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Informal Institutions – Measurement and Comparison in European Countries

Abstract

This paper addresses the topic of informal institutions that remain an unexplored part of the institutional system due to identification, operationalisation, and measurement problems. The author concludes that there is a dire need to develop an approach to analysing the rules that govern entities' behaviour that are difficult to comprehend, deeply ingrained, and long-lasting. Therefore, based on data from social surveys, the author has constructed ten indices of informal institutions comprising trust, happiness, bonds with relatives, social capital, interest in politics, tolerance, resourcefulness, religiousness, attitudes to work, and attitudes to traditional values. They present a comprehensible picture of countries' informal institutions and enable the making of comparisons. Later, the author uses the indices to investigate the links between formal and informal institutions in selected European countries and explore their role in providing a stable environment conducive to economic well-being. This is, however, only an example in which informal institutions are vital, and the research can support further studies in various fields. The findings indicate which investigated institutions seem central and worth supporting and which co-occur with lower levels of development.

Keywords: Informal Institutions, Formal Institutions, Economic Well-Being, Institutional Consistency

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Introduction

Claiming that “institutions matter”, a claim that appears with regularity in academic texts, seems obvious. Many studies emphasise the role of institutions in the activities of individuals, enterprises, and entire economies. However, despite this immense role, we still do not know much about institutions. One of the most significant shortcomings concerns informal institutions, as most research focuses on their formal counterparts. This is justifiable; formal institutions are more accessible to identify, operationalise, and evaluate. Despite analyses confirming informal institutions’ role and emphasising that they are no less important than formal institutions (e.g., Bentkowska, 2021; Boettke et al., 2008; Chavance, 2008; Cruz-García, Peiró-Palomino, 2019; Gërxhani, Cichocki, 2023; Glaeser et al., 2004; Helmke, Levitsky, 2004; Knack, Keefer, 1997; Muringani, 2022; Park, 2023; Pejovich, 1999; Tabellini, 2008, 2010; Williamson, 2009; Williamson, Kerekes, 2011), there is still too little study of the subject. There is no standard theoretical or practical analysis approach, so their nature, origin, and outcomes in different settings remain unclear. The challenges of studying informal institutions are inherent – as they are derived from individuals’ acquired experience and value systems, they often remain in the subconscious and not on a database. There are also problems with the delineation between formal and informal institutions. In addition, informal institutions that are deeply embedded and which have developed over hundreds or even thousands of years (Williamson, 2000) are tricky to capture, operationalise, and estimate. Despite these problems with investigating them, we will not understand how institutional systems work without addressing the challenges.

Institutions, understood as the so-called “rules of the game”, impose constraints on individuals and create the framework for human interactions (North, 1994, p. 3). According to North’s interpretation (1994, pp. 3–9), an institutional system comprises formal and informal institutions supervised by enforcement mechanisms. Formal rules are written down, implemented, and enforced by the state. Informal institutions comprise deeply rooted, unwritten customs, shared rules, traditions, culture, codes of conduct, and behavioural norms. They are created due to interaction between individuals, independently of the state. The author adopts the above interpretation. Therefore, formal institutions are perceived as legal in nature, while informal institutions are nonlegal norms and rules.

Formal and informal institutions should be coherent and complementary for a well-functioning institutional system. In practice,

interