Ostrom, 1993, p. 230). Sicilia *et al.* (2016) provide a good illustration of co-planning in a multi-level setting between different authorities providing services to parents with autistic children in Italy. Edelenbos & v. Meerkerk (2017) introduce three perspectives on interactive governance, particularly in an “Era of Big Society”. Those comprise: an *instrumental perspective* found in public administration literature, with a focus on effective governance and efficiency; a *cultural perspective* found in sociology and social psychology, with a focus on group dynamics and relationships; and a *democratic perspective* grounded in political science, with the objective of promoting legitimacy, democratic control and accountability in decision-making. However, they note that interactive governance is often subject to the “push and pull” of processes between citizens and governments. This leads them to distinguish between two main forms of interactive governance: government-induced and citizen initiatives. The former is a top-down process that relies on “citizen participation”, but is highly

organized and constrained by governments, while the latter is based on bottom-up citizen initiatives and civic engagement that often stems from their dissatisfaction with government policy and action. (Edelenbos & v. Meerkerk, 2017, p. 3)

At the micro level, or governance at the point of service delivery, the multi-stakeholder and co-production concepts are relevant. *Governance at the micro level refers to systems and processes concerned with ensuring the overall direction, supervision and accountability of an organisation* (Cornforth, 2004). Spears *et al.* (2014) present six different models of corporate governance for non-profit organisations, including principle-agent theory, democratic theory, stakeholder theory, resource dependency theory and managerial hegemony theory (Spears *et al.*, 2014). Both control and collaboration are essential elements of these theories. Accordingly, control helps to overcome human limitations through vigilance and discipline, while collaboration taps individuals’ aspirations via co-operation and empowerment. But there is always a need to balance them (Spears *et al.*, 2014). However, research shows that more than one governance model can exist side by side in the same NPO (Reuters & Wijkström, 2018).

Moreover, Sacchetti (2013) argues that both governance and decision-making practices can be divided into inclusive and exclusive categories. Inclusive governance co-ordination structures embody awareness of the effects generated on specific stakeholders or “publics” and on society more broadly, and they take into account both the outcomes and impacts of decisions on these “publics”. By extending impacts to encompass broader society, inclusive governance structures can activate resources from participating “publics” and produce durable networks based on reciprocity and trust, as well as producing innovate outcomes. (16) Sacchetti’s combination of the inclusive/exclusive categories results in four different types of organisations that correspond roughly to three of the four types of healthcare providers found in this study of Japanese healthcare. The inclusive/inclusive are found in the Medical Co-

ops, the inclusive/exclusive are seen in Koseiren, the exclusive/inclusive are seen in the medical corporations (which are not included in this study) and the exclusive/exclusive are found in public sector hospitals.

Governance can play an important role in developing new methods and models to improve work environment in healthcare in Japan. The three most central and relevant governance models for studying co-operative and public healthcare in Japan are the command-and-control model, the stewardship model and the democratic, multi-stakeholder model. The command-and-control model is based on the Weberian ideal for public bureaucracy. The stewardship model assumes that managers want to do a good job and will act as effective stewards of an organisation’s resources, in collaboration with the main stakeholders. As a result, senior management and the stakeholders or members of an organisation are seen as partners. The role of the board is primarily strategic: to add value to important decisions and improve organisational performance. Here board members are selected on the basis of their professional expertise, skills and contacts and they should receive proper training. By contrast, the democratic model includes ideas of open elections on the basis of one member one vote, pluralism, representation of different interests and accountability to its members. The board is often recruited from lay members and its main function is to represent the diverse interests of the organisation’s members (Cornforth, 2004).

From a business administration perspective, governance models usually focus on the relationship between the board and top management of a TSO or co-operative. However, employing a more

holistic or encompassing approach, based on different academic perspectives, such as political science, social work or sociology, would call for broadening the focus. The CEO and board do not provide the whole picture, so we intend to include other major stakeholders in our purview. However, the CEO and board do provide a natural starting point and they were interviewed, with a semi-structured interview schedule, in May 2013. These eight co-op healthcare providers comprise the organisational study of this project. Preliminary results suggest that agricultural co-ops and the *Koseiren* comprise a stewardship model of governance, while the consumer and Medical Co-ops embody a democratic model. However, it is worth noting that these concepts are initially considered heuristic tools and how they actually differ in terms of the governance of their healthcare organisations and the role they attribute to other stakeholders, such as the staff, patients and volunteers, remains an empirical question.

These three models can be distinguished by the degree of autonomy given to the staff in terms of their everyday work life and the degree of inclusiveness of various stakeholders in discussions and decision-making. Differences between them can be visualised and summarised by the step-stool figure below, where staff autonomy is represented by the vertical and inclusiveness on the horizontal axis. The higher up a governance model is on the stool the more the autonomy it gives to the staff, while the lower down on the stool the less autonomy given to the staff.

The first step is a hierarchal command and control, top-down model that allows for little autonomy or discretion to either the staff or clients.



Figure 2. The staff’s autonomy in different governance institutions

Source: Pestoff, 2018.

Traditional public services embody the hierarchical model. The middle step is a corporatist model based on a 70-year public private partnership in Japanese health care that started at the end of World War II. It provided healthcare for more than seven decades to large groups of citizens in rural areas residing well beyond the reach of public services. Finally, multi-stakeholder organisations are found on the top step that represents the highest level of autonomy and greatest inclusiveness. They embody a bottom-up democratic, multi-stakeholder model of governance that has evolved in Japan for nearly 100 years. It is worth noting that differences between these three steps or models do not simply involve the staff or the service users, but both groups together.

Exploring the combined effect of the Demand/Control Model for 10 Japanese hospitals

By combining the two main variables in the Karasek/Theorell working life model, demands and control, we can explore their joint effect on work environment of the 10 Japanese hospitals in our study. The figure below shows the combined effect of demand and control for the staff at these hospitals. The number and proportion of respondents/staff is also indicated.

In general, about a third of the staff/respondents working at the 10 Japanese hospitals in our study are classified as having low strain jobs and another third as having high strain jobs, while the remaining third is divided between passive or active jobs. High strain jobs carry the most risk in terms of negative health consequences for individual employees. They

can also have negative effects in terms of service quality, according to our expectations.

In addition, more than one of eight respondents are classified as having a passive job, which is characterised both by low demands and low control over daily tasks, while fewer than one of five has an active job. In the latter category high demands are combined with high discretion or control over the execution of daily tasks. This is considered the most beneficial work life situation and it usually results both in good working conditions and also a healthier and longer life.

We will now examine the relationship between these four work life situations and the indices of work environment employed by this study. The table below provides an overview of seven work environment indices that were calculated for three to six items each, for a total of 29 work environment items. It only reports the proportion of staff giving a high value for these 29 items. These work environment indices were divided into three roughly equal parts, where a score well above or below 33.3% is noteworthy. It also indicates the difference between the highest and lowest scores in these indices (Dif. h–l).

The difference between the highest and lowest scores in most of these work life indices is greatest for the staff found in the low respective high strain categories. This general pattern suggests that the difference between the proportion of staff reporting low or high strain determines the overall satisfaction of the staff and the quality of the service they provide. The goal of management and human resource officers should, therefore, be to move staff out of a high strain into an active and then, if possible, into a low strain work life situation.

Demands/Control	Low	High
High	<i>low strain</i> 35.1% (2,407)	<i>active</i> 17.1% (1,170)
Low	<i>passive</i> 14.3% (992)	<i>high strain</i> 33.5% (2,248)

Figure 3. Demands and control on/by the staff at Japanese hospitals

Source: Pestoff, 2018.

Table 1. Proportion of staff scoring “high” in indices of work environment, by demand & control categories of Karasek & Theorell (Note: these figures don’t add up to 100%, either column- or row-wise)

WE Index	Passive	Low strain	Active	High strain	Dif. (h-l)*
Work Satisfaction	25.4	49.2	34.4	14.0	35.2
Social Support	28.1	51.9	32.2	14.7	37.2
Influence	19.1	57.0	41.4	12.9	44.1
Pers. & Prof. Dev.	28.9	54.4	47.8	24.2	30.2
Work/Life Balance	30.1	47.6	32.4	19.5	28.0
Networking	20.3	30.2	31.7	21.5	8.7
Service Quality**	46.1	63.3	47.0	27.2	36.1

* Difference between staff categories with the highest and lowest scores in work life indices.

** This index was dichotomised, rather than divided into high, medium and low, as was the case for the other indices.

Source: Pestoff, 2018.

This can be achieved by providing them with more control over the “nuts and bolts” of their daily work tasks, i.e. more control over what they do and how and when they do it. Organisations that best meet this challenge will not only provide its staff a healthier work environment, but they will have a more satisfied staff, and healthier staff members. Thus one of the most important lessons of the Karasek/Theorell model is the necessity of giving the staff more autonomy over the contents of their daily work as a way of improving the work environment and hopefully the service quality as well.

The low strain category is noted for having a much larger proportion of high scores in the following work life indices: work satisfaction; social support; influence; professional and personal development; work/life balance; and service quality. The high strain category, by contrast, has a much lower proportion of high scores on the same indices. Their high score is only half or a third of the low strain staff on work satisfaction, social support, influence, personal and professional development, work/life balance. In particular, their score in service quality is noteworthy. High strain staff rate their hospital’s service quality less than half of what low strain staff do. They clearly feel the pressure of high strain at work

in terms of their lack of satisfaction with the quality of the service they provide.

Introducing the hospitals: work environment and service quality

Taking this analysis one step further, we will now control for organisation type or the hospital group where the staff work. This enables us to focus on the difference between hospital groups in a given demand/control category. Figure 4 introduces the specific patterns found when controlling for this in the Karasek/Theorell Demand/Control model. A separate note exists for the difference between the highest and lowest scores, dif. (h-l) in the figure below.

A quick overview shows that there is not much difference between the staff at these 10 hospitals in terms of either passive or active jobs. A nearly equal proportion of staff at all three types of hospitals are classified as having passive or active jobs, and the difference between hospital groups is rather small, only 0.7 or 2.8 percentage points for these two types of work environments. By contrast, the difference between hospitals is much larger when it comes to low strain and high strain jobs. In the former category, low strain jobs, we note a difference of 20.5 percentage

points between the highest and lowest hospital group, while a similar difference is noted for high strain jobs (19.3 percentage points). In both these situations, the staff at Medical Co-ops are clearly in the most beneficial situation in terms of their work environment. More of them have low strain jobs and fewer of them have high strain jobs. By contrast, the staff at public hospitals is much less fortunate. Fewer of them have low strain jobs, while many more have high strain jobs. Staff at the Koseiren hospitals falls in between the Medical Co-ops and public hospitals, both in terms of low strain and high strain jobs.

The same work environment indices mentioned in Table 1 earlier were also applied to the different hospital groups. The Medical Co-ops rated highest on all these indices, Koseiren came much lower, while the public hospitals ranked lowest on all but one of them.

Elsewhere we have reported in greater detail on the relation between work environment and service quality (Pestoff & Saito, 2018). There we discussed the relation between five of the work environment indices and the index of work satisfaction. They all had a medium Spearman's Rho correlation that varied between .525 and .439. We concluded, therefore, that it can serve as a surrogate for the other work environment variables. Then we considered the relationship between the index of work satisfaction and the index of service quality.

Demands/Control	Low	High
High	<i>low strain</i> MC: 43.1% K: 33.9% Pub.: 22.6% Dif. (h-l) 20.5%	<i>active</i> MC: 17.1% K: 16.9% Pub.: 17.6% Dif. (h-l) 0.7%
Low	<i>passive</i> MC: 13.4% K: 16.2% Pub.: 14.0% Dif. (h-l) 2.8%	<i>high strain</i> MC: 26.5% K: 33.0% Pub.: 45.8% Dif. (h-l) 19.3%

Figure 4. Demand and control by hospital group

Source: Pestoff, 2018. Key: MC = Medical Co-ops, K = Koseiren, Pub. = Public

Table 2. Work satisfaction and service quality

Work satisfaction	Service quality*	Percent	dif. (h-l)
High	High	71.6	
Low	High	23.0	48.6

* Only shows the high values of Service Quality. It was dichotomised.

Source: Pestoff, 2018.

We expect work satisfaction will be positively related to service quality. Healthcare is a typical relational service, so the service provided to clients will depend to a large extent on the relationship between the staff and their clients, as too will the perceived service quality. Satisfied staff will provide better quality services to their clients than stressed staff, or those suffering from chronic pain, etc. So, our expectation was that higher worker satisfaction leads to better service quality. For various levels of Work Satisfaction we will only take the high category of service quality into account for the sake of simplicity and to reduce the amount of data to absorb. The Spearman's Rho correlation between work satisfaction and service quality is .482. Going from the high level of work satisfaction to the low, we note a sharp reduction in the percentage of respondents who report a high level of service quality. It decreased from a high of 71.6% to a low of 23.0%, a decrease of almost 50 percentage points, which is a rather sharp drop. Work satisfaction seems to be related to service quality in a fashion that confirms our expectation. The staff at Medical Co-op hospitals report a higher level of service quality, while the staff at Koseiren and public hospitals report a notably lower one.

Governance models: demand, control and influence

As noted previously, command-and-control governance institutions are exclusive and hierarchal in their nature. They leave little room for staff

autonomy and allow very little degree of freedom for staff to use their own initiative to solve everyday problems and/or improve service quality. Moreover, there is no need for a dialogue with clients or making efforts to get their input, since “the experts know what is best” for their clients. Stewardship governance institutions are more inclusive and can be found in user-owned organisations that allow more room for staff autonomy and accept a larger degree of freedom for the staff to use their own initiative to solve everyday problems. However, long-term public-private partnerships may erode some of their autonomy and these governance institutions can gradually assume the character of command-and-control governance structures. Finally, democratic, multi-stakeholder governance institutions are most inclusive, they give staff the greatest amount of autonomy and offer them the largest degree of freedom to use their own initiative when solving everyday problems and/or making efforts to improve service quality. Moreover, various stakeholders have both a voice and vote in deciding important strategic matters and everyday issues, as well as improving service quality (Vidal, 2013).

We expect that these different governance institutions will promote more or less participatory governance. In order to explore this we will examine two indices of participatory governance from the staff study, i.e. the index of influence and the index of control at work. Note that only the high scores are reported here. However, they speak volumes about the governance institutions found in the hospitals included in this study. The democratic, multi-stakeholder model clearly rates best in terms of control and influence at work, the command-and-control model is weakest in terms of staff control and influence at work, while the stewardship model falls in between the other two in terms of staff control and influence at work.

Finally, by examining the frequency of staff discussions with key stakeholders about important issues concerning the hospital, we can construct the index of contact. It is reported in the table below.

As might be expected, staff working at democratic, multi-stakeholder institutions report a much higher level of frequent contacts with patients, volunteers and local community groups about issues related to their hospital than the staff at command-and-control hospitals. Just over one

Table 3. Governance institutions, control and influence at Japanese hospitals*

Hospital governance institutions & indices	Democratic, multi-stakeholder**	Stewardship***	Command & control****
Index of control	40.1	33.3	22.9
Index of influence	42.2	31.6	23.8

* Percentage giving a positive response (agree & agree somewhat) to the points included in these indices; ** Medical co-ops; *** Koseiren; **** Public.

Source: Pestoff, 2018.

Table 4. Index of frequency of contacts at Japanese hospitals*

Frequency of staff contact	Democratic, multi-stakeholder**	Stewardship***	Command & control****
Index of contact	35.1	21.0	16.2

* Percentage giving a positive response (always and sometimes) to the points included in these indices; ** Medical co-ops; *** Koseiren; **** Public.

Source: Pestoff, 2018.

third do so, which is more than twice as many as the staff at command-and-control hospitals. Staff working in the stewardship model fall in between the other two.

Conclusions

The Karasek/Theorell demand/control model of work environment presented in Figure 1 proved highly relevant for exploring the relationship between work environment and service quality in Japanese hospitals. It has clear heuristic and predictive value. Combining these two variables in Figure 3 we found a pattern where nearly one third of the staff at these ten Japanese hospitals have low strain jobs, one third high strain jobs, while the remainder are divided between passive and active jobs. Table 1 documented the impact of the four work life or job categories on the work environment indices employed by this study. In general, the low strain category performed much better on all of them than the high strain category. Moreover, they had a clear impact on service quality, where three of every five staff members with low strain jobs reported high service quality, while only one of every four staff with high strain jobs made the same report. Then, figure 4 introduced the three hospital groups in terms of these four demand/control job types.

We maintained that work satisfaction could serve as a surrogate for the six other work environment indices. Table 2 showed that work satisfaction was closely related to service quality. More than two thirds of the staff who were highly satisfied with their jobs said that the service quality was high, while less than a quarter of those who were least satisfied claimed high service quality. Our data clearly shows that work environment and service quality are positively related. Thus, a healthy work environment not only results in greater work satisfaction, but it promotes better service quality.

Furthermore, we argued that governance systems can help explain some of the most notable differences in work environment, work satisfaction and service quality. Governance systems can be

viewed from various angles. A key perspective is the degree of autonomy given to staff and clients to interact and resolve by themselves certain issues related to service provision and service quality. Also, the degree of inclusiveness of various stakeholders or “publics” is important to consider. We noted that three governance models embody different levels of autonomy and inclusion in decision-making for both the staff and clients, as illustrated in Figure 2. First is a hierarchical command-and-control model that is usually associated with traditional public administration and was first articulated by Max Weber. Second is a stewardship model where the leaders and representatives of the group served make decisions on their behalf. It clearly involves more autonomy and inclusion than the first model, but not as much as the last one. Third is a more horizontal, multi-stakeholder model that attributes greater autonomy to both the staff and their clients to resolve some key issues about service provision and quality, together, themselves.

The first step is a hierarchical command-and-control top-down model that gives little autonomy or discretion to either the staff or clients. Traditional public services embody the hierarchical model. The middle step is a corporatist model based on a 70-year public private partnership in Japanese health care that started at the end of World War II to provide health care to large groups residing well beyond the reach of the public services. Finally, multi-stakeholder organisations are found on the top step, which that represents the highest level of autonomy. They embody a bottom-up democratic model of governance that has existed and evolved in Japan for nearly 100 years. It is worth noting that differences between these three steps or models do not simply involve the staff or the service users, but both groups together. To achieve the highest level of autonomy and become viable they both need to be present and actively involved.

Then Table 3 considered control and influence at Japanese hospitals in relation to governance models. Democratic multi-stakeholder models promoted greater control and influence than either

the stewardship or command-and-control model. Finally, Table 4 presented data about the frequency of contacts with three key stakeholder groups: patients, volunteers and the local community. It demonstrates that staff at a democratic multi-stakeholder model have more inclusive discussions with its key stakeholders about hospital affairs than the staff at the other hospital groups.

It follows from this configuration that the governance model had an impact on the work environment. Staff with greater autonomy was more satisfied than those with less autonomy, as seen in some of the tables presented in this paper. That, in turn, can have a positive or negative impact on perceived service quality. It suggests that governance models are an important intervening variable between work environment and service quality. Thus, governance models, rather than ownership per se, appear to require closer attention in research on work environment and service quality in healthcare and other public financed services. However, different ownership constellations might learn from the best practices found in these separate governance models. Moreover, in the next round of analysis, we intend to consider the patient and volunteer data to confirm or reject the picture provided by the staff concerning service quality.

References

- Alakeson, V., Bunnin, A., & Miller, C. (2013). *Coproduction of health and wellbeing outcomes: the new paradigm for effective health and social care*. London: Office of Public Management.
- Birchall, J., & Sacchetti, S. (2017). *The comparative advantages of single and multi-stakeholder co-operatives*. Sterling, Scotland: ICA CCR Global Research Conference.
- Cornforth, C. (2004). The governance of co-operatives and mutual associations: a paradox perspective; I, *Annals of Public and Co-operative Economics*, 75(1): 11–32.
- Edelenbos, J. & v. Meerkerk, I. (2017). Introduction: three reflective perspectives on interactive governance. In: J. Edelenbos, I. van Meerkerk (Eds.), *Critical reflections on interactive governance*. Cheltenham, UK – Northampton, MA: Edward Elgar Publishing.
- Hudson, B. (2014). Public and patient engagement in commissioning in the English NHS: an idea whose time has come?. *Public Management Review*, 17(1): 1–16.
- Karasek, R., & Theorell, T. (1990). *Healthy work: stress, productivity and the reconstruction of working life*. New York: Basic Books.
- Kurimoto, A. (2015). *Social enterprise in Japan: the field of health and social services*. ICSEM Working Paper, 7.
- Kurimoto, A. (2018). Japan: health and elderly care cooperatives. In *Co-operative health report: assessing the worldwide contribution of cooperatives to healthcare*. International Health Cooperative Organisation, Eurisce.
- Ostrom, E. (1993). A communitarian approach to local governance. *National Civic Review*, 82(3): 226–233.
- Ostrom, E. (1996). Crossing the great divide, co-production, synergies and development. *World Development*, 24(6): 1073–1087.
- Osborne, S. P., Radnor, Z., & Nasi, G. (2013). A new theory for public sector management? Towards a (public) service dominant approach. *American Review of Public Administration*, 43(2): 135–158.
- Pestoff, V. (1998). *Beyond the market and state: social enterprise and civil democracy in a welfare society*. Aldershot: Ashgate.
- Pestoff, V. (2008). *A democratic architecture for the welfare state*. London & New York: Routledge.
- Pestoff, V. (2009). Towards a paradigm of democratic governance: citizen participation and co-production of personal social services in Sweden. *Annals of Public and Cooperative Economy*, 80(2): 197–224.
- Pestoff, V. (2018). Work environment and service quality in Japanese healthcare. Paper presented to the International Conference on Social Economy in Asia, Osaka, Japan.
- Pestoff, V., & Saito, Y. (2018). Work environment in Japanese health and elder care providers. Wageningen & Amsterdam, the Netherlands: conference paper presented at ICA & ISTR Conferences.
- Peters, B. G. (1996). *The future of governing: four emerging models*. Lawrence, KS: University Press of Kansas.
- Reuter, M., & Wijkström, F. (2018). Three parallel modes of governance in civil society: the steering and control of welfare provision in the Church of Sweden. Amsterdam: ISTR conference paper.

- Sacchetti, S., & Catturani, I. (2017). *The institutions of governance: a framework for analysis*. Trento: Euricse Working Paper, 93/17.
- Sacchetti, S., & Tortia, E. (2019, forthcoming). A needs theory of governance. *Public Management Review*.
- Schmitter, Ph. (2002). Participation in governance arrangements. Is there any reason to expect it will achieve “sustainable and innovative policies in a multi-level context”? In J. R. Grote, B. Gbikpi (Eds.), *Participatory governance: political and societal implications*. Opladen: Leske + Budrich.
- Sicilia, M., Guarini, E., Sancino, A., Andreani, M., & Ruffini, R. (2016). Public services management and co-production in multi-level governance settings. *International Review of Administrative Sciences*, 82(1): 8–27.
- Spears, R. *et al.* (2014). Major perspectives on governance of social enterprise. In J. Defourny, L. Hulgård & V. Pestoff (Eds.). *Social Enterprise and the Third Sector*. London – New York: Routledge.
- United Nations (1997). *Co-operative enterprise in the health and social care sectors*. New York: United Nations.
- Vidal, I. (2013). Governance of social enterprises as producers of public services. In P. Valkama, S. Bailey & A.-V. Anttiroiko (Eds.), *Organisational innovation in public services: forms and governance*. New York – London: Palgrave.
- Wikipedia, Spearman’s rank correlation coefficient, Rho, https://en.wikipedia.org/wiki/Spearman%27s_rank_correlation_coefficient (accessed on 1.6.2018).
- World Health Organization (2005). *Ninth Futures Forum on Health Systems Governance and Public Participation*. Copenhagen: WHO.

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Behaviour architects: a framework for employing behavioural insights in public policy practice

Abstract

Objectives: Responses to policy initiatives of citizens and organisations often differ from those expected by policy designers. The article offers an analytical framework for holistic mapping of mechanisms driving policy addressees' behaviours.

Research design & methods: Article uses systematic literature review of policy design and behavioural insights studies to develop the framework. The framework is then empirically tested in a case study of a policy implemented in 2015 by the government of Poland to address the problem of obesity in school children. Methods include in-depth interviews with adults parents, school principals, canteen staff, surveys, and focus groups with parents and teenagers, ethnographic observations in school canteens.

Findings: The empirical test proved the utility of the analytical framework in identifying flaws in policy design. Framework helped: (1) articulating an overall theory of change of regulation; (2) reframing the policy issue in behavioural terms, i.e., stating who, how, and in what context did not comply, and (3) identifying reasons for non-compliance related to capacity, motivation and opportunities of the policy subjects.

Implications / Recommendations: The article proposes that policy designers should work as behaviour architects in order to design more effective public policies and avoid policy failures. They should consider mechanisms facilitating or hampering expected behaviours of policy addressees.

Contribution / Value added: This article contributes to the theory and practice of policy design. It operationalises determinants of policy compliance from the perspective of applied behavioural science. It helps public policy scholars and practitioners to think systematically about policy subjects' behaviours, decisions, and their determinants when analysing and designing policy solution.

Article classification: theoretical article – conceptual article.

Keywords: behavioural insight, public policy design, evaluation, behavioural economics.

JEL classification: H8, D9.

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Introduction

Public policies aim to regulate and improve the life of policy addressees (citizens, private and public organisations) by guiding them towards socially desirable behaviours (Datta & Mullaianathan, 2012; Shafir, 2013a). Thus, the key issue of policy success or failure is the degree to which policy subjects comply with governmental preferences and bring structural change by behaving in a required way.

Looking broadly, understanding the mismatch between the expected impact of policy interventions and real behavioural effects is explored from two perspectives, in two streams of literature. The first perspective focuses on policy design, hypothesising that policy failure is an effect of incorrect “theory of change”, which means a set of assumptions established by policy designers about the causal relation between specific policy problem, profile of policy addressees, and form of intervention that triggers their response and bring an expected effect (Donaldson, 2007; Pawson, 2013; Soman, 2017; Peters, 2018). The second perspective is concerned with policy delivery, hypothesising that policy ineffectiveness is caused by defective “theory of implementation”, which is an execution of a sequence of technical, day-to-day implementation activities and inadequate institutional arrangements required to deliver the intervention. This perspective is covered by policy implementation literature (Pressman & Wildavsky, 1973; Zawicki, 2016).

In policy design literature and practice recent years have brought a significant conceptual shift. Initially, it was dominated by a classical economy approach that assumes full rationality of policy actors. However, gradually it started to recognise the bounded rationality of policy addressees and

a more context-sensitive policy toolkit (Colebatch, 2018). Three new perspectives have been emerging for exploring the issue of mechanisms of (non-) compliance. The neo-institutionalist approach provides an insight into different dimensions of a policy actor’s choice: cognition (to perceive, to know), affect (feelings, moral engagement), and evaluation (calculation), and how institutions impact behaviours (Etienne 2010). Social norm perspective focuses on unwritten rules shared by a group, the respect of which is sanctioned both positively and negatively by the group’s members. However, most of those studies are theoretical and explores the matters of compliance indirectly (Etienne 2010). Finally, the realistic models of behaviours try to integrate public policy and service design (Weaver, 2015; Hill & Hupe, 2014; Stanford University, 2016). It focuses on barriers and gaps in motivation or targets’ capacities that hinder targets’ compliance.

Despite this recent development of literature in policy design, there are three shortcomings in current thinking on policy compliance. Firstly, there is a significant degree of incoherence between different strands of literature in terms of the conceptual framing of the basic analytical vocabulary used to describe key compliance determinants. Secondly, specific practical applications (OECD, 2017; Behavioural Insights Team, 2015) tend to focus more on individual behaviour (behavioural nudges), at the expense of social and institutional aspects, causing a risk of cognitive tunnelling of policy designers. Thirdly, the majority of approaches offer points of advice but rarely provide a coherent framework that could translate into practical procedure applied in policy design. Thus there is a need for a more comprehensive approach that would bring together recent developments.

This article aims to contribute to the policy design literature by addressing the following question: how can mechanisms of compliance in policy addressees' behaviours be identified in a systematic way, in order to design effective policy responses?

In this article we take the perspective of policy designers. We portray them as Behaviour Architects: people who use a combination of policy tools to shape the compliance mechanisms of policy addressees. In order to design effective interventions, behaviour architects need to map and understand well the behavioural mechanism they want to trigger.

We believe that the compliance of policy addressees is embedded in a certain situation. It is a result of a complex behavioural mechanism driven by individual characteristics of subjects and contextual constraints (Michie et al., 2011; Ostrom, 2010; Astbury & Leeuw, 2010; Pawson, 2013; World Bank, 2015).

Building on interdisciplinary developments, we offer an analytical framework for holistic mapping of gaps and barriers to compliance in policy subjects' behaviours, and we test it in a case study of real-life regulation. The next section of the article presents the methodology of our research. Section three provides a conceptual framework for mapping mechanisms of behavioural compliance of policy addressees. Section four employs this conceptual framework in a case study, explaining the discrepancy between policy design (objectives) and policy results of a Polish government policy initiative targeted at the problem of obesity in school children. In conclusions, we discuss the strengths and weaknesses of the proposed framework as well as the implication for policy practice.

We hope that this framework will help policy designers to build their theory of change with more systematised and accurate insights about the behaviours of the policy addressees.

Methodology

The theoretical framework has been developed based on a systematic literature review covering

policy design and behavioural insights studies. The framework was tested via a case study of a design of policy introduced by the government of Poland in 2015 to address the problem of obesity in school children by changing the rules of operations for Polish school cafeterias and canteens (in Polish: *Ustawa z dnia 28 listopada 2014 r. o zmianie ustawy o bezpieczeństwie żywności i żywienia z dnia 25 sierpnia 2006 r.*) (Dz. U. z 2014 r. poz. 1662, 1722).

The case was selected based on its social and scientific relevance. World Health Organization stresses that childhood obesity is one of the most significant public health challenges of the 21st century. Globally, in 2015 the number of overweight children under the age of five is estimated to be more than 42 million (WHO 2017). Poland is not an exception. According to the Polish National Food and Nutrition Institute, a fifth of all school-aged children are overweight.

Due to alarming data, the problem of obesity was constantly gaining public recognition. Over 10 years, the number of scientific publications on the subject of childhood obesity and healthy nutrition of children in schools has increased significantly: from 167 articles published in 2005 to 1280 in 2015 (data derived using the Google Scholar search engine. Keywords for the search included "childhood obesity" and "healthy nutrition of children in schools").

Furthermore, this policy issue is regarded as a good field to test the liberal paternalism type of policy tools. It is a field in which serious societal problems emerge (obesity in children and related health-care costs), while standard policy tools such as strict regulation (bans) could be seen as overly intrusive with regard to citizens' behaviour (Thaler, 2008; Sunstein, 2008).

The case study research design was used because it is appropriate for inquiry aiming to answer the questions "how?" and "why?" about contemporary phenomenon when boundaries between the phenomenon and context are not evident (Yin 2014). We used a single case study with multiple embedded units of analysis. The

main unit of analysis was schools, but we also questioned specific sub-groups: pupils, parents, school principals, teachers, cafeteria owners, and school canteen staff.

To gather a better understanding of how different contextual factors could play a role in policy implementation, we selected a diverse set of schools. Firstly, we selected schools located in different kinds of municipalities (e.g. a big city with more than 1 million inhabitants with schools from both wealthier and poorer neighbourhoods, and a medium-sized town with about 60 thousand inhabitants). Secondly, we investigated schools with different experiences regarding educational programs about healthy eating habits.

Within the case study, we have applied a mixed-method approach. To better understand the content of the regulations, we conducted a systematic narrative review of the literature on similar programs. We searched scientific databases using the following keywords: TS=(children AND primary school* AND (obesity OR overweight) AND (eating habits OR behaviour*) AND prevention). After the initial title and abstract review, 448 papers were selected for further investigation, and 25 papers were included in the in-depth narrative review.

The desk research was followed by collection of empirical data in school settings. It covered: 65 in-depth interviews with adults (parents, school principals, canteen staff), paper and pencil interviews (PAPI) with parents of primary school pupils (n=635) and teenagers from secondary schools (n=150), approximately 30 hours of ethnographic

observations in primary school canteens during lunchtime, and three focus group interviews (participatory workshops) with teenagers from secondary schools.

Theoretical framework

The analytical framework was a three-stage procedure that consisted of: (1) articulating overall theory of change; (2) framing the policy issue in behavioural terms, i.e. stating who, how, and in what context should behave (including detailed mapping of stakeholders) and (3) investigating gaps in compliance. Each element is grounded in a particular stream of literature, accompanied by a set of conceptual framework. Our understanding of “analytical framework” is a set of conceptual canvas that identifies key variables and relations, and makes possible the integrating of different theories with an aim of explaining system relations (Ostrom, 2005, pp.7–11).

Articulating overall Theory of Change

Public policy is a problem solving through trial and error process (Lasswell, 1951; Bardach, 2006). That means that actors involved in policy design debate about misbehaviour they want to turn into compliance, hypothesise about the roots of the problem in a particular context (what factors obstruct compliance), and speculate about optimal policy tools for addressing those obstacles and ameliorating the problem.

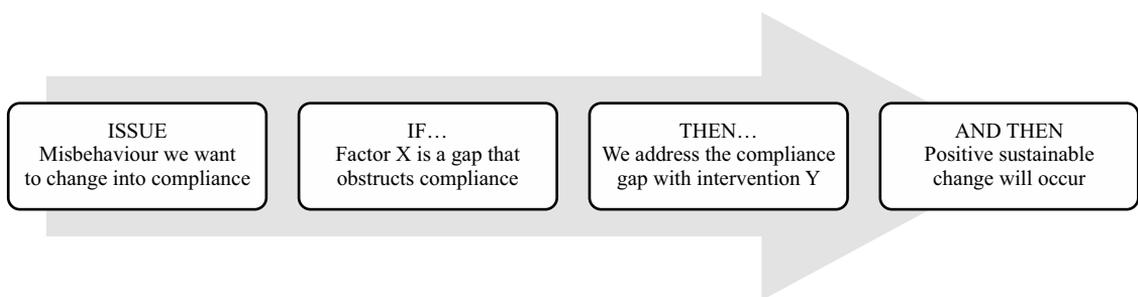


Figure 1. Generic Theory of Change

Source: own work.

The logical chain of these assumptions can be articulated in the form of Theory of Change. Figure 2 presents a generic version of that. The Theory of Change approach is well grounded in the program evaluation literature (Chen, 2005; Coryn et al., 2011; Donaldson, 2007; Astbury & Leeuw 2010). It is also aligned with human problem solving as hypothesis testing (Evans, 2017).

Theory of Change is a simple logical structure that helps Behaviour Architects bring together assumptions and ideas generated at the different stages of policy design, and assess their overall logic, in particular the logical connection between root problem and possible response.

Although canvas is highly linear, in reality it is built iteratively. Policy designers and other actors involved in policy problem-solving fill in individual boxes with initial ideas, switch between them, and zoom in and out onto the details of each box as the design of the policy progresses.

Reframing policy issues in behavioural terms

The public policy cycle starts with agenda setting. It is determined by a complex combination of state of domestic and international affairs, political momentum, and media feeds. What follows, however, is a policy issue formulation (framing) that opens the process of policy design (Fischer et al., 2007; Howlett, 2011).

The policy formulation stage is pivotal, because the same issue can be framed in different ways and that, in turn, determines further answers and selection of policy tools. The framing is partly informed by outcomes of data-driven problem analysis, and partly by value choices in the public sphere. Colebatch & Hoppe (2018) illustrate this point well with an example of the care of young children for parents who want to be in a paid workforce. This policy issue can be framed as labour market participation (enabling parents to work), child development and education (facilitating socialisation and early learning), or even market externalities (who bears the costs of care).

For policy designers operating as behaviour architects, “reframing” means translating policy issue into a specific statement about policy actors, their (mis)behaviour that should be changed into compliance, and the context in which it takes place. The identified policy actors will become policy addressees (also called policy subjects or policy targets). Designers define the characteristics of addressees’ behaviours (individual choice, repeated individual actions – routines or collective actions) and ponder the desired level of compliance. Weaver (2015) points out that governmental preferences can span from insisting on imposing specific standards (e.g. do not drink and drive), through being moderately insistent (saving for retirement, giving up smoking) to articulating vague aspirations (improving household energy efficiency). This desired level of compliance will, in turn, determine the degree of obligation imposed and coercive force used as intervention.

We agree with Gofen (2015) that policy non-compliance, understood as the lack of change in addressees’ behaviour in reaction to government action is not a simple, homogenous phenomenon. One of the fundamentals to understand this heterogeneity is the ability to correctly define and understand the context in which behaviour of policy addressees takes place. Thus, two concepts can be of assistance: the Action Situation and the Stakeholder Map.

The Action Situation concept, which derives from the Institutional Analysis and Development Framework, can provide a helpful framework for Behaviour Architects (Ostrom, 2005; 2010, p. 646). Action Situation denotes social or physical space, an arena in which choices are made (McGinnis, 2011). It helps to organise thinking about real-world policy implementation by creating an analytical setting within which we can observe and analyse policy subjects and their behaviours (with their heterogeneity) without losing sight of other key elements that could either hinder or foster the achievement of policy goals.

Behaviours take place in the context of social interactions. Therefore it is necessary to map

stakeholders, defined as “any person, group, or organisation that possesses a stake (e.g., interest, legal obligation, moral right) in a decision” (Navarrete & Modvar, 2007). In the case of public policies, these are policy actors that are likely to affect or be affected by the designed intervention (Bryson, 2011). The assumption is that inclusive policies are more advantageous when tackling complex issues and their implementation is more efficient when different perspectives and actors are taken into account at the design stage (Navarrete & Modvar, 2007).

A simple visual tool aligned with the Action Situation concept – three circles – can help with identifying stakeholders. It is borrowed from architectural and service design (Stickdorn & Schneider, 2012; Binnekamp et al., 2006). The central circle is the target population, the group whose behaviours are targeted. The second circle holds participants that are physically present in the action situation with the analysed target group. In the outer circle, we place stakeholders not physically directly present in the action situation

but having a potential impact on the key addressees’ behaviours.

Hypothesising about gaps in compliance

The desired outcome of governmental policies is a change in the behaviour of targeted individuals. Understanding factors that hinder or prevent such compliance should be the focal point when planning an intervention. However, the behaviour is always a derivative of an amalgam of factors, and it is challenging to perform analysis in a comprehensive yet synthetic way.

In order to unpack the box of factors hindering or preventing compliance (the second box in Theory of Change frame), we propose to use the COM-B model as a canvas. This model was developed by Michie, van Stralen and West (2011), who aimed “...to identify the simplest overarching model needed to account for a change in behaviour.” (2013, p. 6). Their systematic review of 83 behaviour change theories (Mitchie et al., 2014), a consensus meeting of behavioural theorists in the USA

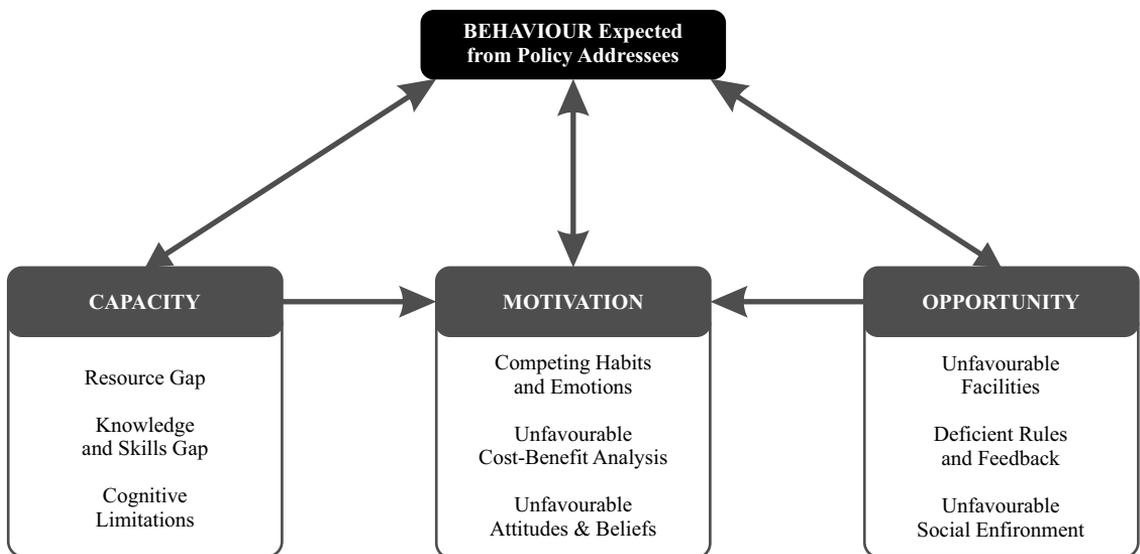


Figure 2. COM-B model for analysis of behavioural drivers

Source: Adapted from (Michie, van Stralen, & West, 2011), (Soman, 2017), and Weaver (2015).

in 1991 and a principal of US criminal law refer to same three factors necessary for performing an action. These are: (1) capacity to perform an action; (2) motivation to perform an action; and (3) lack of environmental obstacles precluding one from performing an action.

We follow this logic, but we propose to unpack some of the concepts used in the model in a different way (see: Figure 2). Capacity is understood as the individual (personal) means of policy actor required to perform an action. The obstacles to behaviour in this category could include: deficits in personal resources (time, money, physical strength), gaps in knowledge or skills to perform specific actions, or cognitive limitations (understood as a spectrum of different cognitive biases that could hamper policy addressee's decisions). Motivation includes factors that drive policy subjects to action. The obstacles in this category include primary barriers related to conflicting emotions or rooted habits, analytical calculation of potential profits or losses, or higher purpose coming from attitudes and beliefs. Finally, the last group of potential deficits blocking desired behaviour can be rooted in contextual factors. Opportunity covers the lack of required infrastructure to perform actions (facilities), deficient setting or execution of rules related to behaviour, or social influence working against compliance.

The proposed model enables Behaviour Architects to hypothesise where critical gaps or barriers to compliance are rooted, and what minimal configuration of capacity, motivation, and opportunity would enable the policy addressee to display the desired behaviour.

Case study: a junk food ban in schools

In 2014 the Polish Parliament made amendments to the Food and Nutrition Safety Act, introducing new regulations concerning the functioning of school canteens and tuck-shops. Foods and drinks high in fat, salt, and sugars were banned. The Ministry of Health issued a detailed list of banned products and introduced limits for sugar, salt and

fat that could be used during meal preparation by school canteens. The motivation behind this change was to stop a negative trend and “save children’s health by promoting healthy eating habits” (as explicitly stated during the parliamentary debate).

The regulation in question is a clear example of policy failure. In 2018, three years after the introduction of the law, the Polish Institute of Food and Nutrition and the Institute of Mother and Child stated in various reports that child obesity rates in Poland were among highest in Europe and children consumed a significant amount of sweets and salted snacks. It seems that the regulation did not change the behaviour of children, which had been expected in working reports published soon after the regulation was introduced in 2015.

Additionally, the regulation has been widely criticised, and “banned buns” became a buzz phrase in Polish media, both in traditional and social channels. Jokes about young people “smuggling” illegal sweets and crisps into schools, being involving in “junk food” organised crime networks and making fake ID cards in order to be able to buy “adults-only food” started to appear in TV shows and stand-up comedy routines. School principals reported that canteens operators were withdrawing from contracts as a result of the limited ability to sell the most profitable snacks.

In the next sections, we will apply our theoretical framework to explain the failure of policy regulation introduced in Poland. We argue that the potential barriers could have been noted before the introduction of the policy if an appropriate analytical framework had been applied. This case will illustrate the potential strengths and weaknesses of the framework in providing a fuller picture of gaps in compliance.

Reconstructing Overall Theory of Change

The simplified logic of the Polish regulation is shown in Figure 3.

The implementation of the regulation started with the introduction of the food list to

school canteens and tuck-shops. Also, vending machines were removed from schools and all kinds of promotion of “junk food” within school premises was prohibited. To enforce the compliance, local Sanitary Inspectorates carried out school inspections, and violations could be punished either with a financial penalty (up to EUR 1,000) or the termination of the contract with the canteen/shop operator. Thus, the Polish Government chose a solution from “the upper end of the intrusiveness scale” (Weaver 2014), to prohibit specific behaviour and to punish non-compliant behaviour.

The designers of the policy used a simple instrument, i.e. a ban, combined with penalties for owners of stores and school cafeterias, as well as school principals, that failed to comply with the regulation. However, those actors were not the regulation’s target group, they were merely a means to ensure the compliance of the actual target group: children attending educational facilities. Thus, the regulation was targeted at changing the behaviour of school children, so that they would start choosing healthy food. This assumption seems far-fetched, but in order to check its rationality we will have to unpack the black box of the behaviour.

Figure 3 also shows the challenge with a second causal link, between changed behaviour and ultimate policy impact. Childhood obesity is a result of “life style”, which includes dietary choices as well as patterns of physical activity. Regulators targeted only the former, in a very narrow context, i.e. school, not taking into account the world outside school. However, to increase the probability of achieving its goals, such a regulation should be more comprehensive, i.e. take into account other situations in which children consume food, as well as target physical activity – the second component which, if there is a lack thereof, contributes to obesity.

We argue that such shortcomings could have been avoided if the regulatory bodies had followed several steps we propose in our framework.

Reframing Policy Issues in Behavioural Terms

The first of such practical steps is reframing the policy issue into behavioural terms. That means defining who should behave how and in what situations. This case study starts with listing the key policy targets (i.e. “Who?”). The policy

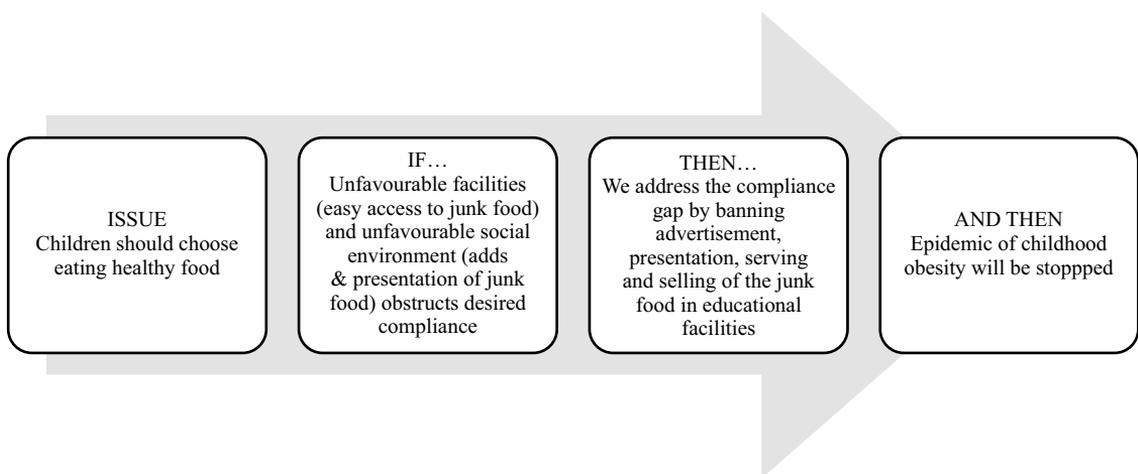


Figure 3. Intervention logic of case study regulation

Source: Food and Nutrition Safety Act changes in 2014.

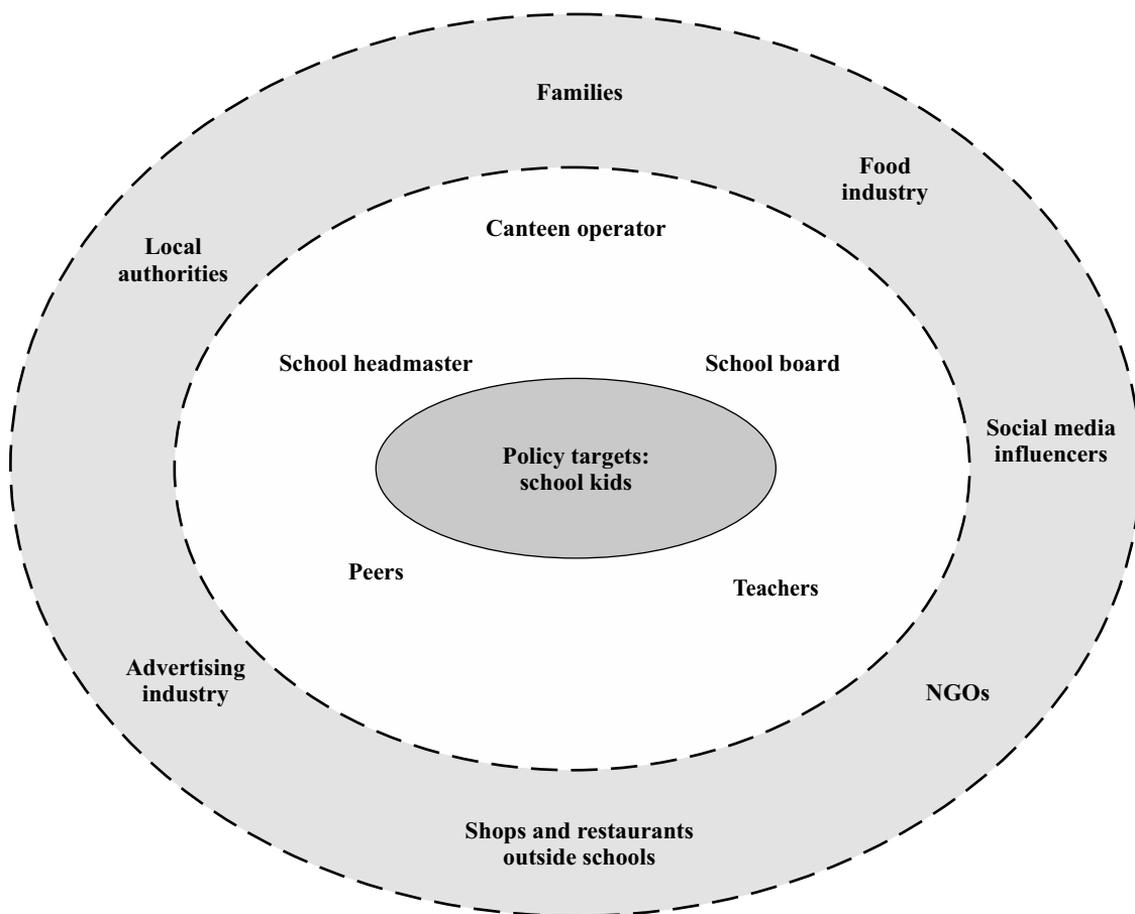


Figure 4. Stakeholder map for the case study regulation

Source: own work.

aimed to affect the behaviour of children (aged six to twelve) and young people (aged 12 to 15).

A policy-making process aimed at increasing the compliance of targets with certain aims should not only build on understanding the primary subjects (with their heterogeneity) but also map other stakeholders that could affect the addressees' behaviour. The following figure shows the stakeholder map for the case study regulation.

At the centre of the policy, we put the key subjects (targets) of the policy: school children. However, when we recall what kinds of measures have been used in the regulation, we immediately understand that there were no direct actions to

change the behaviour of children. Policy makers only used tools addressing the actions of canteen operators and additional measures involving headmasters and school boards to enforce the new regulations. Hypothetically, children's behaviour was intended to change as a reaction to a change in their school environment.

The regulation had several blind spots. It did not address any possible social influences that could either help or hinder its introduction, e.g. it failed to involve the effects of either school peers or teachers. Moreover, the policymakers did not take into account the complex reality of the external world with various stakeholders

that could influence the results of the policy. The regulation did not consider any potential influences on children's eating behaviour from family, media and advertising companies, NGOs (often involved in the promotion of a healthy lifestyle), social media influencers (role models, be they supportive or disruptive), and local shops (which could provide resources that had been banned in schools).

The stakeholder mapping made it possible to show that the Polish government had decided to influence only those stakeholders that were within the educational administrative system (canteen operators tied by legal agreements, school directors and boards operating based on the relevant legal acts). The government did nothing to involve other stakeholders (such families and the media) or to regulate influential interest groups (such as the food and retail sectors).

This has led to two kinds of problems with regard to the effectiveness of the policy: firstly, the diagnosis of situation was oversimplified, and – as such – resulted in suboptimal policy tools being selected. Secondly, many of the stakeholders that were not involved in government actions were further involved in the critical public debate around the regulation, which had an additional diminishing effect on the regulation's legitimacy and acceptance within society.

Secondly, to better understand the context (when and where targets behave), we identify key action situations in which policy targets engage in interactions that could result in compliant (eating healthy foods) or non-compliant behaviour (consuming junk food).

Let us recall that the primary targets were school children and teenagers. Yet the only action situation within which the regulation changed operational rules for targets was school (what can be bought from a tuck-shop or eaten in a canteen). During our exploratory research we identified other important action situations which were entirely ignored by the policy designers.

Firstly, policymakers did not include any actions to alter the behaviour of the policy targets (children) within the primary action situation they

live in and make decisions, i.e. family. Review of evidence that accompanied our ethnographic research showed that: inclusion of families increases the chances of success (Kipping et al., 2014; Schäfer Elinder et al., 2012; Jordan et al., 2008); children in families with higher socioeconomic status change their eating habits more easily (Plachta-Danielzik et al., 2011); as do those with better-educated parents (Llargues et al., 2011). Our empirical findings were in line with this strand of evidence. The family action situation should be the focal point of analysis preceding the selection of policy tools aiming at changing the eating habits of children.

One could argue that there is nothing wrong with focusing efforts on the one action situation. However, in the given case neither regulation (prohibition) nor the accompanying implementation measures (junk- and healthy-food checklists) nor the compliance enforcement tools (inspections and punishment for canteens operators) have acknowledged the impact of the family action situation on children's eating habits.

During our research we identified possible ways in which the family action situation could interact with the school action situation, in a way that has an impact on whether targets comply or not with the policy. The family action situation determines in particular two working elements, i.e.:

- the target preferences and the level of information children could use in the school action situation (what kind of food is desirable, what is healthy/unhealthy food);
- the target degree of control over action in the school situation (i.e. by either providing home-made snacks or giving children pocket money to be spent on food).

Moreover, policymakers have failed to address the other significant action situation in which the eating habits of the policy targets could form or change, i.e. the social life action situation (that could be split to two interacting and mutually enforcing dimensions, i.e. real-world social life and virtual-reality social life, which is extremely important in the case of teenage policy targets).

As described by our interviewees, eating is an essential part of various social interactions they engage in (either in the real world, e.g. meeting at a local McDonalds, or in virtual-reality, e.g. consuming snacks during online gaming with peers).

To sum up, as far as action situations are concerned, the policymakers took a simplistic approach and a narrow world-view. They entirely failed to address two critical action situations (family life and social life) in which policy targets behave and make decisions. Furthermore, they did not include any of the policy tools that could enforce compliance, changing neither the micro context of action situations (e.g. the availability of banned foods in shops located near to schools) nor the broader socio-ecological macro context (e.g. economic aspects of the food industry, such as pricing policies, advertising and PR activities of food brands).

Identification of the above-mentioned action situations in which children behave in desired or not desired ways clearly shows the substantial gaps in the intervention logic of the studied policy and provides information on possible sources of non-compliance (multifaceted impacts of other action situations, family and social life, on children's eating behaviour). The systematic review of the evidence on the effectiveness of healthy eating programs conducted during our research clearly showed that the most effective programs are those addressing various elements from different action situations (Laurence et al., 2007).

Investigating Gaps in Compliance: Case Study Experiences

Looking for gaps that may cause non-compliance of the primary policy targets, we focused on one action situation, i.e. school, which was the only one covered by the policy tools used by the Polish Government.

We started with an analysis of the first component of the COM-B system: capacity, i.e. resource gaps, knowledge and skills gaps, and cognitive limitations.

Firstly, the regulation addressed the level of resources by limiting the availability of junk food in school canteens and tuck-shops. By doing so regulation targeted one of cognitive bias, a psychological myopic: a tendency to think short-sightedly. For children the side effects of eating unhealthy food are distant problems, so they prefer to deal with a more immediate problem: hunger. The pleasure of eating something sweet and salty overshadows the risk of potential future health problems. The regulator decided to overcome this cognitive bias by eliminating this solution from the decision tree of children at school. However, the regulation did not address the availability of the same product categories in the shops located in immediate vicinity of schools. Our observations and interviews showed that children still buy sweet drinks and salty snacks, but they do that either in the morning (on their way to school) or in the afternoon (going home). Sometimes they do not buy food by themselves, especially those who are younger, their parents buy them what they want and give them those things to take to school.

The study of the knowledge and skills of pupils revealed that they had difficulties in assessing the healthiness of food they consume every day. A common assumption of pupils was that junk food is only fast-food, while healthy foods are vegetables and fruits, leaving the rest of the products in a grey zone. Moreover, children believe that the preparation of healthy food is very time-consuming, and they were convinced that the result might not be tasty. They did not know what a healthy snack might be, and they did not have any skills to prepare healthy snacks.

Meanwhile, the introduced regulation has made a clear distinction between “healthy” and “unhealthy” foods. The official list of prohibited foods and practices did not offer any explanation of the choices, and its release was not accompanied by any information campaign that would help people to understand the rationale behind the decisions of the experts. There was an evident lack of divergence between the understanding

of children and that of the government with regard to healthy food, which was not addressed at all.

This discrepancy resulted in two barriers to compliance: firstly, students, their parents, and canteen personnel did not understand why certain foods had been banned. Secondly, students had no knowledge about how healthier alternatives could replace the banned food. Canteen personnel also said they lacked knowledge about how to prepare a tasty meal without ingredients from the list. During interviews they told us that suddenly they had to stop doing things in the way they have been doing for years and had to learn new recipes. They were given no help or time to acquire new knowledge and skills.

In the area of motivation, i.e. competing habits and emotions, as well as unfavourable attitudes and beliefs, we found that children have very strong positive associations with regard to unhealthy food that is often given to children as a reward for good behaviour, accomplishments or hard work. They also said that they did not eat a lot of vegetables or fruit at home, so there were no positive habits at which policymakers could aim while designing intervention. We also found that children like to have a choice when they are offered something to eat. The rapid restriction imposed on that ability to choose has had an effect of psychological reactance. Children interpreted this restriction as a limitation of their freedom, and even those who in general were in favour of healthy food initiatives started to express negative opinions about the new regulation.

Also canteen workers' fear of being fined for incompliant activities resulted in some cases of over compliance, i.e. some canteens stopped using salt and sugar at all (although the regulation permitted the use of small amounts), which in turn had negative impact on children's compliance: they did not accept the "flavorless" soups, sauces, etc. It was visible during ethnographical observations in canteens: younger children were simply leaving a large part of those meals that were newly introduced, and the less salty, less sweet flavours of those were new to children's palates. As a result,

their attitudes towards changes in canteens were increasingly negative. The collected material did not point out any physical capabilities a lack of which would somehow restrict the ability of the average pupil to eat healthily. Disabilities and food allergies were not included in the analysis.

The third component we examined was opportunity, i.e. unfavourable facilities, deficient rules and feedback, and unfavourable social environment.

None of the potential social environment impacts on eating habits have been addressed. Firstly, the family action situation was excluded from the scope of the policy. Secondly, the peer effects, the way young people socialise and how that relates to food consumption, was also ignored. Thirdly, the policy did not address the issues related to traditional and new media discourses and communication practices around unhealthy/healthy eating. The regulation banned the promotion of sweet/fatty/salty foods in school, but at the same time did nothing to the broader regulations regarding advertising of food in Poland. As a result, immediately after leaving school, within which promotion and selling of salty crisps and sweet drinks was banned, children saw billboards and other outdoor commercials with the most famous football players with the pack of crisps in one hand and bottle of Coke in the other.

Nothing has been done to use leverage points (Weaver 2015), e.g. the evolving trends in healthy lifestyle blogs or the Instagram activity of pop-stars showing how visually attractive and tasty healthy eating could be. We can clearly see how many gaps in compliance were not addressed or even acknowledged. That substantially decreased the probability of the effectiveness of the intervention.

Moreover, the policy did not include any tools to support canteen operators and their staff in following the new food checklists and rules for meal preparation. As a result, the media reported cases of canteens operators closing their business because of the presupposition that the introduced changes would decrease revenues (higher prices

of healthy snacks and lower marketing attraction) and make the business difficult to manage (maintaining fresh products, establishing new supply chains, etc) and more risky (possible fines for not following new rules).

Conclusions

This article puts forward a framework helping policy designers to operate as behaviour architects: investigating and addressing the complex patterns of factors that shape the behaviour of policy subjects, and result in policy non-compliance.

We have argued that there are three key elements of such a framework: (1) articulating the overall theory of change that underlies the given policy; (2) framing the policy issue in behavioural terms, describing who should behave how and in what context (including a detailed mapping of stakeholders); and (3) investigating gaps or barriers to compliance in targets' capacity, motivation and/or opportunity. This procedure brings together individual and environmental determinants of behaviour, which could prevent policy practitioners from cognitive "tunnelling" on only selected behavioural gaps during the policy design phase (Weaver, 2015, p. 807).

Trial application of the framework for analysis of real policy (the Polish regulations changing the eating habits of school children) proved its utility. Firstly, the framework made it possible to show how oversimplified and unrealistic assumptions were made about the causal inference between the public regulation, policy addressees' responses, and the ultimate societal impact.

Secondly, the framework made possible the identification of three key action situations in which desired behaviour could take place and be informed, and that only one (school action situation) had been addressed by policymakers, which minimised the possible effectiveness of the regulation.

Thirdly, the framework systematised insights about essential capacities (individual attributes) of policy targets and their motivations and opportunities (resources, institutional arrangements,

and social environment) that could be used either as leverage points to increase compliance or as sources of problems (barriers to compliance). When policymakers or evaluators use such a "map to behaviour" they increase chances of the policy, regulation, program or project being effective by considering a spectrum of accompanying measures. As such, this framework helps them to think outside of the box and to create more realistic policies.

The application of the framework in the case study analysis also made it possible to identify three broad issues requiring further elaboration. Firstly, more conceptual work is needed to organise thinking about elements that can manifest themselves differently in different action situations on different levels. Thus the multidimensionality of action situations and the impact thereof on targets' behaviour needs to be addressed more comprehensively.

Secondly, more work is needed on dynamic elements of the action situations (when one element influence another). Different elements interact within action situations, and those interactions are vital to understanding the whole mechanism leading to an outcome (behaviour). In the current situation, the framework focuses more on static elements, the dynamic is still to be addressed.

Thirdly, the initial analysis showed the framework to be fully operational and easily applicable to policy analysis, especially for practitioners, needing to be enriched with sets of detailed questions tied to each element of the framework. The building of the catalogue of questions could be then followed by an indication of which research designs could be used to investigate each of the described phenomena.

Despite current limitations, we hope that presented framework for behaviour architects would enable policy designers to understand behavioural mechanisms of policy addressees better, and ultimately to create more effective policies

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References

- Aligica, P. D. (2006). Institutional and stakeholder mapping: frameworks for policy analysis and institutional change. *Public Organization Review*, 6(1), 79–90.
- Astbury, B., & Leeuw, F. L. (2010). Unpacking black boxes: mechanisms and theory building in evaluation. *American Journal of Evaluation*, 31(3), 363–381.
- Bardach, E. (2006). Policy Dynamics. In M. Moran, M. Rein, & R. E. Goodin (Eds.), *The Oxford handbook of public policy* (pp. 336–366). Oxford – New York: Oxford University Press.
- Behavioural Insights Team. (2015). Update report 2013–2015. London.
- Bemelmans-Videc, M.-L. (2007). Introduction: policy instruments choice and evaluation. In M.-L. Bemelmans-Videc, R. Rist, & E. Vedung (Eds.), *Carrots, Sticks & Sermons. Policy Instruments and Their Evaluation* (pp. viii–xxvi). New Brunswick: Transaction Publishers.
- Binnekamp, R., van Gunsteren, L., & van Loon, P.-P. (2006). *Open design, a stakeholder-oriented approach in architecture, urban planning, and project management*. Delft: IOS Press.
- Bryson, J. M. (2011). *Strategic planning for public and nonprofit organizations: a guide to strengthening and sustaining organizational achievement*. San Francisco: Jossey-Bass.
- Buse, K., Mays, N., & Walt, G. (2012). *Making health policy*. Berkshire: Open University Press.
- Chen, H. T. (2005). Theory-driven evaluation. In S. Mathison (Ed.), *Encyclopedia of evaluation* (pp. 415–419). Thousand Oaks, CA – London: Sage Publications.
- Colebatch, H. K. & Hope R. (2018). Introduction. In H. K. Colebatch & R. Hope (eds), *Handbook on Policy, Process, and Governing* (pp. 131–168). Cheltenham, UK: Edward Elgar Publishing.
- Colebatch, H. K. (2018). Design as a window on the policy process. In H. K. Colebatch & R. Hope (eds.), *Handbook on Policy, Process, and Governing* (pp. 131–168). Cheltenham, UK: Edward Elgar Publishing.
- Coryn, C., Noakes, L., Westine, C., & Schroter, D. (2011). A systematic review of theory-driven evaluation practice from 1990 to 2009. *American Journal of Evaluation*, 32(2), 199–226.
- Datta, S., & Mullainathan, S. (2012). Behavioral design: a new approach to development policy. *CGD Policy Paper*, 16 (November), 1–33.
- Donaldson, S. I. (2007). *Program theory-driven evaluation science: strategies and applications*. New York: Lawrence Erlbaum.
- Étienne, J. (2010) La conformation des gouvernes. Une revue de la littérature théorique. *Revue française de science politique*, 60(3), 493–517.
- Evans, J. (2017). *Thinking and reasoning. A very short introduction*. Oxford: Oxford University Press.
- Fischer, F., Miller, G., & Sidney, M. (Eds.). (2007). *Handbook of public policy analysis: theory, politics and methods*. London, New York: CRC Press.
- Freeman, E. (1984). *Strategic management: a stakeholder approach*. Boston: Pitman.
- Gomes, R. C. (2004). Who are the relevant stakeholders to the local government context? Empirical evidences on environmental influences in the decision-making process of English local authorities. *Brazilian Administration Review*, 1(1), 34–52.
- Gooch, G., & Stalnacke, P. (Eds). (2010). *Science, policy and stakeholders in water Management. An integrated approach to river basin management*. London, Washington D.C.: Earthscan.
- Hill, M., & Hupe, P. (2014). *Implementing public policy: an introduction to the study of operational governance*. Thousand Oaks: SAGE Publications.
- Howlett, M. (2011). *Designing public policies: principles and instruments*. London – New York: Routledge.
- Jolls, C., Sunstein, C. R., & Thaler, R. H. (2000). A behavioral approach to law and economics. In C. R. Sunstein (Ed.), *Behavioral law and economics* (pp. 13–58). Cambridge: Cambridge University Press.
- Jones, R., Pykett, J., & Whitehead, M. (2013). *Changing behaviours: on the rise of the psychological state*. Cheltenham: Edward Elgar.
- Jordan K. C. et al. (2008). Evaluation of the Gold Medal Schools Program. *Journal of the American Dietetic Association*, 108(11), 1916–1920.

- Kipping, R., *et al.* (2014). Effect of intervention aimed at increasing physical activity, reducing sedentary behaviour, and increasing fruit and vegetable consumption in children: Active for Life Year 5 (AFLY5) school based cluster randomised controlled trial. *BMJ* 2014; 348:g3256.
- Lasswell, H. D. (1951). The policy orientation. In D. Lerner & H. Lasswell, D. (Eds.), *The policy sciences: recent developments in scope and method*. Stanford: Stanford University Press.
- Laurence, S., Peterken R., Burns, C. (2007). Fresh kids: the efficacy of a health promoting schools approach to increasing consumption of fruit and water in Australia. *Health Promotion International*, 22(3), 218–226.
- Llargues E. *et al.* (2011). Assessment of a school-based intervention in eating habits and physical activity in school children: the AVall study. *Journal Epidemiol Community Health*, 65(10): 896–901.
- Martin, B., & Hanington, B. (2012). *Universal methods of design: 100 ways to research complex problems, develop innovative ideas, and design effective solutions*. Beverly, MA: Rockport Publishers.
- Michie, S., & West, R. (2013). Behaviour change theory and evidence: a presentation to Government. *Health Psychology Review*, 7(1), 1–22.
- Michie, S., van Stralen, M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Science*, 6(42), 1–11.
- Michie, S., West, R., Campbell, R., Brown, J., & Gainforth, H. (2014). *ABC of behaviour change theories. An essential resource for researchers, policy makers and practitioners*. London: Silverback Publishing.
- Navarrete, D. M., & Modvar, C. (2007). Stakeholder. In M. Bevir (Ed.), *Encyclopedia of governance* (pp. 917–921). Thousand Oaks: Sage.
- OECD. (2017). *Behavioural insights and public policy. Lessons from around the world*. Paris: OECD Publishing House.
- Ostrom, E. (2005). *Understanding institutional diversity*. Princeton, N.J.; Woodstock: Princeton University Press.
- Ostrom, E. (2010). Beyond markets and states: polycentric governance of complex economic systems. *American Economic Review*, 100(3), pp. 1–33.
- Patton, M. Q. (2008). *Utilization-focused evaluation* (3rd ed.). Los Angeles – London: Sage Publications.
- Pawson, R. (2013). *The science of evaluation: A Realist Manifesto*. London: SAGE Publications Ltd.
- Peters, B. G. (2018). *Policy problems and policy design*. Cheltenham, UK – Northampton MA USA: Edward Elgar Publishing.
- Plachta-Danielzik S. *et al.* (2011). Eight-Year Follow-Up of School-Based Intervention on Childhood Overweight – the Kiel Obesity Prevention Study, *Obesity Facts*, 4(1), 35–43.
- Pressman, J., & Wildavsky, A. (1973). *Implementation: how great expectations in Washington are dashed in Oakland; Or, why it's amazing that federal programs work at all, this being a saga of the economic development administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes*. Berkeley, LA: University of California Press.
- Schäfer Elinder L. *et al.* (2012). A participatory and capacity-building approach to healthy eating and physical activity – SCIP-school: a 2-year controlled trial, *International Journal of Behavioral Nutrition and Physical Activity*, 9(145).
- Shafir, E. (2013a). Introduction. In E. Shafir (Ed.), *The behavioral foundations of public policy* (pp. 1–9). Princeton: Princeton University Press.
- Shafir, E. (Ed.). (2013b). *The behavioral foundations of public policy*. Princeton: Princeton University Press.
- Soman, D. (2017). *The last mile. Creating social and economic value from behavioral insights*. Toronto: University of Toronto Press.
- Stanford University (2016) *Behaviorally informed design for energy conservation; energy innovation and emerging technologies program*. Stanford: Stanford Change Labs
- Stickdorn, M., & Schneider, J. (2012). *This is service design thinking: basics, tools, cases*. Hoboken, NJ: Wiley.
- Weaver, K. (2015). Getting people to behave: research lessons for policy makers. *Public Administration Review*, 75(6), 806–816.
- World Bank. (2015). *Mind, society, and behavior*. Washington D.C.: World Bank Group.
- Yin, R.K. (2014). *Case study research design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Zawicki, M. (2016). *Koncepcje teoretyczne implementacji polityki publicznej*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.

Karol Muszyński

The emergence of unintended fit and the theory of gradual institutional change: a case study of Polish employment regulations and post-crisis public policies¹

Abstract

Objectives: This paper aims to theorise that unintended fit may emerge not only when institutions are creatively adapted by actors within the boundaries of formal rules, but also when formal rules are violated or circumvented.

Research design & methods: To that end, this paper links unintended fit more closely with the theory of gradual institutional change coming from historical institutionalism. Theoretical developments are illustrated by a case study on Polish employment regulations and post-crisis public policies.

Findings: This paper finds that unintended fit may emerge in two situations: when rules are creatively adapted by actors who use them (“conversion-type” unintended fit) or when they are both adapted and circumvented or violated (“drift-conversion-type” unintended fit). The requirements for the formation of both types of unintended fit are discussed.

Implications/ Recommendations: This paper suggests that violations and circumventions should be treated as methods of engaging institutions and that the concept of ambiguity in historical institutionalism should be revised in respect to drift.

Contribution / Value Added: This approach opens new possibilities for analysing the formation of institutional complementarities.

Article Classification: Research article.

Keywords: public policy, institutional change, unintended fit, complementarity, historical institutionalism, drift, conversion.

JEL classification: K4, O1, O2, Z1.

Introduction

In theory, policy makers may design effective institutional framework top-down. This possibility is, however, substantially limited, due to path dependency mechanisms, the impossibility of anticipating how various elements will interact

in case of change, and the fact that policy makers’ tools are mostly limited to elaboration of formal rules. More often efficient institutional systems are worked out gradually by actors finding better ways of operating independently from governments’ intentions. Unintended fit is a description of

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a situation in which effective functioning of a particular institutional framework is not a result of conscious policy design. Aoki (1997) was the first to use this notion, in a paper where he argued against the view that the foundations for Japanese post-war economic success were intentionally designed by policy makers. The term was quickly adapted by new economic sociologists, as it fitted very well the basic assumptions in which the paradigm conceptualised institutional transformation and design (Mica, 2017). Unintended fit was used as a broad description of the outcome of the developments relieving tensions and producing complementarities between mismatched elements of an institutional framework, which, however, caused the dynamics behind its emergence to be overlooked.

This paper argues that in order to investigate the formation of unintended fit, one should link it more closely with the theory of gradual institutional change. By doing so, it is possible to distinguish two different situations in which fit may emerge. The distinction is made on the basis of the mode of institutional transformation leading to the formation of the given fit, but this paper will argue that it is more deeply rooted in possibilities that institutional framework presents to the actors. Firstly, it is possible that fit is created when actors find more efficient ways of using formal institutional framework. In this case, institutions are adjusted through the process of conversion, as actors bend flexible rules to their needs within the boundaries designated by formal framework (“conversion-type” unintended fit). Secondly, fit may emerge when some elements of institutional framework are directly violated or circumvented by actors, who find another substitute institution that they start to utilise in place of the evaded one. Here, the premise for the formation of the fit are simultaneous processes of conversion and drift: some elements of institutional framework are re-interpreted, whereas others are violated or circumvented (“drift-conversion-type” fit). This situation may take place only when actors can bypass regulations. It creates a somewhat paradoxical situation where the very violations and circumventions of formal

rules may contribute to alleviating mismatches and a more effective functioning of institutional framework. I will argue that some elements of this understanding of unintended fit can be reconstructed from the existing state of research, but have not been expressed consistently. This drift-conversion-type unintended fit will also be a focal point of the case study of Polish employment regulations, where drift and conversion resolved tensions between policy that increased minimum wage and other policy that pushed for severe cost reductions in public sector employment. Conversion and drift of different elements of institutional framework mitigated mismatches between the policies and made them mutually complementary.

By stressing the gradual character of most institutional changes and the role ambiguity plays, this paper positions itself in a tradition of historical institutionalism that sees institutions as both legacies of particular policies and objects of continuous contestation by the actors (Thelen & Conran, 2016). Institutions “consist of normatively founded and collectively enforced rights and obligations [that] may be [...] regarded as regimes for specific sets of actors and activities, for which they represent both constraints and opportunities. As actors almost always have a degree of choice as to whether or not to make use of a given institution or comply with its rules, institutions can only condition but cannot determine action” (Streeck, 2004, p. 103). Institutions offer possibilities of solving actors’ problems in a generalised fashion and there is always some freedom in how they are used. This influences how institutions transform.

This paper begins with an introductory section that explains the notion of unintended fit and its relationship to the concept of complementarity, and subsequently reviews current approaches to formation of unintended fit that see it as a result of adaptations remaining within the boundaries of formal rules. It then advances a theory on unintended fit by arguing that fit can also emerge when elements of institutional design are subject to both conversion and drift. Next, this paper presents a case study on how the interaction between drift

and conversion in Polish employment regulations mitigated contradictory policies and produced drift-conversion-type unintended fit. That is then followed by a discussion section, where it is argued that the emergence of unintended fit should be analysed in relation to the ambiguity of institutional framework, understood in a broader sense than current interpretations in historical institutionalism. Ambiguity should not only be referred to possibilities of creative interpretation and application of formal rules, but should be understood as a general possibility of taking strategic action with reference to those rules, which includes circumvention and violation as well.

Unintended fit and complementarity

Unintended fit was developed as a concept critical towards ideas that effective institutional orders must be designed top-down. Aoki (1997) used this term to criticise the rational design interpretation of post-war Japan's economic success. He showed that the framework behind the Japanese economic miracle emerged with little conscious governmental intervention, as a result of simultaneous institutional adjustment that created complementarities between *zaibatsu* ownership structures, financial institutions, workplace culture, and employment philosophy. It involved changes in market practices, political power-games and bureaucratic conversions focused on dealing with administrative problems. The notion was subsequently adopted by new economic sociology to describe developments resulting from gradual adaptations that resolved tensions in interactions between inconsistent elements of institutional design. At the same time, it became helpful in departing from functionalist approaches arguing that the existence of a particular solution somehow triggers the emergence or adoption of others as well (Mica, 2017; Streeck, 2009). New economic sociologists used unintended fit to interpret various developments in what were referred to as coordinated market economies: most often in Japan and Germany, and particularly

in the case of the German system of codetermination (e.g. Jackson, 2001; Jackson, 2005; Streeck, 2009; Streeck & Yamamura, 2001; Yamamura & Streeck, 2003).

Unintended fit in general refers to a situation in which not fully consistent elements of institutional design are adjusted to each other by actors who find more efficient ways of using them, and altered so that they become complementary (Streeck, 2004). Because institutions regulate behaviour in a general fashion (are at least partially ambiguous), more efficient or socially acceptable ways of using institutional framework may appear. "Complementarity" describes here a situation in which the presence of one institution increases the efficiency of another (Hall & Soskice, 2001; Höpner, 2005). Historical institutionalism assumes that institutions must fit each other to a certain degree to constitute an effective institutional framework (that does not mean this matching is optimal; Aoki, 2001; Thelen, 2010). Institutional complementarity may be intentionally designed ("intended", "by design", "ex ante" complementarity; Boyer, 2005; Trubek & Trubek, 2005). For instance, policy makers in liberal economies may deregulate labour law, thus enabling firms to more quickly react to market changes by hiring and firing workers, which is necessary for the functioning of the liberal capital market. Complementarity may also be unintended ("unplanned" or "ex post" complementarity; Streeck & Yamamura, 2001; Trubek & Trubek, 2005), in the sense that it may emerge as an unintended consequence, seen from the perspective of the government. Public policies are often fragmented and various policy fields address different goals, and pursuing them may sometimes unintentionally either hinder or foster the emergence of complementarities. Moreover, it is also possible that policy makers plan or assume that an institution will be creatively used by actors (even that formal rules will be circumvented!), but do not control the precise way in which that is done. Unintended fit refers to this type of unintentionally created complementarity as well.

What we know so far about the emergence of unintended fit: “conversion-type” fit

How does it happen that two co-existing institutions begin to complement each other? Historical institutionalists have used various concepts of institutional change to explain the emergence of institutional complementarities, such as: “hybridisation”, defined as either separation of forms and practices (e.g. Aguilera & Jackson, 2002) or as mixing components taken from different models (Callaghan, 2010); “recombination”, understood as blurring of boundaries of institutions (Stark, 1996), “co-evolution”, described as adjustment processes of trial and error between institutions (Boyer, 2005; Aoki, 1997); “translation”, depicted as the process of rearrangement of principles and practices; and “bricolage”, the blending new practices into existing institutional framework (Campbell, 2004).

I suggest starting from the adaptation by Mahoney and Thelen (2010) of the theory of gradual institutional change. Those two authors, modifying the approach of Streeck and Thelen (2005), distinguished four types of change: displacement, layering, conversion and drift. Displacement is a mode of change where new rules replace the previous ones, which cease to exist. Layering involves amendments, revisions, and small adjustments that supplement the old rules but do not remove them, resulting in changes of incentives or a hybridised logic of action. Both drift and conversion are “hidden” methods of institutional change as they involve changing an institution without altering formal rules. Streeck and Thelen argued that differences between practice (actual functioning, enforcement, and implementation) and formal framework are vital for understanding institutional transformations. Conversion involves a change in how an institution functions or in the goals that it serves, but within the existing formal rules, without any change of the legal form (Mahoney & Thelen, 2010). This may happen through “redirection, reinterpretation, or re-

appropriation” (Hacker et al., 2015, p. 185). Drift is a failure to update policies or institutional rules in circumstances of substantial external change, resulting in “slippage in institutional practice” (Streeck & Thelen, 2005, p. 31). In spite of a lack of formal change, the institution subject to drift loses its ability to structure targeted behaviour and becomes increasingly neglected by actors who use it. Drift is a reminder that institutions need to be reinvented and adjusted to perform their functions.

In the sense of the theory of gradual institutional change, unintended fit has so far been mainly explained as a result of conversion-type change of practical application and implementation of institutions that remain within the sphere of possible actions from the formal point of view, with no substantial change in formal rules. As actors engage in “ongoing efforts [...] to try out and establish new interpretations of pertinent norms that better fit their interests” (Streeck, 2004, p. 103), complementarities are produced as unintended consequences resulting from “the mutual adjustment of institutions as an ongoing process needed to reduce ambiguities, debug frictions, and establish satisfactory performance” (Jackson, 2005, p. 235). In this perspective, unintended fit is created when institutions are subject to conversion in such a manner that they become complementary to each other. Aoki stressed that we can speak of unintended fit when “institutions modified their functions considerably from the original intention of the government” (Aoki, 1997, p. 235), whereas Jackson (2005) argued that unintended fit is a result of interactions between two or more institutions that, independently of the intervention of governments, influence the consequences they produce and, as a result, the way they function in practice.

I suggest calling a fit that emerges as a result of actors adapting an institution within the boundaries of formal rules a “conversion-type fit”. It is present and well documented in the literature. Conversion-type adaptations are the focal point of Aoki’s 1997 paper in which he describes multiple conversion-type changes in the public sector (administrative-bureaucratic practices) that

complemented conversion-like transformations in the private sector (the development of market practices and customs such as lifetime employment, long-term relationships between banks and groups of firms and between firms and their suppliers). Both German and Japanese institutional frameworks were interpreted in a similar way, as products of conversion-like adaptations (Aoki et al., 2007; Jackson, 2001; Jackson, 2005; Streeck, 2009; Streeck & Yamamura, 2001; Yamamura & Streeck, 2003). This type of unintended fit is common, because actors always try to find more efficient ways to use existing tools (Sheingate, 2010; Streeck, 2004). The potential for conversion is determined by the range of interpretation of formal rules available to actors, courts, and administration: ambiguity of formal rules enables broader adaptations. This fact also presents policy makers with an opportunity to deliberately broaden scope of implementation or application of a particular institution to stimulate and facilitate processes of adoption and adjustment. This may, for instance, take the form of delegation of particular interpretation to independent or semi-independent bodies, e.g. bureaucratic agencies or courts, which are left with the possibility of introducing a new interpretation (Hacker et al., 2013).

“Drift-conversion-type” unintended fit

I argue that actors do not necessarily have to limit themselves to adaptations that stay within the boundaries designated by formal rules. Fit may emerge even when rules are violated and circumvented. It depends on how formal rules structure behaviour. Institutions need to be able to cope with the problems they intend to solve or facilitate (co-ordination, protection, social needs, etc). If there is a change in factors important for an institution’s performance (e.g. fragmentation of families, in the case of social policy; de-standardisation of tasks in the economy, in the case of labour law), it often needs to be adjusted to still serve its purpose (e.g. a redefinition of family in social policy or core notions in labour law). If that does not happen in a formal way (for

example because barriers to reform are too high) or in a conversion-type change within existing rules (for example because, for some reasons, actors find it difficult to adjust formal rules), formal rules may increasingly be violated or circumvented. At the same time, actors may try to cope with institutional maladjustment by adapting (converting) some other institution to their needs. I will define this situation as “drift-conversion-type” unintended fit. We can speak of it when the fact that an institution is subject to drift actually helps to alleviate mismatches or resolve institutional frictions, brings some positive effects from a certain standpoint, and/or contributes to the production of complementarities.

Some elements of drift-conversion-type unintended fit may be reconstructed from the existing literature; however, they have not been expressed in a consistent manner. Aoki’s (1997) fundamental paper on the unintended fit did not use the theory of gradual institutional change, but that paper does focus mostly on conversion-type adaptations within formal rules. However, on close examination, one may find some developments resulting from drift-conversion-type interaction, which have not, however, been sufficiently theorised. Aoki shows that in Japan during Second World War professional engineers were often conscripted into the army. That undermined Taylorist hierarchical/specialisation type of dealing with the problems in firms by experts (=drift). Underqualified workers had to complement for temporary labour shortages, and problems were increasingly solved by collective team effort, which became the new standard (=conversion). This type of work organisation became an excellent base for the development of flexible, lean-manufacturing production which became Japan’s comparative advantage. We can see the conditions for drift-conversion dynamics. One institution is either maladjusted or not properly enforced, whereas another institution has formal rules ambiguous enough to be converted so that it can serve as a form of substitute for the former.

The possibility that circumvention or violation of formal rules can contribute to alleviating

mismatches and generating complementarities has been under-represented in historical institutionalism, due to several reasons. Firstly, since historical institutionalism has been developed mostly in Western Europe and US, it has focused mostly on highly developed countries, where the problem of general compliance with the regulations seems to be less pervasive than among late achievers such as, for example, Central and Eastern European countries. Mainstream literature generally assumes that, in comparison to late achievers, Western European and American formal institutional frameworks are more efficient, sanctions for breach are more effectively enforced, and political systems are more responsive towards societal developments. As a result, it seems less common that actions that violate or circumvent rules become so widespread that they become the source of alleviation of mismatches and production of complementarities. Conversion-type adaptations within existing formal rules are, however, more widespread. Secondly, historical institutionalist theory of gradual institutional change is primarily focused on the endogenous mechanisms of institutional change, where the triggering factor is either the internal dynamics of institution or the behaviour generated by it (Beckert, 2010; Streeck & Thelen, 2005). This approach is perfectly suitable for analysis of three remaining forms of institutional change, because the social phenomenon tackled by an institution remains “inside” formal rules that construct an institution: displacement and layering involve changes of formal rules, whereas conversion is a change in how rules are understood and applied. However, it creates problems with regard to drift, as drift only tells us that institution is being increasingly neglected, leaving open how the actual problem is approached after the institution fails to adapt. That leads us to the third, and probably most important, reason for under-representation of drift-conversion-type unintended fit, which is the understanding of ambiguity in historical institutionalism. So far, institutional ambiguity in historical institutionalism has been understood

as a possibility of creatively adapting institutions to fit actors’ needs within the boundaries of formal rules. It effectively means that “uses” of ambiguity have been narrowed to only conversion-type adaptations (Hacker, Pierson & Thelen 2015; Jackson, 2005; Mahoney & Thelen, 2010; Rocco & Thurston, 2014). Jackson (2005) even explicitly links ambiguity exclusively with conversion-type institutional adaptations. Furthermore, drift is even sometimes presented as being caused by lack of ambiguity, due to inability of actors to adapt institution to their needs. Rocco and Thurston (2014, p. 41) note that “highly ambiguous institutional rules elicit change through layering and conversion, while less ambiguous institutions elicit change through drift”.

This assumes that bypassing formal regulation is not a method of engaging institutions, but rather an action that transcends them. However, circumventions and violations characteristic for drift are also ways of approaching institutions, similar to actions enforcing specific meaning of formal rules to “bend” institutions that are characteristic for conversion. Ambiguity should therefore be understood as an opportunity that an institution presents to actors in how they can approach, interpret and use it in a creative way, including an opportunity to circumvent and violate formal rules. We will get back to this problem in the discussion. Before doing that, I will present one more precise example of how drift-conversion-type unintended fit can emerge in the example of Polish employment regulations, where contradictions between public policies were worked out thanks to drift and conversion-type developments.

Mismatched public policies introduced after the crisis in Poland

The following sections introduce a case study that presents a formation of drift-conversion-type unintended fit between different public policies implemented during the economic crisis and developments on the labour market in Poland.

It depicts the dynamics behind the emergence of this fit with the use of concepts coming from the theory of gradual institutional change.

During the economic turmoil caused by the global financial crisis, policy makers in Poland introduced two important policies affecting labour market. Firstly, the government² opted for substantial minimum wage increases. Between 2001 and 2007 the minimum wage was raised by 23%, while in the period between 2007 and 2013 it was increased by 70%. The minimum wage amounted to 35% of the average wage in 2006, and almost to 45% in 2014. Secondly, between 2005 and 2015 subsequent governments (formed by both the right-wing Law and Justice party from 2005 to 2007 and the liberal conservative Civic Platform from 2007 to 2015) conducted an austerity policy with regard to employment in public sector. Within a new paradigm commonly known as “cheap state”, public agencies were expected to lower overall costs by reducing excessive employment, introducing activity-based budgeting, focusing on core goals, and, possibly, outsourcing tasks outside of that realm (Duda, 2016). One of the elements of the cheap state paradigm was the liquidation of what were known as “supportive units” (*gospodarstwa pomocnicze*), which provided auxiliary services (such as cleaning, security, minor administrative services) to public agencies. Such services were to be acquired on the market via public tenders (Dylong & Klatka, 2014).

The policies of minimum wage increases and cheap state seem somewhat contradictory. The former intended to increase wages of low-income workers, while the latter focused on cost-reducing activities with a substantial emphasis on employment in auxiliary services in general provided by low-income workers. In other words, the cheap state paradigm aimed to save money on

² The minimum wage level is established by social partners sitting on the Council of Social Dialogue (previously known as the Tripartite Commission). However, if employers and employees do not reach an agreement (which is usually the case), the government may make its own decision.

the same workers whose wages were increased by minimum wage rises. How were frictions between those two policies resolved? I argue that negative, cost-increasing effects of minimum wage policy were buffered by drift and conversion-type adaptations made by employers which at the same time contributed to the effectiveness of the cheap state paradigm. Interaction between drift of labour law and conversion of civil-law contracts in Poland enabled employers to circumvent labour law and use civil-law contracts as substitutes for more expensive labour-code contracts. This in result enabled administrative bodies to implement the cheap state paradigm that pushed for reductions of employment costs in public sector in the face of the concurrent policy that increased the minimum wage. Public sector subcontractors could meet public agencies’ cost expectations by using non-standard forms of contracts that were outside of the remit of the minimum wage.

Impact of public policies and institutional transformations

In order to understand the dynamics behind the emergence of this fit, one must first analyse the way in which policies of minimum wage growth and cheap state were implemented. In both cases, the government intended that the practice regarding particular elements of institutional design would transform as a result of policy changes. Both policies in fact stimulated conversions that were followed by drift. Minimum wage growth policy was started by the liberal conservative Civic Platform party. The policy was intended to address various problems, including: compensating for years of slow growth of the minimum wage; complementing stagnating exports with increased internal consumption (NBP, 2009); increasing cash inflows into the social security system; improving the welfare of low-wage workers; and reducing income inequalities (OECD, 2015). The government indirectly switched the role of the minimum wage, with highly limited power to control the outcome. The cheap state paradigm policy was also conducted

in a fashion that fostered conversion. This policy was started by the right-wing Law and Justice party and was continued by the Civic Platform. It primarily intended to promote effectiveness, institutional innovation and financial transparency that would limit the risk of corruption (Sześciło, 2014). The actual implementation of the paradigm was delegated by the government to public agencies, which in theory were relatively free to choose what path they would follow to reduce costs. Delegation, as shown earlier, may provoke conversion. Both conversion-like policies stimulated drift of labour law and conversion of civil-law contracts as well.

Minimum wage growth policy changed the role of the minimum wage: it improved the wages of lower-income workers (OECD, 2015) and contributed to the general wage pressure (Tyrowicz, 2015), but also raised labour costs of low-wage workers. Conversion of the role of minimum wage was concurrent with the drift of labour law, as employers tried to avoid minimum wage increases by circumventing labour law. Fast and substantial increases of minimum wage may lead to growth of informality on the labour market (see a review in Neumark & Wascher, 2006). Some employers resorted to simple labour law violations to make up for increased labour costs. Around 50% of the enterprises inspected by the Labour Inspectorate were violating some of some provisions of the Labour Code (the Labour Inspectorate, 2005–2014), with economically oriented violations being particularly common (Muszyński, 2018). The percentage of minimum wage violations, i.e. the percentage of employees who received less than minimum wage, increased by around a half (Goraus & Lewandowski, 2016). Violations were made possible by weak surveillance mechanisms, as inspections by the Labour Inspectorate were rare and sanctions for labour law violations were low and subject to stagnation (Muszyński, 2016).

However, most employers made use of ambiguous regulations, and tried to circumvent labour law by way of the use of civil law to avoid minimum wage increases, as civil law contacts were not covered by minimum wage regulations. In order

to understand how that happened it is important to note that under Polish law there are two ways of structuring employment contracts. It is possible to choose between labour-code contracts governed by labour law and civil-law contracts governed by civil law. These two methods differ significantly. Civil-law contracts provide lower employment protection, are easier to conclude and resolve, are taxed significantly lower, and are, in principle, outside of the remit of minimum wage regulations.³ As a result, they make it possible to achieve greater flexibility in terms of structuring employment relationships, and to reduce employment costs, because of much lower taxation. The difference between overall costs for the employer and net remuneration received by employee can be as much as 40% for labour-code contracts and can be as low as 9% for civil-law contracts (Arak, 2016). At the same time, civil-law contracts could in fact be used as substitutes for labour-code contracts for two reasons. First, labour law surveillance was very weak and how contracts were utilised was not properly monitored. Secondly, from the formal point of view the boundary between labour code and civil-law contracts was highly ambiguous. The notion of “supervision” was used to distinguish situations where labour-code contracts should be used from situations where civil-law contracts are permitted, but it has become subject to divergent interpretations created in the jurisprudence and doctrine which have not been clarified by legislative intervention.⁴ The boundary between labour-code and civil-law employment became blurred (Pisarczyk, 2015), thus allowing employers to use less expensive and more flexible civil-law

³ Since January 2017 one form of civil-law contract (*umowa zlecenie*) has been subject to an hourly minimum rate.

⁴ The basic legal notions of the Labour Code were created more than 40 years ago, in the era of a socialist economy where the State basically provided full employment and secured a particular level of working conditions and proved to be path dependent. Moreover, there are plenty of rulings from the 1980s and 1990s that are still referred to in case law.

contracts in creative ways to structure rather typical employment relationships with them (which should also be understood as conversion).

Kamińska and Lewandowski (2015) calculated that between 2002 and 2013 more than 100,000 workers with labour-code contracts were fired each year due to minimum wage increases that made their employment less profitable. Most of those workers were re-hired on “converted” civil-law contracts that were not governed by the minimum wage. Between 2007 and 2013, when minimum wage increases were most radical, the number of employees working on civil-law contracts rose from around 0.5–0.6 million to 1–1.1 million (Muszyński, 2016). At the same time, the percentage of civil law contracts found to be concluded in breach of labour law increased dramatically, from 8% in 2008 to more than 20% in 2014 (the Labour Inspectorate, 2009–2014). Here we can see the self-reinforcing dynamics of drift and conversion. “Converted” civil-law contracts provided an attractive alternative to labour-code contracts that became circumvented, thereby contributing to the drift of standard contracts, understood as the diminishing importance in terms of structuring employment relationships (Muszyński, 2016; GUS, 2016).

Concurrently to the change in use of labour and civil law by enterprises, the cheap state paradigm played a role in the process. Officials had to adapt to new requirements and they did so by taking a very cost-reduction focused approach to public tender procedures. Such procedures have become dominated by what is known as the “lowest price dictate”, i.e. choosing the cheapest possible offers for auxiliary services and new employees (Duda, 2016). Numerous other reasons fostered this type of conversion. First, cost assessment was easiest for public officials, as the cost element is self-explanatory and somewhat “objective”, whereas using other criteria would require more subtle analysis, and would also be vulnerable to corruption allegations (Schimanek & Kunysz-Syrczyk, 2014). Secondly, the introduction of the cheap state paradigm co-incided with

Poland’s accession to the EU (2004), which resulted in very rapid growth of the public procurement market, due to an influx of European funds, from PLN 48 billion in 2004 (5.3% of Polish GDP) to PLN 103 billion in 2007 (8.8% of Polish GDP) and PLN 167 billion in 2010 (11.8% of GDP). Officials were overwhelmed by proceedings and were incentivised to take the easiest route. Moreover, activity-oriented rules of financing and monitoring incentivised public agencies to inflate the number of tasks completed, and particularly promoted tasks that brought savings. For instance, outsourcing of cleaning services brought costs down but also enabled officials to easily perform tasks such as carrying out a tender, choosing an offer and signing a contract. Conversely, having a long-term employee performing cleaning services would not entail completing any tasks, it is not reportable, implies that the agency does nothing on this level, and, moreover, this idleness does not bring any savings. The result was cost-reduction focused conversion of public agencies’ practices. The percentage of public tenders in which the sole criterion was price skyrocketed, from 29% in 2004 to 85–90% between 2007 and 2013, while the rate of tenders in which cheapest offer was chosen increased by some 10–15 pp, from approximately 80% to 95% (the Public Procurement Agency, 2001–2015). This was accompanied by a very relaxed approach with regard to employment standards among public sector subcontractors. As outsourcing concerned mostly labour-intensive services, it boosted labour-cost competitiveness among public sector subcontractors. It led to a situation where cleaning and security services, which were most commonly outsourced, often stipulated hourly wages substantially below the hourly minimum wage⁵. While in 2015, the hourly minimum wage was around PLN 8 net, public tenders assumed as little as PLN 3.4, averaging

⁵ There is no hourly minimum wage for labour code contracts under Polish law but it can be calculated by dividing the monthly minimum wage by average number of working hours in a month. Hourly minimum wage for contracts for mandate was introduced in 2017.

PLN 4–5, for an hour of outsourced work (Duda 2016). Public sector subcontractors reacted to stringent public sector cost requirements with adaptations that intended to circumvent labour law and lower costs. If subcontractors acted in accordance with formal regulations, they would not be able to win the tenders. To meet public agencies' cost requirements, subcontractors engaged in multiple strategies that circumvented or violated regulations: minimum wage violations, other labour law violations, conversion of civil-law contracts, or concluding civil-law contracts directly in breach of labour law. In fact, the implementation of the cheap state paradigm was made possible by the fact that subcontractors concluded non-standard contracts with their staff. Public agencies were indirectly accepting the fact that their subcontractors were violating regulations and circumventing labour law by using of civil-law contracts that were outside of the scope of the minimum wage. Again, this drift-conversion interaction had self-reinforcing dynamics: the enterprises that functioned in accordance with the regulations (i.e. would hire workers on labour-code contracts and pay minimum wage) would not be able to win the bids, as in the overwhelming majority of cases public agencies used exclusively cost criterion to assess the offers received. The competition between public sector subcontractors therefore focused on finding non-standard solutions to lower costs, mainly revolving around circumventing labour law (thereby subjecting labour law to drift) and using civil-law contracts instead (thereby subjecting them to conversion).

Drift-conversion-type unintended fit between minimum wage growth and the cheap state paradigm

Minimum wage growth increased labour costs for low-wage work, which could have negatively impacted the effectiveness of the cheap state paradigm. Thanks to institutional adaptations made by the actors utilising drift-conversion dynamics, frictions were resolved and policies in fact were

adjusted to mutually complement each other. Minimum wage growth, by increasing labour costs of low-wage workers, incentivised and provoked strategies that focused on reducing labour costs of low-wage workers. Vague boundaries between labour-law and civil-law contracts, intertwined with a highly ineffective supervision system, allowed employers to circumvent labour law and use civil-law contracts and other non-standard solutions that lowered labour costs.

Institutional adaptations mutually complemented and reinforced each other. While the government increased the minimum wage, more and more workers were pushed outside of the scope of labour law protection due to drift-conversion dynamics. This substantially enhanced the effectiveness of the cheap state paradigm: stringent public sector expectations were met because public sector subcontractors could engage in extreme cost-reduction strategies. At the same time, the cheap state paradigm and drift-conversion dynamics allowed the government to substantially increase the minimum wage with no harm to employment outcomes, as dismissed workers found employment on converted or even illegally concluded civil-law contracts used as substitutes for labour-code contracts. Without drift-conversion dynamics, substantial growth of the minimum wage may have been halted due to the manifestation of negative employment outcomes, such as an increase in unemployment. In the case of Poland, the cheap state paradigm promoted stringent cost-reductions that at the same time created employment opportunities for workers dismissed as a result of minimum wage growth. Drift-conversion dynamics made two contradictory policies complementary.

Discussion and conclusions

Complex societies inherently consist of a multitude of interrelated and interacting elements that very often do not fit each other. Historical institutionalism has developed language to describe how these elements may be adjusted so that they contribute

to the effective functioning of an institutional framework. The emergence of unintended fit, as a summary description of developments leading to the working out of discrepancies and the producing of complementarities, has been characterised mainly as a result of adaptations taking place within the boundaries designated by formal rules. This paper intends to argue that the theory of unintended fit can benefit from linking it more closely with the theory of gradual institutional change, which stresses gaps between the formal meaning of institutions and their practice and enforcement as key factors behind the dynamics of change.

This allows us to see unintended fit not only as an effect of redirecting institutions in a way that is formally permitted, but also conceptualising it as a result of adaptations that involve circumvention or violation of formal rules. Drift-conversion-type unintended fit happens when one institution is subject to a drift and another institution is adjusted to serve a similar purpose that the first one no longer serves. This may make possible the reconciling of the tensions between mismatched elements of institutional design or policies and contribute to the production of complementarities. The emergence of this fit is best shown when self-perpetuating mechanisms are triggered: on the one hand, when new institution is adapted to actors' needs, the old one is being abandoned; at the same time, "rediscovery" of another institution in fact makes it less pressing for the abandoned institution to be adapted, because actors are presented with a viable alternative, and that again increases the drift, as governmental intervention in that case may be no longer needed.

In general, it should be noted that the emergence of both types of unintended fit is conditioned by the possibility that actors have to adapt elements of institutional framework to serve their needs. In other words, it is enabled by institutional ambiguity. Conversion-type fits are conditioned by "[formal] rules ambiguous enough to permit different (often starkly contrasting) interpretations" (Mahoney & Thelen, 2010, p. 21), i.e. the form

of legal provisions or specific relations between them are characterised by vagueness stemming from the openness of linguistic structures in which formal rules are communicated. If those rules can be understood in a different manner, there is a gap between strategic action and institutionalised expectation that can be filled with interpretation and application (Jackson, 2010) which may allow actors to adopt institutions so they can fit each other.

Drift-conversion-type unintended fits are conditioned by interaction of different types of ambiguities. Conversion, again, necessitates vague formal rules. But drift happens when an institution performs in an ambiguous manner, when it is no longer able to resolve actors' problems, and is accompanied by weak surveillance mechanisms. This allows actors to approach the formal rules in a different manner. Because "a gap opens up between rules and enforcement" (Mahoney & Thelen, 2010, p. 21), actors are "abdicating previous responsibilities" (Streeck & Thelen, 2005, p. 25), and changing their established way of action: they can strategically circumvent or violate regulations. This was the case with the Polish institutional system. Vague boundary between labour-law and civil-law employment, intertwined with maladjustment of labour law and very weak surveillance system allowed actors to "innovate" by circumventing labour law and using civil-law contracts as substitutes. Expectations were created on the basis of that, e.g. administrative bodies were assuming in their public tenders that subcontractors were violating labour law and using cheaper non-standard forms of contracts. Complementarities between contradictory public policies were produced thanks to both drift and conversion-type adaptations, made possible by institutional ambiguity.

A more precise conceptualisation of this type of unintended fit is beneficial for several reasons. Firstly, it enables us to consistently treat conversion and drift as forms of institutional adaptations, which may create complementarities and contribute to more efficient functioning of institutional change.

Secondly, it adds another layer to our understanding of the dynamics of institutional change. An

Table 1. Comparison of conversion- and drift-conversion-type unintended fit

	Conversion-type fit	Drift-conversion-type fit
Mechanism of complementarity production	Conversion(s)	Interaction between conversion(s) and drift(s)
Type of institutional ambiguity	Formal ambiguity (vague formal regulation)	Formal ambiguity + ambiguity of performance (weak surveillance, non-compliance, etc)
Actions contributing to production of fit	Creative adaptations, “redirection, reinterpretation, re-appropriation” (Hacker, Thelen & Pierson, 2015, p. 185)	Circumventions and violations of regulations, adaptations on the verge of regulations

Source: own elaboration.

idea that policy transformations do not necessarily rely on one type of change and that there may be “patterns of sequencing of mechanisms” in which one transformation (e.g. layering or conversion) leads to another (e.g. drift or displacement) is common in historical institutionalism (see literature in van der Heijden 2014, p. 13), but the theoretical implications were not stretched towards unintended fit. However, as shown in the case study, it is possible that drift results from a situation in which actors are dropping an institution in favour of another existing institution which is in that case subject to conversion and adjusted to serve similar (but not necessarily the same) purpose as the “abandoned” institution. Usually these three elements (external event, conversion, and drift) are interrelated, as external events pressure the conversion of the new institution and aggravate the drift of the previous one at the same time, which in a self-reinforcing fashion contributes to the conversion, and the latter may actually boost the drift, as it presents actors with potentially more beneficial alternative. As shown in the case study, hiring non-standard workers may consist of both conversion of non-standard employment (so that they could be substitutes for regular workers) and drift of standard employment (as it intends to circumvent it). Additionally, while actors try to bend an institution to their needs, they may also break it. Actors using non-standard employment in a “creative” fashion may end up simply violating some regulations.

Third, just as policy makers may intentionally make formal rules more flexible or ambiguous to facilitate and promote conversion-like adaptations, they may very well influence the development of drift. Policy makers may choose drift as a policy solution, i.e. accept that some institutions are systematically circumvented or violated (Callander & Krehbiel, 2014), for instance as means of welfare state retrenchment (Hacker, 2004; Starke, 2007), with blame avoidance being probably the most common cause for such strategies (Vis, 2016). This can lead to paradoxical consequences, as policy makers may intend that an institution will be subject to drift, but may in fact provoke conversion of some other element of institutional design, unintentionally contributing to the emergence of unintended fit. That may “lock-in” circumventions and violations of law as elements of a more broadly understood institutional framework (Streeck, 2004).

Lastly, drift-conversion type dynamics may help better understand the relationship between creative institutional adaptations and the issue of stability. Since historical institutionalism was focused on conversion type changes, it was argued that working out of complementarities can either “reinforce” or “weaken” the institutional network, i.e. increase or decrease its stability (Amable, 2016; Deeg & Jackson, 2007; Hall, 2016). Drift-conversion type unintended fit presents us with a different possibility: fit may be based upon interaction between a “weakening” of some elements of an institutional network (drift) and a “sharpening” of another (conversion). This

allows us to understand the stability of some continuous violations and circumventions of formal rules, as they may contribute to debugging frictions between mismatched elements and to the emergence of complementarities. Finally, drift-conversion dynamics makes it possible to better integrate some problems within a historical institutionalist framework, such as those of Central European economies, in which massive non-compliance with the regulations did not disturb notable economic development.

References

- Aguilera, R., & Jackson, G. (2002). Hybridization and heterogeneity across national models of corporate governance. *Economic Sociology*, 3(2), 17–25.
- Amable, B. (2016). Institutional complementarities in the dynamic comparative analysis of capitalism. *Journal of Institutional Economics*, 12(1), 79–103. <https://doi.org/10.1017/S1744137415000211>
- Aoki, M. (1997). Unintended fit: organizational evolution and government design of institutions in Japan. In M. Aoki et al. (Eds.), *The role of government in East Asian economic development: comparative institutional analysis* (pp. 233–254). New York: Clarendon Press.
- Aoki, M. (2001). *Toward a comparative institutional analysis*. Cambridge, MA: MIT Press.
- Aoki, M., Jackson, G., & Miyajima, H. (Eds.). (2007). *Corporate governance in Japan: Institutional change and organizational diversity*. New York: Oxford University Press.
- Arak, P. (2016) *Jak naprawić klin podatkowy w Polsce*. Warsaw: Polityka Insight.
- Beckert, J. (2010). How do fields change? The interrelations of institutions, networks, and cognition in the dynamics of markets. *Organization Studies*, 31(5), 605–627. <https://doi.org/10.1177/0170840610372184>
- Boyer, R. (2005). Coherence, diversity, and the evolution of capitalisms: The institutional complementarity hypothesis. *Evolutionary and Institutional Economics Review*, 2(1), 43–80.
- Callaghan, H. (2010). Beyond methodological nationalism: how multilevel governance affects the clash of capitalisms. *Journal of European Public Policy*, 17(4), 564–580. <https://doi.org/10.1080/13501761003673351>
- Callander, S., & Krehbiel, K. (2014). Gridlock and delegation in a changing world. *American Journal of Political Science*, 58(4), 819–834. <https://doi.org/10.1111/ajps.12105>
- Campbell, J. (2004). *Institutional change and globalization*. Princeton: Princeton University Press.
- Deeg, R., & Jackson, G. (2007). Towards a more dynamic theory of capitalist variety. *Socio-Economic Review*, 5(1), 149–179. <https://doi.org/10.1093/ser/mwl021>
- Duda, K. (2016). *Outsourcing usług ochrony oraz utrzymania czystości w instytucjach publicznych. Wpływ publicznego dyktatu najniższej ceny usług na warunki zatrudniania pracowników przez podmioty prywatne*. Wrocław: Ośrodek Myśli Społecznej im. Ferdynanda Lassalle’a.
- Dylong, A., & Klatka, J. (2014). Koniec z dyktatem najniższej ceny?. *Przegląd Komunalny*, 3, 37.
- Goraus, K., & Lewandowski, P. (2016). *Minimum wage violation in Central and Eastern Europe*. Warsaw: IBS.
- GUS. (2016). *Pracujący w nietypowych formach zatrudnienia*. Warsaw: Główny Urząd Statystyczny.
- Hacker, J. (2004). Privatizing risk without privatizing the welfare state: the hidden politics of social policy retrenchment in the United States. *American Political Science Review*, 98(2), 243–260. <https://doi.org/10.1017/S0003055404001121>
- Hacker, J., Thelen, K., & Pierson, P. (2015). Drift and conversion: hidden faces of institutional change. In J. Mahoney & K. Thelen (Eds.), *Advances in comparative-historical analysis* (pp. 180–208). Cambridge, UK: Cambridge University Press.
- Hall, P. A., & Soskice, D. W. (2001) Introduction. In P. A. Hall & D. W. Soskice (Eds.), *Varieties of capitalism: the institutional foundations of comparative advantage* (pp. 1–68). Oxford – New York: Oxford University Press.
- Hall, P. A. (2016). *Politics as a process structured in space and time*. In O. Fioretos, T. G. Falleti & A. Sheingate (Eds.), *The Oxford handbook of historical institutionalism* (pp. 31–51). Oxford: Oxford University Press.
- Höpner, M. (2005). What connects industrial relations and corporate governance? Explaining institutional complementarity. *Socio-Economic Review*, 3(2): 331–58. doi:10.1093/SER/mwi014.
- Jackson, G. (2001). The origins of nonliberal corporate governance in Germany and Japan. In W. Streeck & K. Thelen (Eds.), *The origins of nonliberal capital-*

- ism: *Germany and Japan compared* (pp. 121–170). Ithaca, NY: Cornell University Press
- Jackson, G. (2005). Contested boundaries: ambiguity and creativity in the evolution of German code-termination. In W. Streeck, & K. Thelen (Eds.), *Beyond continuity: explorations in the dynamics of advanced political economies* (pp. 229–254). Oxford: Oxford University Press.
- Jackson, G. (2010). Actors and Institutions. In G. Morgan *et al.* (Eds.), *The Oxford handbook of comparative institutional analysis* (pp. 63–86). Oxford: Oxford University Press.
- Kamińska, A., & Lewandowski, P. (2015). *The effects of minimum wage on a labour market with high temporary employment*. Warsaw: IBS.
- Labour Inspectorate. (2005–2014). *Sprawozdania GIP z działalności PIP*. Warsaw.
- Mahoney, J., & Thelen, K. (2010). *Explaining institutional change*. New York: Cambridge University Press.
- Mica, A. (2017). The unintended consequences in new economic sociology: Why still not taken seriously?. *Social Science Information*, 56(4), 544–566.
- Muszyński, K. (2016). Factors behind the growth of civil law contracts as employment contracts in Poland – a study of labour law violations. *Prakseologia*, 158, 323–359.
- Muszyński, K. (2018). Labour law violations as innovations in Central Eastern European countries. *Przegląd Socjologiczny*, 69(3), 9–34.
- NBP. (2009). *Polska wobec światowego kryzysu gospodarczego*. Warsaw: Narodowy Bank Polski.
- Neumark, D., & Wascher, W. (2006). *Minimum wages and employment: A review of evidence from the new minimum wage research*. National Bureau of Economic Research No. 12663.
- OECD. (2015). *Focus on minimum wages after the crisis: making them pay*. OECD.
- Pisarczyk, Ł. (2015). Prawo pracy wobec rozwoju zatrudnienia cywilnoprawnego. In Z. Hajn & D. Skupień (Eds.), *Przyszłość prawa pracy. Liber Amicorum. W pięćdziesięciolecie pracy naukowej Profesora Michała Seweryńskiego* (pp. 351–355). Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Public Procurement Agency. (2000–2015). *Sprawozdania Urzędu Zamówień Publicznych*. Warsaw.
- Rocco, P., & Thurston, C. (2014). From metaphors to measures: observable indicators of gradual institutional change. *Journal of Public Policy*, 34(1), 35–62.
- Schimanek, T., & Kunysz-Syrytczyk, B. (2014). *Podręcznik stosowania klauzul społecznych w zamówieniach publicznych*. Warsaw: Instytut Spraw Publicznych.
- Sheingate, A. (2010). Rethinking rules: creativity and constraint in the House of Representatives. In J. Mahoney, & K. Thelen (Eds.), *Explaining institutional change: ambiguity, agency and power* (pp. 168–203). New York: Cambridge University Press.
- Stark, D. (1996). Recombinant property in East European capitalism. *American Journal of Sociology* 101(4), 993–1027. <https://doi.org/10.1086/230786>
- Starke, P. (2007). *Radical welfare state retrenchment: a comparative analysis*. Houndmills: Palgrave Macmillan.
- Streeck, W. (2004). *Taking uncertainty seriously: complementarity as a moving target*. In *Workshops/Österreichische Nationalbank, Eurosystem: proceedings of OeNB workshops* (pp. 101–115). Österreichische Nationalbank.
- Streeck, W. (2009). *Re-forming capitalism: institutional change in the German political economy*. Oxford: Oxford University Press.
- Streeck, W., & Yamamura, K. (2001). *The origins of nonliberal capitalism: Germany and Japan in comparison*. Ithaca – London: Cornell University Press.
- Streeck, W., & Thelen, K. (2005). *Beyond continuity: Institutional change in advanced political economies*. Oxford: Oxford University Press.
- Sześciło, D. (2014). *Rynek, prywatyzacja, interes publiczny: wyzwania urynkowienia usług publicznych*. Warsaw: Wydawnictwo Naukowe Scholar.
- Thelen, K. (2010). Beyond comparative statics: Historical institutional approaches to stability and change in the political economy of labor. In G. Morgan *et al.* (Eds.), *The Oxford Handbook of Comparative Institutional Analysis* (pp. 41–61). Oxford: Oxford University Press.
- Thelen, K., & Conran, J. (2016). Institutional change. In O. Fioretos, T. G. Falleti & A. Sheingate (Eds.), *The Oxford handbook of historical institutionalism* (pp. 51–70). Oxford: Oxford University Press.
- Trubek, D., & Trubek, L. (2005). The coexistence of new governance and legal regulation: Complementarity or rivalry?. Paper Presented at the Annual Meeting of the Research Committee on the Sociology of Law. Retrieved from CiteSeerX website: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.528.2544&rep=rep1&type=pdf>

- Tyrowicz J. (Ed.) (2015). *Raport 2014. Badanie ankietowe rynku pracy*. Warsaw: Narodowy Bank Polski
- van der Heijden, J. (2014). Through Thelen's lens: layering, conversion, drift, displacement and exhaustion in the development of Dutch construction regulation. RegNet Research Paper No. 2014/46.
- Vis, B. (2016). Taking stock of the comparative literature on the role of blame avoidance strategies in social policy reform. *Journal of Comparative Policy Analysis: Research and Practice*, 18(2): 122–137. <https://doi.org/10.1080/13876988.2015.1005955>
- Yamamura, K., & Streeck, W. (2003). *The end of diversity?: prospects for German and Japanese capitalism*. Ithaca – London: Cornell University Press.

Tomasz Skrzyński

In the face of the rising importance of natural gas to the Polish economy¹

Abstract

Objective: The purpose of this text is to determine ways of diversifying the sources of origin and directions for importing natural gas to Poland until the agreement for the supply of Russian gas expires in 2022. In so doing, the growth of extraction in Poland, deliveries from other countries and the partial replacement of gas in the economy with raw materials available in Poland are all analysed.

Research design and methods: A reasonable approach to energy policy, factor analysis and elements of multidimensional comparative analysis were adopted.

Findings: It is important that gas imports to the country are substantially increased in winter and it is essential that the capacity of gas storage facilities, in particular cavity facilities, is increased as well. Furthermore, it is necessary to attempt to reduce energy consumption, with different preferences that facilitate the growth of the share of renewable sources of energy (RSE) in the energy mix.

Implications / Recommendations: This article presents arrangements which may prove to be useful for implementation of Polish energy policy.

Contribution / Value Added: Considerable political changes and alterations to the gas market have superseded a number of researchers' arrangements and forecasts concerning Poland. What is missing is a comprehensive analysis, based on data from 2017 and 2018, of increasing the diversification of gas supplies to Poland.

Article Classification: research article.

Keywords: natural resource security, national security, energy policy, natural gas, pipelines, transportation investment, natural resources.

JEL classification: F520; H540; H560; L950; O130; Q340; Q470; Q480.

Introduction

In 2017 the world's demand for natural gas was 3.67 trillion m³. According to specialist predictions the economic importance of this fuel will carry on

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increasing (*International Energy*, 2017, pp. 49–53). The extraction, transportation, distribution and storage of natural gas are the most important sectors of the Polish economy with regard to national security (Lewandowski, 2016, pp. 494–495).

As most energy security definitions point out, a government should endeavor to ensure high energy performance and reliability of supply. Its

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task is to take care of suitable quantity and quality thereof. The prices of energy resources (fuels) should be competitive for the economy and allow enough energy to be generated for citizens to use the facilities of modern civilization, but respect environmental protection requirements.

Diversification of supplies should therefore be considered from at least four points of view (see, for example, Tański, 2016, pp. 104–105):

- 1) economic – attempts to lower energy costs;
- 2) political – independence from one main supplier, who may suddenly suspend supplies which cannot be replaced easily;
- 3) reduction of environmental degradation; and
- 4) diversified use of energy carriers, with a view to limiting dependence on any one of them.

Substantial political changes and alterations to the gas market have superseded a number of researchers' arrangements and forecasts concerning Poland. Even one of the best Polish specialists in this field incorrectly predicted gas consumption (a year in advance), domestic extraction and extraction by Polish companies abroad (Ruszel, 2017, pp. 15–17; cf. *Krajowy dziesięcioletni plan*, 2017, p. 17. More details on price volatility and its independence from producers' decisions: Łęt, 2015).

What is missing is a comprehensive analysis, based on the data from 2017 and 2018, which enables ways of diversifying the sources of origin and directions for importing natural gas in Poland to be determined until the applicable agreement for the import of Russian gas expires in 2022.

Literature review

Since 2014 a few texts involving the issues in question have been published (among others: Janusz *et al.*, 2017, pp. 101–116; Olkusi *et al.*, 2015; Ruszel, 2017). The majority of them are narrow in their scope. For example, they encompass only: one of the listed points of view (Czech, 2017); forecasts for the gas market (e.g. Olkusi *et al.*, 2017; Szoplik & Oszczyk, 2015); gas storage

facilities (Ciechanowska, 2016; Kutyla, 2016); imports of liquefied natural gas (LNG) (Biały *et al.*, 2018; Blacharski *et al.*, 2016; Chłopińska & Gućma, 2018); the consequences of gas market liberalisation (Iwicki *et al.*, 2014; Szurlej *et al.*, 2014); or the role of gas in the electric energy market (Łaciak *et al.*, 2017).

Apart from Emelin (2013), over the last five years energy security researchers have focused on other countries than Poland in Russian journals.

Material and methods

The basis for data will be *BP Statistical*, statistical yearbooks issued by GUS (Poland's Central Statistical Office); *Sprawozdanie Prezesa* from the Energy Regulatory Office for 2017; *Skonsolidowany raport Grupy Kapitałowej Polskiego Górnictwa Naftowego i Gazownictwa* (PGNIG) for 2017; *Prezentacja wyników Grupy Kapitałowej LOTOS za czwarty kwartał 2017 i 2017 rok*; *Polityka energetyczna Polski do 2040 roku (pep2040) – projekt*; *Krajowy dziesięcioletni plan rozwoju systemu przesyłowego. Plan rozwoju w zakresie zaspokojenia obecnego i przyszłego zapotrzebowania na paliwa gazowe na lata 2018–2027 wyciąg*; the act on the change of renewable sources of energy and certain other acts, 2018; Quarterly Report Energy on European Gas Markets Market Observatory for Energy DG Energy v.11; legal acts published in the Trade Bulletin URE – Gas Fuels; data posted on the websites of the European Commission and Polish Power Systems; the Polish Geological Institute; and Gas Infrastructure Europe. Some important data for 2017 and 2018 concerning the issue in question is still unavailable (e.g. Eurostat).

The studies on establishing instruments for measuring energy security in particular countries are still far from completion (Bluszcz, 2017, pp. 1531–1548). One example is the lack of common acknowledgment for the import dependency factor. Authors adopt various criteria in the process of assessing Russian gas import volumes. Some of them maintain that Poland is safe from

the energy perspective when compared to other EU member states. Several Serbian researchers claim that in 2015 Poland was one of the last countries in the EU in terms of energy security (Filipovic *et al.*, 2018, pp. 432, 433–434). Similar differences apply to the condition of gas energy security. In 2017 a few Ukrainian researchers assigned Poland to the group of three EU countries with the lowest gas supply diversification and countries highly dependent on gas supplies controlled by Russia (Dzoba *et al.*, 2017, p. 29).

This article adopts a reasonable approach to energy policy, factor analysis and elements of multi-dimensional comparative analysis.

Results and discussion

In 2017 gas extraction in Russia reached a record level in the space of the last 10 years (see Table 1). In 2017 Russian gas was inexpensive

as compared to other supply options, and for that reason its consumption in the EU rose. Simultaneously, as in previous years, extraction in the EU dropped; it was more than five times lower than that in Russia (see Table 1). In the second quarter of 2018 gas prices rose. The same applied to imports from Russia to the EU, which reached 46% of the entire EU gas import (*Quarterly Report*, 2018b, p. 3).

As in previous years, in 2017 high-nitrogen gas accounted for more than two thirds of the total extraction in Poland (*Energia*, 2018, p. 23–24). High-methane gas dominated imports and sales. In Poland in 2017 the consumption of gas went up by 5%, while extraction fell by 2% (*BP Statistical*, 2018a, p. 28, 29). This trend remained stable in the first quarter of 2018 (*Quarterly Report*, 2018a, p. 8). PGNiG anticipates that extraction in 2018 and 2019 will go down by 5% compared to 2017 (*Skonsolidowany raport*, 2018, p. 32).

Table 1. Extraction of natural gas expressed as methane-rich gas (2007–2017) illustrated by selected examples (in billions of m³)

Country/ organisation	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Poland	4.5	4.3	4.3	4.3	4.5	4.5	4.4	4.3	4.3	4.1	4.0
Russia	601.6	611.5	536.2	598.4	616.8	601.9	614.5	591.2	584.4	589.3	635.6
Germany	15.0	13.6	12.7	11.1	10.5	9.5	8.6	8.1	7.5	6.9	6.4
EU	196.8	198.4	179.0	182.0	161.2	151.5	150.4	137.6	124.5	121.8	117.8

Source: *BP Statistical*, 2018a, p. 26, 28.

Table 2. Consumption of natural gas illustrated by selected examples in 2007–2017 expressed as high-methane gas (in billions of m³)

Country/ organisation	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Poland	14.4	15.6	15.1	16.2	16.5	17.4	17.4	17.0	17.1	18.3	19.1
Russia	428.8	422.7	399.5	422.6	435.6	429.6	423.0	423.6	409.6	420.2	424.8
Germany	88.6	89.5	84.4	88.1	80.9	81.1	85.0	73.9	77.0	84.9	90.2
EU	505.4	516.8	484.2	521.0	470.3	457.9	450.7	400.9	417.7	448.8	466.8

Source: BP 2018, p. 29. Other data: *Rocznik statystyczny*, 2018, p. 110.

As Table 2 shows, gas consumption in Poland is minor when compared to the rest of the EU. Despite differences in data, we can assume that domestic extraction was 4 billion m³; imports from Russia 11.1 billion m³; import by sea nearly 1.63 billion m³; and import from the rest of the EU 2.37 billion m³ (own calculations on the basis of *BP Statistical*, 2018, p. 34 and *Sprawozdanie prezesa*, 2018, p. 211).

At the end of 2018 the stability of gas supplies to Poland from Russia is primarily endangered by the following:

- the option of using the Nord Stream II and Turkish Stream gas pipelines, which are to be completed in 2019, for the purposes of energy-related blackmail (see, for example, Jakimowicz, 2015 and Kłaczyński, 2013, pp. 134–135);
- the use of differences between EU Member States by Russia (see Tomaszewski, 2018, pp. 138–141) to radically increase the prices of gas supplied to Poland;
- the failure to assign relevant means by Russia for the modernisation and growth of infrastructure used to deliver materials to western countries, as well as searching for and extraction of gas from new deposits (Pronińska, 2018, p. 152);
- the current economic and financial potential of geologists in Russia not corresponding to the scale and complexity of tasks to be carried out (Milovidov, 2017, p. 24);
- Russia's influence on the volume of gas exported by Kazakhstan, Azerbaijan and Turkmenistan;
- the reduction in the efficiency of the gas deposits which are currently used in Russia.

Polish authorities assume that conflict with Russia will not cause gas supply downtime to affect domestic households and entities which render basic social services (*Sprawozdanie prezesa*, 2018, p. 195). According to EU regulations, as of 2017, with regard to the supply of gas to these recipients neighbouring EU states are required to help Poland (*Sprawozdanie prezesa*, 2018, p. 215; for more detail on these EU regulations see Fleming 2019, pp. 102–110). The diverse attitudes

towards Russia inside the EU prevents us from establishing the feasibility of these assumptions.

Thanks to EU support given to the development of gas infrastructure in Poland, at the beginning of 2018 Poland was able to import 141.8 million m³ of gas per week by way of what is known as EU physical reverse (calculations based on *Sprawozdanie prezesa*, 2018, p. 190). This was equal to 50% of the gas imported weekly by Poland from abroad in 2017. By 2022 Poland intends to triple its import-related capabilities away from the east: from 12.4 billion m³ to 39.5 billion m³. The network of gas transfer pipelines in the country is to be extended by 2,200 km by 2027 (*Sprawozdanie prezesa*, 2018, pp. 183, 186, 190–191; cf. *Krajowy dziesięcioletni plan*, 2017, p. 19).

As has been aptly noted (Podraza, 2018), to create an international gas hub with a capacity of 70 billion m³ a year in Poland it is necessary to substantially expand the infrastructure, to considerably reduce the share of Russian gas in imports and to build up a significant surplus of gas in stocks.

In the process of evaluating the aforementioned plans, it is also necessary to consider the following:

- the poor progress of works on the construction of pipelines to Norwegian deposits and to Slovakia and Lithuania (*Skonsolidowany raport*, 2018, p. 3);
- the consumption of gas in winter being several times higher than the monthly average);
- the potentially much higher use of gas in the Polish economy by 2022;
- the significant delays in the construction of this kind of development in the Polish power industry (the commissioning of these gas pipelines is scheduled for 2021 and 2022) (*Polityka energetyczna Polski*, 2018, pp. 22, 31);
- the fact that no agreement has been reached for an additional link with the Czech Republic;
- the failure to carry out previous plans regarding the construction of transmission infrastructure from Scandinavia.

At the end of 2017 in Poland we knew of 295 conventional gas deposits extracted using current

technology. They had a total of 119.19 billion m³ of gas (Czapigo-Czapla & Brzeziński, 2018).

Contrary to Golarz's view (2016, p. 168), the current costs related to gas extraction from conventional deposits in Poland are high (see, for example, Bałamut, 2017, p. 23). Although new deposits are being discovered, it is impossible to substantially increase the extraction of gas in Poland, given the current prices of gas (*Polityka energetyczna Polski*, 2018, pp. 4, 10).

However, PGNiG is extracting more and more gas in Norway and Pakistan. In 2017 it extracted 0.548 billion m³ and 0.15 billion m³, respectively, in those countries. In fact, extraction in Norway accounted for two fifths of all the high-methane gas extraction by the PGNiG Corporate Group (*Skonsolidowany raport*, 2018, pp. 75–76). In 2017 the Lotos group also extracted gas in Norway (*Prezentacja wyników*, 2018, p. 7). Due to the lack of a direct pipeline the costs related to importing this gas to Poland are excessively high.

Seemingly, the solution is to make broader use of unconventional gas deposits (*Polityka energetyczna Polski*, 2018, p. 10).

At the end of 2017 the mineable methane deposits in Poland were estimated to reach 96.95 billion m³ (Malon & Tyminiński, 2018). Contrary to the expectations of some researchers (e.g. Graczyk *et al.*, 2017, p. 21), methane extraction is low: in 2017 it was 0.33 billion m³. The reasons behind this are significant expenses related to the following:

- the adoption of extraction methods which allow methane to be obtained with a touch of air;
- the provision of safety for employees and infrastructure (see Gatnar, 2016, p. 114; Wilczyński, 2015, pp. 30–31);
- the ecological consequences of the use of hydraulic fracturing methods to extract methane.

In addition, the use of what is known as shale gas is challenging. In theory Poland could extract 350 billion m³. In practice, however, the vast majority of deposits are located under urbanised areas, which prevents their extraction by way of current technology.

The key issue concerning shale gas is the investors' high costs arising from (see Lis & Stankiewicz, 2017, pp. 53, 61–68; Nizioł, 2016, pp. 75, 81; Wilczyński, 2015, pp. 29–30):

- the considerable depth of the material, which means that preparation for a 300-km²-deposit extraction costs are about PLN 35 billion, using prices from mid-2018;
- the very high income tax on extraction;
- protests by farmers (who fear substantial contamination of ground waters and local earthquakes);
- the need to expand local transmission infrastructure.

The severity of ground water contamination and the frequency of local earthquakes may cause the extraction of shale gas to be a part of political conflict in Poland.

What is known as closed gas can be found in Poland only at such depths that its extraction is considered to be unprofitable.

In 2017 Poland's share of LNG import to the EU was only 2.96%. It acquired 6.5 times less gas in this way than from Russia. The amount was below a third of the regasification capabilities of the terminal in Świnoujście (*Liquefied Natural*, 2018, pp. 34–35; *Sprawozdanie prezesa*, 2018, p. 210). At the end of 2017 the maximum capacity of LNG storage facilities in Świnoujście was 320,000 m³, and the maximum gas intake capability was 656 m³ per hour (*Sprawozdanie prezesa*, 2018, pp. 173–174).

In the first and second quarters of 2018 the growth in LNG import to Poland was among the highest in the EU. In terms of year-on-year growth for those quarters it increased by 30% and 68% (*Quarterly Report*, 2018a, p. 12; *Quarterly Report*, 2018b, p. 11). This was fostered by changes in prices in the gas market. We can estimate that in 2018 Poland will import a maximum of 3 billion m³ of gas. It would thus use at most 60% of the terminal's capabilities.

In the second quarter of 2018 supplies from Qatar accounted for 78% of the Polish LNG market (*Quarterly Report*, 2018b, p. 12; *U.S. Natural*

Gas, 2018). This small country is the world's largest supplier of LNG, but it is subject to pressure from the biggest empires of the world. In this case, the financial terms of supply security are at odds with the economic terms. Based on the November agreement for the supply of LNG from the US, in the years 2019–2022 Poland is to receive 0.7 billion m³ of gas a year, and in the years 2023–2042 1.95 billion m³ per year (*yearbook.enerdata*, 2018). Current terminal regasification capabilities make possible the full performance of that agreement on an annual basis. The prerequisite is maintaining this year's supplies from Qatar and Norway and full availability of the port during the winter.

The EU has provided considerable funds to support the expansion of the terminal's regasification capabilities by 50%, as scheduled for the years 2018–2022 (*Quarterly Report*, 2018b, p. 11). Polish plans for the years to come involve the further development of the terminal and the construction of a floating terminal in the vicinity of Gdańsk. These investments will lead to an increase in maximum regasification capabilities from 5 billion m³ per year (at present) to 14–18 billion m³ per year (calculations based on: *Sprawozdanie prezesa*, 2018, p. 186; *Krajowy dziesięcioletni plan*, 2016, p. 18). If we rely on current estimates for the growth of the Polish economy's demand for gas (Olkuski *et al.*, 2017, p. 53) with attractive LNG prices, the use of terminal capabilities in Świnoujście and the vicinity of Gdańsk will stabilise gas imports from Russia until at least 2040. These investments will, however, not be sufficient to have optimal supply diversification by 2022. Given the current prices of gas supplied through pipelines, the aforementioned investments are economically unprofitable, and the construction time needed for the related pipelines will trigger bureaucratic and legal obstacles.

In mid-2018 the major contraindications against supplying Poland with gas by sea are the following:

- the financial terms of the contract with Russia, which are still more beneficial than LNG-related agreements;

- Poland has no LNG tankers, which results in higher transportation prices;
- the high costs of terminal maintenance;
- the largest LNG tankers cannot call at the port in Świnoujście due to their size compared to the limitations of the port;
- the concentration of regasification in Świnoujście dramatically strengthens the effects of potential terrorist attacks or port blockades;
- there is sea ice in winter when the terminal is needed (see *Dopuszczalne zanurzenia*, 2018; Kaźmierczak, 2008, pp. 93–95; Sikora, 2013, p. 146; Szoplik & Oszczyk, 2015, p. 11. For an alternative point of view see Gałczyński *et al.*, 2017, pp. 110–45);
- the current capabilities of the terminal, transmission gas pipelines and road transport allow less than 0.42 billion m³ of gas to be transported a month from Świnoujście to other parts of Poland at very low temperatures.

In order to considerably limit Poland's dependence on Russian gas by 2022 we cannot use other sources of energy obtained in the territory of Poland. The share of coal in primary energy consumption in Poland is declining as coal is replaced by gas. In 2017 the difference between these materials was 48.7% to 16.5% (*BP Statistical*, 2018, p. 9). By 2022 the share of coal in primary energy consumption in Poland will be declining as coal is replaced by gas (see *Sprawozdanie Prezesa*, 2018, p. 319).

At present the best growth prospects in the Public Power System are assigned to gas stations. In fact, in 2017 they accounted for just 3% of all production of electricity (for more details see Gabryś, 2018, pp. 312–313). In terms of power installed, their capabilities grew much faster in 2017, from 1,610 to 2,341 megawatts, which was 35% of the entire annual power increase in a sector dominated by coal power plants (*Raport 2017*). The reason behind this is not an economic analysis of energy production (for more about that regarding Poland see Król & Ocloń, 2018, pp. 11–29). Poland is a net importer of hard coal and brown coal. In 2017 domestic coal extraction fell to

127 million tonnes. 13.6 million tonnes were imported (mainly hard coal), and 7.2 million tonnes were exported (*Energia*, 2018, p. 22; cf. *EU energy*, 2017, p. 216). With regard to hard coal this was a result of EU energy policy, which generated uncertainty regarding the functionality of coal plants, low coal prices on the world market, and high extraction costs in Poland. With regard to brown coal a crucial factor is local residents who disagree with extraction being started in areas in which deposits can be found. They are afraid of the severity of mining damage (Pazderski & Bandera 2017, p. 68; *Rocznik Statystyczny*, 2017, p. 102).

Large-scale coal and biomass co-firing, supported by Polish authorities, contradicts the intentions of the European Commission, generates costs related to boiler adaptation, ecological issues as and partial biomass import (see, for example, Rajczyk, 2017, pp. 15, 20, 34). Simultaneously, in the first quarter of 2018 the processing of biomass in Poland was more expensive than gas-based energy (*Sprawozdanie z działalności prezesa*, 2018, p. 286).

Climate change reduces the effectiveness of potential supply cuts by Russia. The likelihood of long periods of low temperatures in winter is getting smaller and smaller. At the same time, climate change has a negative influence. For this reason the EU Winter Package titled “Pure Energy for All Europeans” (for more details see Paska & Surma, 2017, pp. 21–28) placed an emphasis on a radical reduction of the impact of coal on the Polish power industry. Well-known CO₂ emission reduction technologies in coal plants are, in fact, unprofitable. In 2017 Poland was the fifth largest CO₂ emitter country in the EU (*BP Statistical*, 2018a, p. 49).

It is unlikely that a nuclear power station will be built in Poland by 2025. The following symptoms make that state of affairs likely: the previous delays in investments in the power industry; the substantially higher construction costs than for other kinds of plants (when calculated in terms of power produced), public opinion (Ligus, 2017,

p. 17); and the risk of Poland’s dependence upon uranium supplies (Janowski, 2016, p. 66-67) from Russia or transported through Russia (e.g. from Kazakhstan).

The major obstacles in developing RSE are the still high energy production costs (*Polityka energetyczna Polski*, 2018, p. 27), the considerable variability of the amount of energy available and serious storage-related problems. In terms of the main RSE in 2017, the largest growth was recorded by hydro-energy plants (*BP Statistical*, 2018b, p. A7). In the face of EU climate policy, Poland’s hydroenergy resources are, however, much too small to be able to hinder the growth in use of gas in the power industry.

It is too early to judge whether another RSE-concerned act will make possible the resumption of the dynamic growth of wind power. It came into effect in July 2018 (The act on changes in renewable sources of energy and some other acts, 2018).

This being the case, in the process of planning investments, firms ignore gas reduction plans set out in the Winter Package and prioritise the CO₂ emission indicators which are to be followed by power plants, as also specified in that document. According to the data given by Polish Power Grids, as of July 2018 the achievable net power of gas-powered generating facilities to be erected was 4.37 gigawatts. This is eleven times bigger

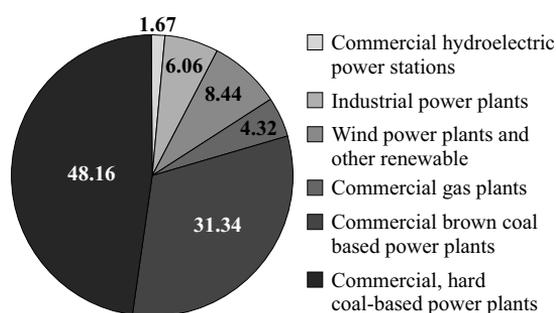


Figure 1. Percentage share in domestic electric energy production of particular groups of plants, by type of fuel, 2017

Source: *Report 2017*.

than their equivalents powered by water and wind. It slightly exceeds the net power of generating facilities powered by coal (*Rynek mocy*, 2018). The scale of potential changes is much larger. The above-stated investments in coal power result primarily from a need to replace, by 2022, a substantial number of the facilities of this sector, which are more than 25 years old (see *Polityka energetyczna Polski*, 2018, p. 5).

Perhaps it was the high cost of infrastructure maintenance that led Polish gas stores to be still smaller than Slovakian equivalents in September 2018. They could accommodate 2.985 billion m³ of gas (calculations based on: *Historical data*, 2018; *Skonsolidowany raport*, 2018, p. 155; *Sprawozdanie prezesa*, 2018, p. 171, 175). It is wrong to think that this amount is enough to ensure energy security for Poland (Janusz *et al.*, 2017, p. 115) in relation to 2018. Since 2016 there has been a substantial growth in gas consumption in Poland. In addition, Russia has threatened to suspend gas supplies to other countries in winter (Kochanek & Kazimierzczak, 2015, pp. 222–237), when the consumption exceeded the yearly average considerably.

In mid-2018 in Poland only 0.735 billion m³ of gas could be stored in cavity storage facilities. They can collect gas for the transmission network quickly. Storing the remaining 2.255 billion m³ was possible only in storage facilities whose gas intake capability was “minor in relation to active capacity” (*Sprawozdanie prezesa*, 2018, p. 211). An obstacle to construction of numerous or capacious cavity storage facilities in Poland are the geological conditions (Ślizowski *et al.*, 2017, pp. 167–178). The maximum power of gas intake is when a storage facility is full (100%). This is the reason why Polish authorities wish to fill storage facilities as much as possible in 2018 (*Historical data*, 2018; *Quarterly Report*, 2018b, p. 15) and intend to enlarge them (e.g. *Polityka energetyczna Polski*, 2018, pp. 23–24).

In 2017 only seven various sized underground gas storage facilities were operating in Poland. This increases the risk of successful terrorist

attacks. Depending on the country in question, the rental by Polish companies of gas storage facilities abroad either reduces energy security or is unprofitable. In 2017 the rented gas storage facilities abroad (in the EU) had a maximum of 4.4% of all obligatory gas reserves of Polish companies (*Sprawozdanie prezesa*, 2018, pp. 200, 212). The figure for 2018 will probably be similar (see, for example, *Komunikat prezesa*, 2018, p. 23).

The increasing gas market liberalisation in certain zones year-by-year (*Sprawozdanie prezesa*, 2018, p. 181), still forced in the EU, remains dangerous from the political point of view (*Polityka energetyczna Polski*, 2018, pp. 27, 31). In spite of the attempts of Polish authorities, Russia’s impact on companies who import, extract, transmit and store gas is likely to increase.

In 2018 the prices of gas supplied to Poland determine the prices paid by recipients (see, for example, *Decyzja prezesa*, 2018, pp. 2–3). The awareness of the importance of gas energy security does not, however, translate into citizens being ready for related costs (see, for example, Mrozowska, 2018, pp. 37–39). A significant increase in gas prices, related to an improvement in energy security, may affect public support for the government.

Conclusions

Contrary to the hopes of some researchers (e.g. Tański, 2016, p. 105), the main obstacle to gas supply diversification in Poland is the contradiction between the aforementioned points of view: economic, political, ecological...

Currently Poland is able to negotiate terms with Russia, thanks to low gas prices, the moderate (according to most climatologists) likelihood of long, severe winters, and EU support for the expansion of gas infrastructure in Poland.

In March 2018 the head of the URE presented an official statement that the current gas infrastructure development “prevents rapid and effective reaction to supply disruption. It is essential that works are intensified to the benefit [...] of diversification

of roads and sources of supply” (*Sprawozdanie prezesa*, 2018, p. 209). This is relevant with respect to short-term disruption and mild winters.

If very low temperatures continue for a long time, Polish authorities have to take into consideration a potentially much more dangerous conflict with Russia. The demand for gas will increase rapidly, EU imports will reach a maximum of 141.8 million m³ of gas per week, while weather and ice in the Baltic Sea will hamper LNG importation. The situation may get even worse due to the insufficient transmission infrastructure from the terminal, declining maximum daily gas intake from storage facilities as well as the risk of successful terrorist attacks on regasification systems and the largest storage facilities. The timely supply of LNG from Qatar may be influenced by the scale of the contemporary Russian impact in the Persian Gulf. Because Poland’s EU neighbours refrain from providing assistance, it will be necessary to dramatically limit supplies for the economy and citizens.

Simultaneously, further implementation of EU energy policy helps Russia to increase its influence on the Polish gas market and may lead to substantial growth in gas consumption in Poland by 2022. Given the situation of coal power plants and RSE plants, we may predict that, by 2022, it is unlikely that the share of gas in production of electricity in Poland will remain below 16%.

Given current prices, the costs related to gas extraction from conventional deposits in Poland are high, while LNG importation is still unprofitable. It is very unlikely that by 2022 gas extraction by PNGiG and Lotos in Norway, Pakistan and Libya will have a considerable impact on diversification. This assumption is based on transportation costs and the scale of extraction in the last five years.

Significant extraction of shale gas and closed gas is unlikely in Poland during next five years. This results from the limitations of the technology currently used. To make sure that extraction is feasible at all it is necessary to reduce taxes and to assign to residents the right to deposits which are under their property. An opportunity to have

additional income will change some farmers’ attitudes towards investors.

A considerable increase in the prices of Russian gas would probably lead to profitable imports from the EU and by sea as well as an enlargement of extraction from domestic deposits and the use of RSE. However, Poland must be prepared for a rapid increase in the share of these sources of energy in supplies. This is the effect of long-term investments in the gas sector and reduced competitiveness of the Polish economy, resulting from higher prices of the material in question.

With a view to limiting the effects of a potential blockade of Świnoujście port and terrorist attacks on terminals, it is necessary to build a few small LNG handling points, as well as related pipelines. The completion of such projects by 2022 is virtually impossible. However, rapid progress of work will affect negotiations with Russia. A similar situation regarding gas pipelines negotiated with Denmark.

In the aforementioned context, in order for Poland to achieve a strong position during negotiations in 2022 the priority should be to increase the options for importing gas in winter and the capacity of gas storage facilities by 100%.

However, as aptly noted, the expansion of infrastructure by 2022 is unable to compensate for a shortage of Russian gas (Baltensperger *et al.*, p. 474). It is also necessary to strive to improve the co-ordination of actions in the EU (including a reduction in the energy consumption of economies) as well as state preferences which facilitate faster growth of the share of renewable energy sources in the energy mix.

For effective energy policy it is also crucial to keep a sense of security among citizens. It is necessary to keep on propagating the intensification of works over sources of gas supplies which are independent of Russia.

It is essential to carry out further studies on methods of limiting gas consumption by the Polish economy when temperatures are low. It is important that we continue the quest for convenient domestic venues for the erection of five

additional cavity gas storage facilities with a total capacity of 1.5 billion m³.

It is also advisable to support studies on inexpensive technologies which foster pro-ecological coal energy extraction, e.g. regarding biomass and enriched coal co-firing.

References

- Bałamut, A. (2017). *Polityka bezpieczeństwa energetycznego Polski w latach 2000–2015*. Kraków: Krakowska Akademia.
- Baltensperger, T., Fuchslin, R. M., Krutli, & P., Lygeros, J. (2017). European Union gas market development. *Energy Economics*, 66(C), 466–479.
- Biały, R., Janusz, P., Ruszel, M., & Szurlej, A. (2018). Znaczenie dostaw LNG w zbilansowaniu zapotrzebowania na gaz ziemny krajów UE. *Zeszyty Naukowe Instytutu Gospodarki Surowcami Mineralnymi i Energią PAN*, 102, 231–244.
- Blacharski, T., Biały, R., Kaliski, M., Stachowiak, B., & Szurlej, A. (2016). Wpływ dostaw LNG na rozwój krajowego rynku gazu ziemnego. *Zeszyty Naukowe Instytutu Gospodarki Surowcami Mineralnymi i Energią PAN*, 95, 253–264.
- Bluszcz A. (2017). European economies in terms of energy dependence. *Quality & Quantity*, 51(4), 1531–1548.
- BP Statistical Review of World Energy, Renewable Energy (2018b). <https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-stats-review-2018-renewable-energy.pdf>, accessed on 1.9.2018.
- BP Statistical Review of World Energy, June (2018a) <https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-stats-review-2018-full-report.pdf>, accessed on 2.9.2018.
- Chłopińska, E., & Gucma, M. (2018). The impact of a liquefied natural gas terminal on the gas distribution and bunkering network in Poland. *Scientific Journals of The Maritime University of Szczecin – Zeszyty Naukowe Akademii Morskiej w Szczecinie*, 53(125), 154–160.
- Ciechanowska, M. (2016). Podziemne magazyny gazu elementem bezpieczeństwa energetycznego Polski. *Nafta-Gaz*, LXXII(10), 833–840.
- Czapigo-Czapla, M., & Brzeziński, D. (2018). *Gaz ziemny – mln m³*. Retrieved from http://geoportal.pgi.gov.pl/css/surowce/images/2017/tabele/gaz_zasoby.pdf, accessed on 28.1.2019.
- Czech, A. (2017). Economic dimension of Polish energy security. *Oeconomia Copernicana*, 8(3), 383–399.
- Decyzja prezesa Urzędu Regulacji Energetyki z 25 lipca 2018 (2018). *Biuletyn Branżowy URE – Paliwa Gazowe*, 49, 2–6.
- Dopuszczalne zanurzenia statków przy nabrzeżach portu w Świnoujściu (aktualizacja 03.08.2018) (2018). Retrieved from http://www.ums.gov.pl/nawigacyjne/ost/zanurzenia_Sw.pdf, accessed on 4.9.2018.
- Dzoba, O., Marynychak, L., & Romashko, O. (2017). A new approach to the assessment of effective management of gas supply diversification. *Baltic Journal of Economic Studies*, 3(1), 24–30. doi: 10.30525/2256-0742/2017-3-1-24-30.
- Emelin, K. N. (2013). Diversifikatsiia importa prirodnogo gaza v energeticheskoj politike Polshi. *Kontury globalnykh transformatsii: politika, ekonomika, pravo*, 6(32), 115–126.
- Energia 2018 (2018). Warszawa: GUS.
- EU energy in figures. Statistical pocketbook 2017 (2017). Luxembourg: Publications Office of the European Union.
- Filipovic, S., Radovanovic, M., & Golusin, V. (2018). Macroeconomic and political aspects of energy security: exploratory data analysis. *Renewable and Sustainable Energy Reviews*, 97(C), 428–435. doi: 10.1016/j.rser.2018.08.058.
- Fleming, R. (2019). A legal perspective on gas solidarity. *Energy Policy*, 124(1), 102–110. doi: 10.1016/j.enpol.2018.09.037.
- Gabrys, H. L. (2018). Elektroenergetyka w Polsce 2018... z wyników roku ubiegłego i wybrane z wyzwań. *Energetyka*, 6, 311–317.
- Gałczyński, M., Ruszel, M., Turowski, P., Zajdler, R., & Zawisza, A. (2017). *Global LNG Market*. Rzeszów – Warszawa: Ignacy Łukasiewicz Energy Policy Institute.
- Gatnar, K. (2016). Kogeneracja i trój generacja na bazie gazu z odmetanowania kopalń – aktualny stan w Jastrzębskiej Spółce Węglowej. In R. Ney et al. (Eds.), *Energetyka wobec nowych wyzwań, XXX Konferencja, materiały konferencyjne* 4 (pp. 111–126). Kraków: Instytut Gospodarki Surowcami Mineralnymi i Energią.
- Golarz, M. (2016). Bezpieczeństwo energetyczne Polski na przykładzie zaopatrzenia w gaz ziemny, ropę

- naftową i energię elektryczną. *Bezpieczeństwo: Teoria i Praktyka*, 1, 161–179.
- Graczyk, A., Wielewska, I., & Piaskowska-Silariska, M. (2017). *Rozwój odnawialnych źródeł energii w Polsce. Problemy bezpieczeństwa energetycznego i lokalnego wykorzystania zasobów*. Warszawa: Texter.
- Historical data* (2018). Retrieved from <https://agsi.gie.eu/#/historical/PL>, accessed on 2.10.2018.
- International Energy Outlook 2017* (2018). Retrieved from [https://www.eia.gov/outlooks/ieo/pdf/0484\(2017\).pdf](https://www.eia.gov/outlooks/ieo/pdf/0484(2017).pdf)
- Iwicki, K., Janusz, P., & Szurlej, A. (2014). Wpływ liberalizacji rynku gazu ziemnego na bezpieczeństwo energetyczne Polski. *Rynek Energii*, 3, 3–13.
- Jakimowicz, R. (2015). *Polityka Federacji Rosyjskiej wobec regionu Azji i Pacyfiku, Azji Centralnej i Arktyki*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Janowski, M. (2016). Energetyka jądrowa w państwach Grupy Wyszehradzkiej. In M. Ilnicki & Z. Nowakowski (Eds.), *Bezpieczeństwo energetyczne, gospodarka, społeczeństwo – wybrane zagadnienia* (pp. 62–73). Warszawa: Towarzystwo Naukowe Powszechne.
- Janusz, P., Szczerbowski, R., & Zaleski, P. (2017). *Istotne aspekty bezpieczeństwa energetycznego Polski*. Warszawa: Texter.
- Każmierczak, T. W. (2008). *Bezpieczeństwo energetyczne – implikacje uzależnienia Polski od importu gazu ziemnego (zarys problemu)*. Warszawa: Promotor.
- Kłaczyński, R. (2013). „South Stream” i „North Stream” jako narzędzia realizacji rosyjskiej polityki zagranicznej. *Nowa Polityka Wschodnia*, 2, 130–142.
- Kochanek, E. & Kazmierczak, M. (2015). Gaz ziemny jako wspólny surowiec wykorzystywany w wojnie gospodarczej. In J. Płaczek (Ed.), *Współczesna wojna handlowo-gospodarcza* (pp. 221–249). Warszawa: Difin.
- Komunikat Prezesa Urzędu Regulacji Energetyki nr 37/2018. (2018). *Biuletyn Urzędu Regulacji Energetyki*, 3(105), 23–24.
- Król, J. & Ocloń, P. (2018). Economic analysis of heat and electricity production in combined heat and power plant equipped with steam and water boilers and natural gas engines. *Energy Conversion and Management*, 176, 11–29. doi: 10.1016/j.enconman.2018.09.009
- Krajowy dziesięcioletni plan rozwoju systemu przesyłowego. Plan rozwoju w zakresie zaspokojenia obecnego i przyszłego zapotrzebowania na paliwa gazowe na lata 2018–2027 wyciąg* (2017) Warszawa. Retrieved from: https://www.gaz-system.pl/fileadmin/pliki/open-season/Krajowy_Dziesiecioletni_Plan_Rozwoju_2018-2027.pdf, accessed on 27.1.2019.
- Kutyła, S. (2016). Rola magazynów gazu w zapewnieniu bezpieczeństwa energetycznego państwa. In M. Ilnicki & Z. Nowakowski (Eds.), *Bezpieczeństwo energetyczne, gospodarka, społeczeństwo – wybrane zagadnienia* (pp. 120–140). Warszawa: Towarzystwo Naukowe Powszechne.
- Lewandowski, R. (2016). Economic sectors of strategic importance to the national security. A case of Poland. *Equilibrium Quarterly Journal of Economics and Economic Policy*, 11(3), 473–497. doi: 10.12775/EQUIL.2016.022
- Ligus, M. (2017). Evaluation of economic, social and environmental effects of low-emission energy technologies development in Poland: a multi-criteria analysis with application of a fuzzy analytic hierarchy process (FAHP). *Energies*, 10(1550), 1–20.
- Liquefied Natural Gas* (2018). Retrieved from <https://ec.europa.eu/energy/en/topics/oil-gas-and-coal/liquefied-natural-gas-lng>, accessed on 2.10.2018.
- Lis, A., & Stankiewicz, P. (2017). Framing shale gas for policy-making in Poland. *Journal of Environmental Policy & Planning*, 19(1), 53–71.
- Łaciak, M., Olkusi, T., Świdrak, M., Szurlej, A., & Wyrwa, A. (2017). Rola i znaczenie gazu ziemnego w strukturze wytwarzania energii elektrycznej Polski w perspektywie długoterminowej. *Rynek Energii*, 2(129), 60–67.
- Łęt, B. (2015). *Ekonometryczne modelowanie czynników ryzyka na rynku surowców energetycznych*. Poznań: Uniwersytet Ekonomiczny w Poznaniu.
- Malon, A., & Tymiński, M. (2018). *Metan z pokładów węgla*. Retrieved from: http://geoportal.pgi.gov.pl/css/surowce/images/2017/pdf/metan_2017.pdf, accessed on 20.9.2018.
- Milovidov, K. N. (2017). Otsenka konkurentnykh variantov vosproizvodstva zapasov hefti i gaza. In V. Zhukov (Ed.), *Mirovye rynki nefi i prirodnogo gaza: uzhestotsenie konkurentsii* (pp. 24–36). Moskva: IMEMO RAN.
- Mrozowska, S. (2018). The democratic deficit and participation in the European Union energy policy. *European Journal of Transformation Studies*, 6(1), 30–42.
- Nizioł, K. (2016). Wydobywanie gazu ziemnego ze źródeł niekonwencjonalnych w Polsce – konse-

- kwencje gospodarcze (wybrane zagadnienia). In R. Molski (Ed.), *Eksploracja i eksploatacja gazu ziemnego ze złóż niekonwencjonalnych. Wybrane zagadnienia prawne i ekonomiczne* (pp. 73–85). Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Olkuski, T., Sikora, A., Sikora, M. P., & Szurlej, A. (2017). Prognozy wydobywania, konsumpcji i salda wymiany surowców energetycznych w Polsce. *Polityka Energetyczna – Energy Policy Journal*, 20(2), 41–58.
- Olkuski, T., Szurlej, A., & Janusz, P. (2015). Realizacja polityki energetycznej w obszarze gazu ziemnego. *Polityka Energetyczna – Energy Policy Journal*, 18(2), 5–18.
- Paska, J., & Surma, T. (2017). „Pakiet zimowy” Komisji Europejskiej a kierunki i realizacja polityki energetycznej do 2030 roku. *Rynek Energii*, 2(129), 21–28.
- Pazderski, L., & Bandera, J. (2017). Społeczności lokalne wobec węgla brunatnego: dlaczego perspektywa wpływów finansowych do budżetów gmin i nowych miejsc pracy bywa niewystarczająca? In Z. Grudziński *et al.* (Eds.), *Surowce energetyczne i energia. Materiały XXXI konferencji z cyklu Zagadnienie surowców energetycznych i energii w gospodarce krajowej*, 4 (pp. 61–70). Kraków: Instytut Gospodarki Surowcami Mineralnymi i Energią PAN.
- Podraza, A. (2018). *Geopolityka a bezpieczeństwo energetyczne w kontekście stworzenia w Polsce hubu gazowego dla Europy*. In IVth Polish Political Science Congress, Lublin, 19 September 2018, panel: State and energy megatrends.
- Polityka energetyczna Polski do 2040 roku (pep2040) – projekt*. (2018). Retrieved from: <https://www.gov.pl/web/energia/polityka-energetyczna-polski-do-2040-r-zapraszamy-do-konsultacji>, accessed on 27.1.2019.
- Prezentacja wyników Grupy Kapitałowej LOTOS za czwarty kwartał 2017 i 2017 rok* (2018). Retrieved from: http://inwestor.lotos.pl/193/raporty_i_dane/raporty_roczne, accessed on 2.10.2018.
- Pronińska, K. (2018). Zmiany technologiczne vs. tradycyjna geopolityka na globalnym i europejskim rynku energetycznym. *Rocznik Strategiczny*, 23, 142–155.
- Quarterly Report Energy on European Gas Markets Market Observatory for Energy DG Energy* (2018a). 11, 1.
- Quarterly Report Energy on European Gas Markets Market Observatory for Energy DG Energy* (2018b). 11, 2.
- Rajczyk, R. (2017). *Współspalanie biomasy stałej w cyrkulacyjnej warstwie fluidalnej*. Częstochowa: Wydawnictwo Politechniki Częstochowskiej.
- Raport 2017 KSE Zestawienie danych ilościowych dotyczących funkcjonowania KSE w 2017 roku* (2018). Retrieved from: https://www.pse.pl/dane-systemowe/funkcjonowanie-rb/raporty-roczne-z-funkcjonowania-kse-za-rok/raporty-za-rok-2017#t1_1, accessed on 2.10.2018.
- Rocznik Statystyczny Handlu Zagranicznego 2017* (2018). Warszawa: GUS.
- Rocznik Statystyczny Rzeczypospolitej Polskiej 2017* (2018). Warszawa: GUS.
- Ruszel, M. (2017). Ocena bezpieczeństwa dostaw gazu ziemnego do Polski – stan obecny i perspektywa do 2025 r. *Polityka Energetyczna – Energy Policy Journal*, 20(1), 5–22.
- Rynek mocy w liczbach certyfikacja ogólna 2018* (2018). Retrieved from: https://www.pse.pl/biuro-prasowe/aktualnosci/-/asset_publisher/fwWgbbtxcZU/content/rynek-mocy-w-liczbach-certyfikacja-ogolna-2018, accessed on 10.9.2018.
- Sikora, A. P. (2013). *Skroplony gaz ziemny a inne źródła importu gazu do Unii Europejskiej*. Kraków: Wydawnictwa AGH.
- Skonsolidowany raport roczny Krupy Kapitałowej PGNiG*. (2018). Retrieved from: http://pgnig.pl/documents/10184/2297192/PGNiG_Skonsolidowany_Raport_Roczny_2017.pdf/38dc8569-6c6e-43b8-b9ce-709dfe1be5a4, accessed on 2.10.2018.
- Sprawozdanie z działalności prezesa Urzędu Regulacji Energetyki w 2017 r.* (2018). Warszawa: URE.
- Szoplík, J., & Oszczyk, M. (2015). Analiza ryzyka w prognozowaniu zapotrzebowania na gaz ziemny. *Rynek Energii*, 3(118), 10–16.
- Szurlej, A., Kamiński, J., & Suwała, W. (2014). Liberalizacja rynku gazu ziemnego w Polsce – wybrane zagadnienia. *Rynek Energii*, 2(111), 47–53.
- Ślizowski, J., Lankof, L., Urbańczyk, K., & Serbin, K. (2017). Potential capacity of gasstorage caverns in rock salt bedded deposits in Poland. *Journal of Natural Gas Science & Engineering*, 43(C), 167–178.
- Tański, T. (2016). Rozwój rynku LNG a bezpieczeństwo energetyczne państw Unii Europejskiej. In G. Wojtkowska-Łodej (Ed.), *Europejska Unia Energetyczna. Wybrane zagadnienia* (pp. 103–141).

- Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej w Warszawie.
- The Act dated 7 czerwca 2018 r. on the change of renewable sources of energy and some other acts, Polish Journal of Laws 2018, item 1276.
- Tomaszewski, K. (2018). Polityka energetyczna Unii Europejskiej w kontekście problematyki bezpieczeństwa gospodarczego. *Przegląd Politologiczny*, 1, 133–145.
- U.S. natural gas exports and re-exports by country.* (2018). Retrieved from https://www.eia.gov/dnav/ng/ng_move_exp_s1_a.htm, accessed on 2.10.2018.
- Wilczyński, M. (2015). *Gaz ziemny wsparciem dla niskoemisyjnej gospodarki*. Warszawa: Instytut na Rzecz Ekorozwoju.

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Corruption: the Polish perspective of combating it in light of the World Bank's experiences

Abstract

Objectives: The aim of this article is to identify the main weaknesses in Poland in combating corruption in the context of the World Bank's experiences.

Research Design & Methods: Various notions of corruption will be presented. This article will also indicate the most important conclusions from a number of previous scientific studies in the field of corruption conducted under the aegis of the World Bank.

Findings: Reducing motivation to accept or provide undue benefits is directly related to an increased effectiveness in detecting corruption. The World Bank also points out that one of the most effective tools in fighting corruption is counteracting the legalisation of benefits obtained through corrupt activities.

Contribution: In the Polish perspective, a positive correlation between a weaker, less operational state apparatus and the frequency of corruption will be shown.

Article classification: research article.

Keywords: corruption, World Bank, Poland.

JEL classification: D73.

Introduction

The Polish experience in combating corruption after 1989 is a relatively short one and concerns the specificity and imperfections of systemic change. The various reasons for and faces of corruption make it difficult to talk about only one level of defining and fighting corruption. When treating the phenomena of corruption particularly as a category of crime, it is possible to underestimate the social, political, and economic aspects that determine the occurrence of corruption. It seems to me that the main difficulty

in researching the phenomenon of corruption stems from its essence, consisting, as it does, of a pact concluded by the perpetrators. This pact, often concluded in an implicit way, requires the secrecy of the corrupt actions taken. The secrecy of corrupt practices causes particular difficulties in disclosing and examining them. Having the above in mind, at the outset it is worth citing at least the two of the most revealing collections of data. In the latest Corruption Perception Index (CPI), published by Transparency International on 21 February 2018, Poland ranked 36th out of 180 countries, with a score of 60 points.¹ The leaders were New Zealand,

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¹ https://www.transparency.org/news/feature/corruption_perceptions_index_2017, accessed on 8.4.2018. The Corruption Perception Index, created in 1993 by

Denmark, Finland, Norway, Switzerland, Singapore, Sweden, Canada, Luxembourg and the Netherlands. The most corrupt countries, in turn, were considered to be Somalia, South Sudan, Syria, Afghanistan, Sudan, Yemen, Equatorial Guinea, Guinea-Bissau, North Korea and Libya. And the latest Corruption Map,² published in December 2017 by the Central Anti-Corruption Bureau, shows that in 2016 Polish law enforcement agencies registered 25,968 offenses of corruption. That is the highest figure in the history of the publication of the Corruption Map, i.e. since 2007. On the one hand, this data may indicate an improvement in detection capabilities, but, on the other hand, the specificity of corruption makes us ask a question about the hidden numbers of this crime³ and the credibility of such statistics. The significance of the negative political, economic, and social consequences and costs borne because of corruption will undoubtedly motivate due attention to be paid to the need to combat it in the context of Poland. In addition to tools in the field of penal policy, including, in particular, the establishing of a specialised investigative institution (in the form of the Central Anti-Corruption Bureau), it should be effective to apply the systemic mechanisms recommended by the World Bank. This international institution, whose original official name was the International Bank for Reconstruction and Development,⁴ was established as an organisation

the non-governmental international organisation that is Transparency International, is based on research conducted since 1995 among selected representatives of countries, who assess the perception of corruption in a given country.

² <https://cba.gov.pl/ftp/pdf/Mapa%2020upup%202016.pdf>, accessed on 8.4.2018. The Corruption Map is based on the registration data of crimes in the National Criminal Information Center, created pursuant to the Act dated 6.7.2001 on the collection, processing and transfer of criminal information (Journal of Laws of 2018, item 424).

³ The dark number of crimes is understood as the difference between the number of actually committed crimes and the number of crimes for which initial information reached law enforcement agencies (Hanausek 1998, p. 265).

⁴ From the IBRD, i.e. International Bank for Reconstruction and Development.

to provide financial assistance to countries that suffered during the Second World War and to developing countries. It was also set up to co-ordinate investment activities on a global scale, in order to guarantee the best possible economic results and contribute to a balanced growth of economic exchange (Munyama, 2009, p. 144). The creation of the World Bank was the result of the United Nations Monetary and Financial Conference, which took place in July 1945 in the United States, in Bretton Woods, New Hampshire (Latoszek, 2001, p. 190). The World Bank is the largest entity in the World Bank Group, which includes the International Development Association⁵ and the International Finance Corporation⁶; associated organisations include the Multilateral Investment Guarantee Agency⁷ and the International Forum on Settlement of Investment Disputes.⁸ The term “World Bank” most often refers only to the International Bank for Reconstruction and Development, although it is also officially applied to the International Development Association mentioned above, which is its main supporting body. During the decades of its operation, the World Bank, wishing to effectively implement its statutory goals, saw that that would not be possible without the implementation of an appropriate anti-corruption strategy. This issue was officially taken into account in the 1990s.

The World Bank’s definition of corruption

The World Bank, as part of various research and assistance programs, defines corruption as abuse of office for private gain.⁹ At the same time, it focuses

⁵ From the IDA, i.e. the International Development Association.

⁶ From the IFC, i.e. International Finance Corporation

⁷ From the MIGA, i.e. the Multi-lateral Investment Guarantee Agency.

⁸ From the International Center for Settlement of Investment Disputes.

⁹ The World Bank, *Helping Countries Combat Corruption. The Role of the World Bank*. Washington 1997, typescript in the possession of the author, p. 8.

on the economic analysis of factors conducive to that (Sutch, 1999, p. 10). That consequently widens the description of the phenomenon. The economic definition of corruption according to the World Bank is based on the statement that corruption is a function of:

- 1) a procedure's high profitability,
- 2) a high degree of discretion in the decision, and
- 3) low transparency.

In this sense, corruption also refers to the state apparatus in the spheres:

- 1) of efficiency,
- 2) integrity of officials and
- 3) the monitoring and accountability of officials.

With reference to the definition of corruption, however, it should be pointed out that different and diverse approaches exist in public and academic discourse. Using the term "corruption", one should first start with a linguistic interpretation. According to the dictionary of foreign expressions and foreign-language phrases by Władysław Kopaliński, it means degradation, demoralisation, bribery, and corruptibility. The etymology of this word derives from the Latin word *corruption*, which refers to degradation and bribery. The verb *corruptere* refers to shredding, destroying, and spoiling, including moral spoiling.¹⁰ The foregoing explanation of the term corruption, although probably corresponding to the intuitive meaning thereof, is problematic. It contains both the elements of the perpetrators' actions themselves and the effects of those actions. Such a broad definition may imply misleading conclusions. Not every action leading to demoralisation or degradation, in the sense of destroying social

values, is the result of the occurrence of corruption. Not every advantage doled out to a second party can be considered an instance of corruption. An essential requirement of democracy is to give due importance to occurrences of corruption and their absolute disclosure and stigmatisation. As the World Bank's experience shows in particular, eliminating the basis of corruption is a condition sine qua non for fighting it effectively. And occurrence of certain kinds of corruption can be indirect evidence of its existence.

Instances of corruption are not only issues in the field of ethics, sociology or economics: above all, they are a category of crime,¹¹ crimes which are extremely difficult to detect and prove. The perpetrators of corruption are its only beneficiaries, who take all kinds of, often very sophisticated, measures to mask their activities from their surroundings. The particular mystery surrounding incidents of corruption is undoubtedly the distinguishing feature of this type of crime. It should be added that today acts of corruption often accompany other types of crime, such as fraud, mismanagement, abuse of power, failure to comply with obligations, disclosure of professional secrecy, untruthful certification of documents, fixing public tender or money laundering. They are also often international in nature when the perpetrators are active in more than one country. Finally, acts of corruption are also instruments used in political activities and espionage carried out in the territory of a foreign state. As Dorota Fleszer notes: "There are no rules for analysing the scope, causes and nature of corruption, common for all states and institutions dealing with this issue. Understanding this word depends both on the research perspective and on the institutions or countries that use them.

¹⁰ <http://www.slownik-online.pl/kopaliniski/0EB3CFBD1C4B3255C12565E90058616C.php>, accessed on 31.12.2017. In the Anglo-Saxon culture, analogous definitions can be found in The Oxford English Dictionary, which speaks of violating reliability in the performance of public duties through bribery or favour. As Jorge Martinez-Vasquez, Javier Arze del Granado and Jameson Boex note, other definitions develop this lexicon to indicate the role of persons performing public functions (J. Martinez-Vasquez *et al.*, 2007, p. 5).

¹¹ Crime in contemporary Polish criminal law, in accordance with the provisions of Art. 1 of the Criminal Code (Journal of Laws 1997.88.553, as amended) is defined as an act of a person which is unlawful (i.e. violating the sanctioned norm), punishable (i.e. covered by a penal act at the time of committing it), shameful (i.e. socially detrimental to a degree higher than negligible) and culpable (i.e. one for which the perpetrator can be blamed).

Otherwise, it is understood from the point of view of psychology, sociology, ethics, history or law.” (Fleszer, 2014, p. 286).

Selected definitions of corruption in scientific literature

In modern Polish academic literature one can find a wide range of definitions of corruption. For example, Kazimierz Tarchalski indicates that it is “an implicit deviation from the established order or from established norms of behaviour.” (Tarchalski, 2000, p. 9). He adds that corrupt behaviours have some necessary characteristics. It is pointless to define corruption where there is no distinction between public and private good. At the same time, there is no corruption when there is no secrecy or secrecy of exchanging benefits. Tarchalski emphasizes at the same time that there is no requirement that corruption should be interactive. It can come to fruition without an agreement with others. Andrzej Kojder, in turn, defines corruption as a “misappropriation of public resources (goods, benefits, services) or having them at one’s disposal to unlawfully obtain personal gain. Bribery, corruptibility, paid protection, nepotism, dishonest mediation, and the use of one’s position for personal (family or collegial) purposes are the most common activities of corruption today.” (Kojder, 2002, p. 234). At the same time, partly contradicting Kazimierz Tarchalski, he notes that “the most typical features of corruption are:

- 1) universality – since the time a sphere of public affairs became distinguishable, corruption has occurred in all political and economic systems;
- 2) entropy – corruption spreads – like a cancerous tissue – to areas that were not previously infected with it;
- 3) market – the price of corrupt transactions is a result of supply and demand for appropriated public resources;
- 4) interactivity – the partners of corrupt transactions are always ‘donors’ of public resources and their ‘recipients’. Usually, they are guided by

the motivation to achieve maximum personal benefits and a common desire to minimize the risk that the concluded corrupt transaction will be uncovered.” A slightly different view is proposed by the authors of a handbook edited by Janina Filek, in whose opinion “corruption is: first of all bribery, which results in government orders, contracts, receiving concessions, amending court decisions or repealing customs duties, tax and other duties; secondly, theft, i.e. conscious, unlawful disposition of budgetary and property funds which are a public good; thirdly, favouritism, protection, nepotism, cronyism; fourthly, buying influence (e.g. financing elections or political parties in exchange for obtaining influence)” (Filek, 2004, p. 42). Zbysław Dobrowolski states that corruption is an “illegal activity consisting of taking advantage of a privileged position for obtaining economic or political benefits, manifesting itself in placing private interest over public” (Dobrowolski, 2001, pp. 13–14). Zbigniew Rau defines corruption as instances where “a worker of a state or social institution receives or requests material or personal benefits in exchange for performing an official function or breaking the law” (Rau, 2002, p. 66). Antoni Z. Kamiński defines corruption “understood as bribery and embezzlement, in terms of the symptom of the problem of weakness in political culture, which causes inefficiency in political institutions” (Kamiński, 1997, p. 3).

A multitude of perspectives on this issue can also be found in the writings of contemporary authors from outside Poland. According to Samuel P. Huntington’s definition, corruption is the behaviour of government officials departing from acceptable standards in order to obtain private benefits (Huntington, 1968, pp. 59–61). It is also a phenomenon that occurs in varying intensity, at different times, in different cultures. At the same time, it is an element inseparably associated with modernisation, with the historical development of societies. In his considerations, Samuel P. Huntington stressed that the term corruption applies

only to regimes where there is a distinction between public and private interest. For example, it is difficult to talk about corruption in regimes where the monarch has power over the whole state. Going further, it should be noted that debate about corruption is pointless in non-democratic states. These regimes are characterised by the power elite appropriating the state and are, by their very nature, fundamentally corrupt. Returning to his insights, Huntington pointed out that corruption can also be described as a product of the distinction between the public and private good that comes with modernisation. Ian Senior, in turn, defines corruption by pointing to the necessary conditions that at the same time must be implemented in order to speak about its existence. According to this scholar, a briber must, in a non-transparent manner, provide the one being bribed or some third party a benefit to obtain a benefit for himself/herself or a third party who falls under the authority of the corrupted entity (Senior, 2006, p. 26). The service may be a good or a service. At the same time, it must present a positive value for the recipient. By the same token, psychological or physical coercion cannot be equated with obtaining benefits and the occurrence of corruption. Petrus C. van Duyne made an original attempt to define corruption based on a behavioral criterion (Nowak, 2008, p. 5). He perceives corruption as dishonesty or weakness that is a part of the decision-making process. In this approach, the perpetrator agrees to deviating or demands deviating from the criteria that should guide the decision-making process in return for a benefit or the promise thereof. The work of Carl J. Friedrich may be used as a summary of the above considerations. He stated that any attempt to analyse the concept of corruption must take into account that in each language the term has a history of wildly diverse meanings and connections. (Friedrich, 2002, p. 15). Nevertheless, it is possible to distinguish from a number of definitions of corruption, of its specific core. It is any behaviour that deviates from the norms currently dominating or recognised as dominant in a specific context. Moreover, according to Carl J. Friedrich, this behaviour is associated

with a situation in which private profit is achieved at the expense of a significant public good.

In the literature on the subject, and thus in the public debate, the tendency to broadly define corruption certainly predominates, mainly based on ethical imperatives, without strict reference to legal norms. The reason for this state of affairs probably arises from the fact that the phenomenon of corruption is inseparably connected with the existence of any state organization, (A. Z. Kamiński & B. Kamiński, 2004, p. 15), i.e. since the emergence of the first political structures and the use of public posts for private purposes (Czepil, 2015, p. 15). Thus, moral and not legal norms were the primary tools for combating it. The term corruption itself was not traditionally a legal language in the sphere of criminal legislation. (Nowak, 2008, p. 1).

The need to fight corruption

It should be emphasised that in addition to the above-mentioned definitions of corruption there are parallel and narrower or wider interpretations of this phenomenon. First of all, there is an intuitive understanding of the term. Simply put, corruption is most often perceived as drawing personal benefits from a public function, (Tarchalski, 2000, p. 9) and thus as a form of abuse of power. There is no doubt that just as there is no single, fully clear, and comprehensive definition of corruption (Filek, 2004, p. 9), it is difficult to point to a specific, concrete remedy to stop it.

The need to fight corruption stems from its destructive impact on the social, political, and economic life of the state and its citizens. From Kazimierz Tarchalski, it can be noted that the main consequences of corruption in the moral and cultural dimensions are primarily the decline in ethical standards of society and the disappearance of mutual trust between people participating in the social and economic market and the reduction of social capital, and ultimately the emergence of a “neo-tribal culture”, understood as division of societies according to group loyalty and acting

only in self-interest (Tarchalski, 2000, p. 54). In political terms, corruption is a denial of the idea of democratic equality of citizens in the face of the law (Dobrowolski, 2001). As to its economic repercussions, it can be stated most generally that it especially causes the depletion of state revenues, which in turn may lead to an increase in fiscal burdens. Going forward, some specialists such as Helen Sutch talk about four types of economic costs stemming from corruption (Sutch, 1999). The first are fiscal costs on a macro scale, which results from the loss of revenues from taxes and proceeds from privatisation, which in turn leads to excessively high expenditure, by increasing the prices of goods purchased by state administrators. The second are those related to the reduction of investment and economic growth. These indicators are lower in countries where the level of corruption is higher. The third type that can be distinguished are the social costs that most affect the poorest citizens. They are the result of the need to provide benefits to settle anything. The fourth and final type according to Sutch is the cost included in terms of cynicism and trust in public institutions or the state itself. Lack of societal subordination and identification with the idea of the state weakens the effectiveness of the fiscal apparatus. Summing up, it should be noted that the ultimate result of corruption is the undermining of trust in public institutions, which may even lead to undermining the legitimacy of the state (Dobrowolski, 2004, p. 8).

Good governance

Returning to the World Bank's experiences in the field of combating corruption, it should be pointed out that the starting point is the term "good governance". Its application took place for the first time by the World Bank when implementing support programs in the early 1990s (Rutkowski, 2009, p. 9 *et seq.*). With the collapse of the communist world in Europe and the transition of the Cold War order into historical memory, the institution has noticed that the effectiveness of its assistance is in close

correlation with the state of societies and countries concerned. Therefore, the term initially referred to the level of efficiency of the state administration in the scope of using financial aid from World Bank resources; the key issue was the ability of individual states to absorb aid money. With time, "good governance" came to include further political and economic factors. When speaking of "good governance", the following indicators should be taken into account: the voice and accountability of the governing power; political stability and non-violence; effective government; regulatory quality; the rule of law; and limiting corruption. The voice and accountability of the governing power is determined by the World Bank by how it implements democratic freedoms, including, in particular, the scope of civil liberties and democratic elections. Political stability and non-violence, on the other hand, refer to the continuity of democratic processes and to the state's degree of security, both internal and external, for its citizens. The effectiveness of governance concerns the correlation between a weaker, less efficient state apparatus and the more frequent phenomenon of corruption (Runde *et al.*, 2014). Regulatory quality is perceived by the World Bank through the prism of legal regulations created and implemented through appropriate channels, especially in relation to the private sector (Rutkowski, 2009, p.17). Going further, "good governance" is also the rule of law, understood as respect for civil rights, in particular, respect for property and economic freedoms. Finally, the corruption reduction index mainly affects the risk-perception of corruption. The experience of the World Bank clearly shows that where there is "good governance", corruption is limited. Furthermore, it can be stated that corruption is where the norms of a well-governed, well-functioning state are being violated (Fjeldstad & Isaksen, 2008). Here it is worth emphasising that the fight against corruption while maintaining the requirements of "good governance" is fraught with the basic difficulty resulting from the objective need to trust people who perform public functions (Soreide, 2014). In fact, it depends on the ethical

quality of public employees whether corruption will occur. Corruption often takes the form of extortion, understood as a solidification of conviction among citizens that without a gratifying a certain person performing a public function, it will not be possible to settle one's case. This ultimately results in reducing the role of an official to a profitable, cynical player who will abstain from carrying out his/her tasks until he/she receives a satisfactory gratification from the petitioner. The experience of the World Bank indicates that the factors that contribute to the fulfilment of this type of dependence are primarily the lack of moral backbone in public employees. This is particularly the case in countries with a fragile statehood and is also dependent on historical and cultural factors.¹² Another reason is also a low probability of detecting corrupt practices, as well as low risk of punishment and conviction (Martinez-Vasquez *et al.*, 2007, p. 80 and further). Thus, in the absence of moral dilemmas, if weighing profits and potential losses encourages an act of corruption, it is highly probable that the appearance thereof is only a matter of "price". In this context, the next factor conducive to bribery will be inadequate remuneration for the tasks faced by decision-makers. The frustration caused by financial undervaluing on the part of the employer in the long-term view gives rise to a lack of identification with the performed function and results in unscrupulous opportunities to "add" to one's salary. The World Bank's analyses see yet another important component motivating corrupt behaviour. It is the scope of official recognition, which is in particular clearly visible in the complexity of tax systems, which give rise to opportunities to look for ways to avoid fiscal obligations. In conclusion, the postulate of "good governance" can be said to emphasise the need for democracy, the effectiveness of governments, and economic development to complement each

¹² Bartosz Czepil in "Cultural and institutional barriers of corruption in the Scandinavian countries" indicates even the local democracy of the Viking Age as the germ of the egalitarian culture resulting in the implantation of a permanent pro-state attitude in Scandinavian societies.

other. The interplay of these components reduces the opportunity for corruption, which in itself is a symptom of state weakness and "bad governance".

World Bank guidelines on combating corruption

When conducting its activity, the World Bank places expectations on beneficiaries that the loans granted are effectively used for the economy. The solutions proposed by the World Bank can be spelled out in the following guidelines for governments. In countries where the level of corruption is high, the first steps should be to introduce the rule of law, strengthen horizontal control institutions (such as courts or parliaments), and strive to reduce state intervention (Fjedstadt & Isaksen, 2008, p. 16). In such countries, other measures will not work, due to the weakness of the state apparatus and the tendency towards politicisation. In turn, steps taken by countries with an average level of corruption should be adequate for effective government. The Bank proposes decentralising the administration, simplifying administrative procedures, and limiting regulation, which is understood as imposing on citizens requirements to obtain permits or any kind of consent from state authorities. Moreover, it is advisable to increase the responsibility and accountability of officials as part of their public functions. In countries with a relatively low level of corruption, the World Bank recommends the creation of specialised anti-corruption institutions. In well-functioning countries there is no danger that they will become a weapon of any current political struggle. In addition, educational activities that increase social awareness of problems arising from corruption are important. It also requires placing emphasis on raising the qualifications of public officials in this field (The World Bank, 1997, p. 39). The experience of the World Bank indicates that well-functioning control institutions and anti-corruption institutions are an important element strengthening the state apparatus, especially the corps of civil servants. In addition, they enhance financial discipline and

responsible economy, both at the central and local level. Thus strengthening the rule of law is also achieved. All the while, the overall transparency of how the state apparatus functions, which in turn favours the creation of a civil society that holds power accountable, increases.

The World Bank also points to the need for macroeconomic and sectoral reforms that will result in increased marketisation while reducing fiscalism. It should be mentioned here that the actions are aimed at reducing barriers, especially customs, in international trade and thus stimulating free-market competition. Going forward, the World Bank recommends limiting price controls and limiting subsidies for economic entities by the state. This should be introduced with the simultaneous privatisation of hitherto state-owned sectors. It should be noted that these guidelines correspond to the general political assumptions held by the World Bank's policy and have therefore undergone various criticisms. The overwhelming desire to limit barriers to the free market, in the context of perceiving corruption as a phenomenon related to the "struggle for access to resources" (Soreide, 2014), seems understandable. Critical voices, however, point out that such a policy is nothing more than an interference in the economic policies of states, imposed as the only legitimate, liberal lens (Polzer, 2001). However, such argumentation does not seem to apply to the World Bank guidelines themselves regarding the problem of corruption, but rather is a criticism that the Bank provides assistance according to the criteria imposed by it (Dobrowolski, 2001). In its aid projects, the World Bank requires borrowers to abide by public procurement rules, competitiveness, and transparency. In this respect, the goal is to increase the competence of beneficiaries. Some assistance programs are also oriented directly towards anti-corruption projects. Such as implemented taking into consideration the Bank's experience with operations in countries with a weak, inefficient administrative apparatus. This indicates that in such countries the political will to fight corruption is often focused only on selective action.

What's more, it is also unstable. As time goes by, political enthusiasm drops. In addition, the economic resources of countries with a weak administrative apparatus are usually insufficient. The implementation of anti-corruption measures in them therefore requires a long period of time (Fjeldstad & Isaksen, 2008).

Fiscal policy is another key aspect in limiting opportunities for corrupt behaviour. The factors that create the possibility of their occurrence, according to the World Bank, is the lack of comprehensive supervision over tax administration. This is especially facilitated by the complexity of tax systems. As a result, this leads to an increased spectrum of discretion in the activities of tax officials (Martinez-Vasquez *et al.*, 2007). The effects of this state of affairs are all the more severe the more politicised public officials responsible for the range and collection of taxes are. The World Bank's recommendations speak first of all about the need to increase the level of ethical fiscal administration. This should be done in particular through educational activities such as trainings and conferences aimed at developing a uniform model of behaviour towards taxpayers. In post-communist countries such as Poland, it also seems particularly important to promote ethical behaviour among citizens themselves. It should be noted that the oppressiveness of totalitarian regimes naturally established social resistance to the administrative apparatus. Thus, the behaviour of "cheating" officials of the hated state was widely regarded as something done by "decent men" for decades. Submission to authority could be construed as collaborating with the authorities. At the same time, it should be pointed out that the heritage of the communist system based on the apparatus of the police state was the creation of specific social capital (Zybertowicz, 2002, p. 174); a large part of the ruling class functioning after the fall of communism (understood as an undemocratic economic, social, and political system) was entangled in informal arrangements having their roots in a bygone era, and resulting from the activities of special services and their agents.

The secretiveness of these connections made it more difficult to detect corrupt behaviour in such an environment. The World Bank clearly indicates that reducing the motivation to accept or provide undue benefits is directly related to increasing effective detection (Martinez-Vasquez *et al.*, 2007). It is the fear of revealing corrupt behaviour and punishing it that is the most effective disincentive against taking such actions. Impunity, on the other hand, is the driving force thereof. One of the most effective tools for combating corruption is to counteract the legalisation of benefits obtained through corrupt activities. In particular, the World Bank mentions the obligatory submission of declarations of assets by persons holding public functions. For example, an experience, presented as a model for fighting corruption, and in the unfavourable historical and social conditions of Hong Kong, indicates that this requirement should be developed for family members of a given official. It significantly impedes camouflaging the reception of undue funds that are transferred to family members. The public disclosure of property declarations allows us to examine changes in the property status of persons discharging public functions and, therefore, to check whether those are not the result of bribery. The roles of not only state institutions appointed to prosecute crimes but also the media or non-governmental organisations are important. Indeed, independent public opinion may raise doubts as to the veracity of the official's statements or even force the indication of the origin of the revenues obtained. An important caveat is that the media itself should be financially independent and thus not subject to political influence (Senior, 2006). The experience of the World Bank clearly shows that a great problem in the fight against corruption is the tendency of the justice system to apply a protective umbrella over persons performing public functions and accused of corruption (Martinez-Vasquez *et al.*, 2007). As a result, the income statement for an official who faces a corrupt offer is such that, with the low likelihood of incurring severe criminal liability, and if ethical dilemmas are rejected, it pays to accept such an offer. The results of analyses

carried out under the auspices of the World Bank clearly show that the changes described above in how the administration of the state functions should go hand in hand with severe punishment for corrupt acts. There is, after all, no discrepancy between preventive solutions and those related to the execution of criminal liability.

The experience of the World Bank clearly shows that the fight against corruption is essential for the proper social and economic development of countries. Without it, one should expect that corruption will gradually decompose state structures and replace them with various informal structures of mutual connections and dependencies between persons performing public functions and groups of influence. At the same time, the macroeconomic stability of the economy will be systematically affected by the loss of income from tax receivables (The World Bank, 1997, p. 18). What's more, without fighting against corruption, it is impossible to control state expenditures, because they will be wasted and will not be directed towards set goals. This also applies to foreign investments. In microeconomic terms, corruption raises the costs of running a business and therefore inhibits competitiveness and the scope of investment by firms. Ultimately, the World Bank's analyses show unequivocally that the poorest social strata are the most affected by the effects of corruption. They are excluded from access to public services because the costs associated with the need to pay even small bribes are unsustainable in the long term.

Combating corruption: the Polish perspective after 1989

With reference to the above, it seems appropriate to look from the perspective of more than 25 years of Polish transformation whether the instruments for combating corruption recommended by the World Bank seem feasible in our country. While there has been a significant change in the functioning of the economy, it is still doubtful whether the criteria of "good governance" and

the postulated solutions to limit corruption are met. It should be noted that the World Bank's guidelines concerning corruption underline justice and the rule of law as the core remedy for the phenomenon of corruption. As Emilia Justyna Powell observes: "Many academic studies [...] underestimate the role of courts, prosecutors and law enforcement agencies in preventing and combating corruption. Factors such as economic development, corruption culture, political system and fundamental freedoms certainly have a significant impact on the level of bribery, however, minimising or disregarding the role of prosecution and law in general is a misunderstanding" (Powell, 2007, p. 30). In this context, one cannot fail to identify the weakness of Polish criminal policy. The numbers are telling: as of the time of writing 91 amendments have been made to the Penal Code of 1997.¹³ Along with the astonishing number of 133 amendments that have been made so far to the Code of Criminal Procedure,¹⁴ including one temporarily changing the model of the Polish criminal process in general, those testify to a persistent instability and, consequently, handicaps with regard to prosecuting crime. If crimes of corruption are brought to light, the excessive length of criminal proceedings would be a big problem. For example, according to the statistics of "Length of court proceedings (its efficiency) from the date of first registration to the date of validation of the case in the first instance (including the length of mediation) in district courts in selected categories of cases in the first half of 2017",¹⁵ out of 2,812 criminal cases, as many as 728 lasted for more than six months. This is just over a quarter of all cases. Of those, 149 criminal cases lasted

between 12 months and 2 years, 40 between two and three years, 36 between three and five years, and 38 between five and eight years. There were also 36 cases that lasted longer than eight years. Most notable, however, is the gentleness with which Polish courts treat those accused of corruption. In the case of conviction, the most common sentence is imprisonment with a conditional suspension of execution thereof. For example, between 2012 and 2014 such a penalty was given in 88% to 90% of judgments.¹⁶ This trend has been constant over the years. As one can see, the real shortcoming in the case of convicting people for corruption is only illusory. Thus, in rejecting moral imperatives, taking into account only one's profits and losses, committing such offenses is, in principle, profitable in Poland. In the scope of the existing Polish legal regulations, it should also be stated that there is a lot of resistance from some professional circles performing public functions against a broad disclosure of submitting declarations of assets. What is more, the heterogeneity of regulations in this area and their complexity effectively hinder the actual criminal liability of persons making false property declarations. In addition, the design of the provision of Art. 233 para. 1 k.k. (penal code) providing for the penalisation of such an act requires proving intentionality (Marek, 2007, p. 441), which is problematic, given the above-mentioned complexity of regulations and heterogeneity of case law. In practice, this allows the perpetrator to evade any criminal liability by adopting as a defence the assertion of inadvertently submitting a false property declaration. A particular weakness in Poland is the lack of meritocracy, understood as a model of governing a state in which clear rules of functioning prevail, and, above all, to a minimal extent, there are politically motivated nominations, not in terms of professionalism (Sutch, 1999). A dramatic discontinuity in civil service legislation could especially serve as an illustration of such a state, which should be just

¹³ <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19970880553>, accessed on 28.4.2018.

¹⁴ <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19970880553>, accessed on 28.4.2018.

¹⁵ Ministry of Justice, Basic information on the activities of common courts – the first half of 2017 against the background of previous statistical periods, Warsaw 2017, typescript of studies in the possession of the author, p. 23.

¹⁶ https://cba.gov.pl/ftp/pdf/Mapa_Korupcji_2014.pdf, accessed on 28.4.2018.

a guarantee of the professionalism and impartiality of the highest state officials. Only the first act on this matter, after 1989, was the Act dated 5 July 1996.¹⁷ It reactivated the civil service, created an apolitical idea of the Civil Service Council, three recruitment and HR committees, and the organ of the Civil Service Head, together with the Office of the Civil Service. However, above all it set out the institutional framework for creating an apolitical state apparatus. But just two years later a completely new law on the civil service, dated 18 December 1998, came into effect.¹⁸ That law diametrically changed the previously accepted solutions in the subjective scope of the concept. It also allowed for an exceptional competitive admission for non-civil servants. The next law, dated 24 August 2006,¹⁹ together with a law on the state's staffing pool, made an unprecedented trimming of the civil service corps. It also liquidated the Office of the Head of the Civil Service and the body of the Head of the Civil Service. By 21 November 2008, the Sejm [the Polish parliament] had passed yet another law on the civil service,²⁰ which was to a great degree a repetition of solutions from 1998. However, the restoration of the Office of the Head of the Civil Service was abandoned, replaced by the Chancellery of the Prime Minister. In turn, the latest amendment to the Civil Service Act, which entered into force on 23 January 2016,²¹ made fundamental changes in the principles of employment in higher positions of the civil service. It also liquidated the Civil Service Council, creating in its place the Public Service Council. It is not difficult to notice that the above-mentioned changes corresponded with changes in Poland's political scene and were even a result thereof. This is proof of the instrumental treatment of the Civil Service by governmental authorities. An even more significant example of how the attempt to create an apolitical and professional state apparatus

is lacking, in another key sector of the country, are the constant changes in managerial positions in the special services. The most important²² Polish civilian special service, nowadays called the Internal Security Agency, and previously the State Protection Office, had as many as 18 heads between 1990 and 2015.²³ This momentous fact does not seem to require a wider commentary. The aforementioned lack of meritocracy results, to a large extent, from the totalitarian legacy of communism, in which the state apparatus was identical with the party. Moreover, it is compounded by the lack of systematically coming to terms with the past era and making it impossible for the representatives of the old nomenclature to function in public space. At the very beginning of the creation of the Third Republic the democratic system was perverted by sanctioning the gigantic advantage of post-communist parties in the organisational and financial sectors. This problem was presented in detail and analyzed by Antoni Dudek in the book *Reglamentowana rewolucja* [Regulated revolution]. (Dudek, 2004). In particular, leaving property to these groups at the beginning put them in a privileged position in relation to the newly formed post-Solidarity groups. This clearly undermined the basic requirement of democracy, which is equal opportunity to take part in the political scene (Krasowski, 2012, p. 347). If we add the omnipotence of the former communist secret services, the most striking example of which was the Foreign Debt Service Fund (Cenckiewicz, 2011, p. 351 *et seq.*), or the activities of the Military Information Services as described in the Verification Commission report,²⁴ for Władimir Bukowski an especially

²² Because of counterintelligence competences.

²³ <https://www.abw.gov.pl/pl/o-abw/kierownictwo/278,BYLI-SZEFOWIE-UOP-I-ABW.html>, accessed on 28.4.2018.

²⁴ Report on the activities of soldiers and employees of the WSI and military organisational units carrying out tasks in the field of intelligence and military counter-intelligence before the entry into force of the Act dated 9 July 2003 on the Military Information Services in the scope specified in Art. 67 para. 1 items 1–10 of the Act dated 9 June 2006 "Provisions introducing the Act on the Military

¹⁷ Dz. U. 1996.89.402.

¹⁸ Dz. U. 1999.49.483.

¹⁹ Dz. U. 2006.170.1218.

²⁰ Dz. U. 2008.227.1505.

²¹ Dz. U. 2016 item 34.

accurately definition of the political system in Poland after 1989 was “kleptocracy” (Bukowski, 1999, p. 688). It is a system in which the political and economic elites to a large extent turn out to be an old nomenclature, having overwhelming control over the instruments of socio-economic life. At the same time, as Wojciech Roszkowski remarks, “Recovered freedom caused [...] numerous problems. Most of society, accustomed to various limitations, was not ready to accept those that resulted from the principles of social co-existence, treating those as a result of persecution by individuals or groups of opposite beliefs. In the ideological confusion, the hierarchy of values was mixed, often denying it at all” (Roszkowski, 2017, p. 508). James Dawson and Sean Henley, in their article “Poland Was Never as Democratic as It Looked”, published in the pages of *Foreign Policy*,²⁵ point to the facade of Polish democracy stemming from the lack of democratic ideas really taking root in Polish society. With reference to the recommendations of the World Bank, in this context one should count on a generational change that will make possible the implementation of the rules of “good governance” and the fight against corruption, distant from the baggage of the PRL era. One of the key conclusions resulting from the experience of the World Bank is the need for patience and persistence in the systemic implementation of changes.

References

- Bukowski, W. (1999). *Moskiewski proces: Dysydent w archiwach Kremla*. Warszawa: Bertelsmann Media.
- Counterintelligence Service and the Military Intelligence Service and the Act on the service of officers of the Military Counterintelligence Service and the Military Intelligence Service” and about other activities going beyond the matters of state defense and security of the Armed Forces of the Republic of Poland, M. P. 2007.11.110.
- ²⁵ <http://foreignpolicy.com/2017/01/03/poland-was-never-as-democratic-as-it-looked-law-and-justice-hungary-orban/>, accessed on 28.4.2018.
- Cenckiewicz, S. (2011). *Długie ramie Moskwy. Wywiad wojskowy Polski Ludowej 1943–1991*. Poznań: Zysk i S-ka.
- Czepil, B. (2015). *Kulturowe i instytucjonalne bariery korupcji w państwach nordyckich*. Opole: Wydawnictwo Uniwersytetu Opolskiego.
- Dobrowolski, Z. (2001). *Korupcja w życiu publicznym, międzynarodowe doświadczenia w zwalczaniu korupcji, korupcja w Polsce*. Zielona Góra: Organon.
- Dudek, A. (2004). *Reglamentowana rewolucja. Rozkład dyktatury komunistycznej w Polsce 1988–1990*. Kraków: Znak.
- Filek, J. (2004). Rola etyki w działalności samorządowej. In J. Filek (Ed.), *Etyczne aspekty działalności samorządu terytorialnego*. Kraków: Małopolska Szkoła Administracji Publicznej Akademii Ekonomicznej w Krakowie.
- Fjeldstad, O., & Isaksen, J. (2008). *Anti-corruption reforms: challenges, effects and limits of World Bank support*. Washington DC: The World Bank.
- Fleszer, D. (2014). Z problematyki korupcji w administracji publicznej. In A. Kamińska, E. Kraus, K. Ślęczka (Eds.), *Jak możliwy jest dialog? Księga Jubileuszowa dedykowana prof. WSH dr. Jerzemu Koplowi*. Sosnowiec: Humanitas.
- Friedrich, C.J. (2002). Corruption concepts in historical perspective. In A. Heidenheimer, M. Johnston (Eds.), *Political Corruption: Concepts & Contexts*. New Jersey – New Brunswick: Transaction Publishers.
- Hanausek, T. (1998). *Kryminalistyka. Zarys wykładu*. Kraków: Zakamycze
- Huntington, S. P. (1968). *Political order in changing societies*. New Haven – London: Yale University Press.
- Kamiński, A. Z., & Kamiński B. (2004). *Korupcja rządów: państwa pokomunistyczne wobec globalizacji*. Warszawa: Wydawnictwo Trio.
- Kamiński, A. Z. (1997). Korupcja jako symbol instytucjonalnej niewydolności państwa i zagrożenie dla rozwoju polityczno-gospodarczego Polski. *Zeszyty Centrum im. Adama Smitha*, 29, 3–32.
- Kojder, A. (2002). Korupcja i poczucie moralne Polaków. In J. Mariański (Ed.), *Kondycja moralna społeczeństwa polskiego*. Kraków: Wydawnictwo WAM.
- Krasowski, R. (2012). *Po południu. Upadek elit solidarnościowych po zdobyciu władzy*. Warszawa: Wydawnictwo Czerwone i Czarne.
- Latoszek, E. (2001). Bank Światowy jako instytucja globalna o charakterze finansowym. In: E. Latoszek,

- M. Porczek (Eds.), *Organizacje Międzynarodowe. Założenia, cele, działalność*. Warszawa: Elipsa.
- Marek, A. (2007). *Kodeks karny. Komentarz*. Łódź: Wolters Kluwer.
- Martinez-Vasquez, J., Arze del Granado, J., & Boex, J. (2007). *Fighting corruption in the public sector*. Amsterdam – Oxford: Elsevier Science.
- Ministry of Justice (2017). *Basic information on the activities of common courts, the first half of 2017 on the background of previous statistical periods*, Warsaw.
- Munyama, K. (2009). Istota inicjatywy MFW i Banku Światowego na rzecz zmniejszenia zadłużenia krajów najbiedniejszych. *Roczniki Ekonomiczne Kujawsko-Pomorskiej Szkoły Wyższej w Bydgoszczy*, 2, 143–152.
- Nowak, C. (2008). *Korupcja w polskim prawie karnym na tle uregulowań międzynarodowych*. Warszawa: C. H. Beck.
- Polzer, T. (2001). *Corruption: deconstructing the World Bank discourse*. London School of Economics Working Paper Series, No. 01-18, 1–24.
- Powell, E. J. (2007). Zwalczanie korupcji z perspektywy USA. *Prokuratura i Prawo*, 1, 27–35.
- Rau, Z. (2002). *Przestępczość zorganizowana w Polsce i jej zwalczanie*. Kraków: Zakamycze.
- Roszkowski, W. (2017). *Historia Polski 1914–2015*. Warszawa: Wydawnictwo Naukowe PWN.
- Runde, D. F., Hameed, S., & Magpile, J. (2014). *The costs of corruption: strategies for ending tax on private-sector-led growth*. Washington: The Center for Strategic & International Studies.
- Rutkowski, M. (2009). Bank Światowy a poprawianie jakości rządzenia w zmieniającym się świecie. Sytuacja Polski i wyzwania kryzysu gospodarczego. *Zarządzanie Publiczne*, 3(9), 69–79.
- Senior, I. (2006). *Corruption – the world's big C: cases, causes, consequences, cures*. London: The Institute of Economic Affairs.
- Sutch, H. (1999). *Strategia walki z korupcją – teoria i praktyka*. Warszawa: Fundacja Naukowa CASE – Centrum Analiz Społeczno-Ekonomicznych.
- Soreide, T. (2014). *Drivers of corruption*, Washington: The World Bank.
- Tarchalski, K. (2000). *Korupcja i przywilej. Zarys teorii i praktyki*. Warszawa: Wydawnictwo Naukowe Semper.
- The World Bank (1997). *Helping countries combat corruption: the role of the World Bank*. Washington: The World Bank.
- Zybertowicz, A. (2002). Demokracja jako fasada: przypadek III RP. In E. Mokrzycki, A. Rychard, A. Zybertowicz (Eds.), *Utracona dynamika? O niedojrzałości polskiej demokracji* (pp. 173–214). Warszawa: Wydawnictwo IFiS PAN.

Official Journals

- Dz. U. 2018, item 424
 Dz. U. 1997.88.553
 Dz. U. 1996.89.402
 Dz. U. 1999. 49.483
 Dz. U. 2006.170.1218
 Dz. U. 2008.227.1505
 Dz. U. 2016 item 34
 M. P. 2007.11.110

Internet sources

- https://www.transparency.org/news/feature/corruption_perceptions_index_2017, accessed on 8.4.2018.
- <https://cba.gov.pl/ftp/pdf/Mapa%20korupcji%202016.pdf>, accessed on 8.4.2018.
- <http://www.slownik-online.pl/kopalinski/0EB3CFB-D1C4B3255C12565E90058616C.php>, accessed on 31.12.2017
- <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19970880553>, accessed on 8.4.2018.
- <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19970880553>, accessed on 8.4.2018.
- https://cba.gov.pl/ftp/pdf/Mapa_Korupcji_2014.pdf, accessed on 8.4.2018.
- <https://www.abw.gov.pl/pl/o-abw/kierownictwo/278,BYLI-SZEFOWIE-UOP-I-ABW.html>, accessed on 8.4.2018.
- <http://foreignpolicy.com/2017/01/03/poland-was-never-as-democratic-as-it-looked-law-and-justice-hungary-orban/>, accessed on 8.4.2018.

Guidelines for Authors

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The articles must be prepared **with accordance to our technical requirements** and taking our academic ethics code into account. We will reject submissions not prepared according to our requirements.

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Please read the EASE file carefully before your submission!
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All submitted manuscripts should not exceed the recommended size in accordance with established rules:

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1. Papers should be presented in **clear, concise English**. Articles written in poor English will be rejected immediately (and will not accepted even for the review process).
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Divide your article into clearly defined sections in the following format:

Research articles	Theoretical articles
<p>1. Introduction State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.</p>	
<p>2. Literature review or 2. Literature review and hypotheses development A literature survey, revealing all important authors dealing with the topic of the article.</p>	<p>2. Material and methods – including goals, and research methods. Provide how the literature was selected to analysis. Methods of analysis should be described.</p>
<p>3. Material and methods – including goals, hypothesis and research methods. Provide sufficient detail to allow quantitative research to be replicated. Methods already published should be indicated by a reference: only relevant modifications should be described.</p>	<p>3. Literature review and theory development A very detailed literature survey, revealing all important authors dealing with the topic of the article.</p>
<p>4. Results and discussion Results should be clear and concise. Discussion should explore the significance of the results of the work, not repeat them.</p>	<p>4. Discussion Discussion should explore the significance of the results of the work, not repeat them.</p>
<p>5. Conclusions – including research limitations and recommendations for future research.</p>	
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Authors must supply a **structured abstract** on the **Article Title Page**, set out under the following sub-headings:

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- **Article Classification:**
 - Research article
 - Theoretical article:
 - Conceptual article
 - Original literature review
- **Keywords** (at least 5, maximum 7 words)
- **JEL classification:** at least one code (e.g. F22)
For JEL codes please visit: <http://www.aeaweb.org/jel/guide/jel.php>

The title, authors, abstract together with the suggested citation cannot take more than one page, please pay a special attention to fit it to one full page.

Technical Issues

Text

1. **Bullets and Numbering** are accepted only in two formats:

<i>Bullets:</i>	<i>Numbering:</i>
– Poland,	1. Poland,
– UK,	2. UK,
– USA,	3. USA,
– Scotland.	4. Scotland.

Use comma (,) after each line of bullets/numbering, and dot (.) after the last one. In most cases please use bullets instead of numbering!

Use each line with the small letter:

<i>Bullets:</i>
– There are three factors (Smith, 1999, p. 2):
– education,
– training,
– consulting.

For full sentences, use (.) after each line and start with the capital letter.

Numbering:

Following Smith (2014, p. 22) we applied the following procedures:

1. Execution of the significance test for individual random effects, allowing to choose between the pooled model, and the model with fixed effects (FE).
2. Execution of the BP test, allowing to choose between the pooled model, and the model with random effects (RE).
3. Execution of the Hausman test, allowing to choose between the FE model and RE.

Please remember to provide with references for each bullets and/or numbering before, not after them!

Other Editorial Requirements

2. Non-English words (including Latin) should be in *italics*.
3. Authors are requested to limit formatting commands to **bold** to the necessary minimum.
4. Authors are requested **not** to use underline words at all
5. To enclose a quotation use single quotation marks, so use ‘quotation’ not “quotation”.
6. Commas and periods go outside closing quotation marks.
7. Please, use high and honest standards for authorship!
 - a. If you are referring to the literature you haven’t reached directly and have read it somewhere else, please mention where it was quoted originally: e.g. (Smith, 1976, p. 22) as cited in (Lincoln, 2012, p. 12)
 - b. Please refer to the particular author of the chapter in edited books! Don’t quote the editor of the book, but the particular author of the text you are referring to!

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Data Sources:

8. Please remember to provide with the detailed source for each data you refer to!
e.g. The population of Poland is 38 533 299 inhabitants (GUS, 2014, p. 4).
9. Never use general source (e.g. Eurostat), but make it as detailed and clear as it is possible, (GUS, 2014, p. 4); (Eurostat, htec_trd_tot4) – where ‘htec_trd_tot4’ is the code – used by Eurostat – to identify the exact data you refer to.

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10. Only **Latin characters** are accepted in both – the main text and the **list of references!**
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See: <http://www.loc.gov/catdir/cpsd/roman.html>

Original language		Latin alphabet (to be used in the article)
Japanese	経済学	Keizai-gaku
Russian	Предпринимательство	Predprinitatel'stvo
Ukrainian	Підприємництво	Pidpriemnytstvo

Graphics and Tables

1. All Tables/Figures should be numbered in Arabic Numerals (Table 1) and should appear in the body of the manuscript (Figure 1).
2. Please number all figures as Figure 1, Figure 2 etc. (don't use different names for graphs, schemes, maps, diagrams, charts, line drawings, etc.)
3. Tables/Figures should have their titles according to the rule ‘**What/Who + where + when**’ (e.g. **Table 1. Inflation rate in the European Union in the years 2004–2010**).
4. All table numbers and titles should appear above each table.
5. The numbers, titles of sources of all figures should be provided below each figure.
6. Tables/Figures should be **editable**, Tables must be prepared in MS Word (file format: doc or docx) and MS Excel (file format: xls orxlsx). Figures should **be editable** (MS Visio, Corel Draw, MS Word Drawing Module).
7. Tables/Figures should fit the Journal page – they cannot exceed the size **15.0x21.00 cm (150x210 mm)**
8. At the bottom of each Table/Figure should be indicated the source from which it was taken, or information that it is developed by author.

For your own original ideas and concepts:

Source: own elaboration.

Source: own study.

If you based your concept on the work of other authors:

Source: own elaboration based on ...

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Source: own compilation based on ...

Source: own calculations based on Eurostat data available at

If you slightly changed the original table please indicated that it is your adaptation:

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9. Always mention the measures (e.g. in %, in USD).
10. For empirical surveys always provide the sampling size (e.g. $n = 650$)
Please note, that we use N for the whole population and n for the sample.
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 - b. Other graphics: source file (MS Visio, Corel Draw, we also accept MS Word but only with the module of drawing!).
16. Authors may include graphs prepared using other software (e.g., Corel Draw, Statistica, Stata, SPSS, Harvard Graphics) provided they are with the module of drawing/editing (for example "wmf" or "eps" format, with all the necessary fonts included).
17. Please align the numeric values in the tables to the right and use a uniform number of decimal places in the data presented in the tables and graphs (we advise max. 3 places after dot, e.g. 1.000, please don't use 0.0011111).

Numbers, Formulas and Calculations

Mathematical formulas recommendations

1. Mathematical dependences, their notations in the text and other symbols should be typed in **MS Word 2010 – The Equation Tools Design Tab:**

The Equation Tools Design Tab



The *Equation Tools Design* tab is divided into three groups: *Tools*, *Symbols* and *Structures*.

2. Formulas are centred and numbered by Arabic numerals in round brackets and aligned right – **all formulas must be numbered**, e.g. (1), at the right side. There should be single spacing of one line between the formula and the text.

$$\min \rho = 1 - \frac{1}{m} \sum_{i=1}^m s_i / x_{i0} \quad (1)$$

$$X = \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1n} \\ x_{21} & x_{22} & \dots & x_{2n} \\ \cdot & \cdot & \dots & \cdot \\ x_{m1} & x_{m2} & \dots & x_{mn} \end{bmatrix}, Y = \begin{bmatrix} y_{11} & y_{12} & \dots & y_{1n} \\ y_{21} & y_{22} & \dots & y_{2n} \\ \cdot & \cdot & \cdot & \cdot \\ y_{m1} & y_{m2} & \dots & y_{mn} \end{bmatrix} \quad (2)$$

3. Matrices are written in square brackets, vectors by bold-regular typeface.
4. All the numerals, including index numbers, are presented in regular typeface.
5. Work with a large number of formulas to be prepared as follows:
 - simple formulas (one-level) typed with keyboard,
 - complex formulas, (multi-level) should be entered using the equation tools design tab.

Mathematical numbers and money

6. Use New British English (i.e. American English) for numbers:

a thousand million (10⁹) is a billion
(not ‘a milliard’ as it used to be in Old British English!).

For details please see: <http://mathworld.wolfram.com/Milliard.html>

7. **DO NOT** use dots to separate thousands, millions, etc. (e.g. 32 046; 45 263 721; 741 592 438 526).
8. Numbers till 10 are usually best written as full words (one, two, three etc.). 11+ would be written as numbers. There’s no strict rule on this: 11–20 may often also be written as words, but 21+ would almost always be put down as numbers. Be consistent over this: don’t sometimes write twenty but in other places 20.
9. **Money**
 - a) Do not use graphic signs for currencies. Always use international codes (e.g. USD – American dollar, GBP – pound sterling, EUR – euro, PLN – Polish zloty, LTL – Lithuanian litas, RUB – Russian rouble).
 - b) The currency codes placed after the numerical value: 4.99 EUR, 100 USD etc. Always make clear what currency you’re referring to.
 - c) Millions are often abbreviated to m. – for example:
7m EUR = 7 million EUR
4.7m USD = 4.7 million USD.
However, we advise to use full names (million, billion ...)

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Examples:

Ku, G. (2008). Learning to de-escalate: The effects of regret in escalation of commitment. *Organizational Behavior and Human Decision Processes*, 105(2), 221–232.

Sanchez, D., & King-Toler, E. (2007). Addressing disparities consultation and outreach strategies for university settings. *Consulting Psychology Journal: Practice and Research*, 59(4), 286–295.

Reference to a journal publication with DOI:

Author, A. (Publication Year). Article title. *Periodical Title*, Volume(Issue), pp.–pp. <https://doi.org/XX.XXXXX>

Example:

Chrabąszcz, R., & Zawicki, M. (2016). The evolution of multi-level governance: The perspective on EU anti-crisis policy in Southern-European Eurozone states. *Public Governance*, 4(38), 17–31. <https://doi.org/10.15678/ZP.2016.38.4.02>

Reference to a book:

Kidder, T. (1981). *The soul of a new machine*. Boston, MA: Little, Brown & Company.

Gibbs, J. T., & Huang, L. N. (Eds.). (2001). *Children of color: Psychological interventions with culturally diverse youth*. San Francisco, CA: Jossey-Bass.

Reference to a chapter in an edited book:

Labajo, J. (2003). Body and voice: The construction of gender in flamenco. In T. Magrini (Ed.), *Music and gender: perspectives from the Mediterranean* (pp. 67-86). Chicago, IL: University of Chicago Press.

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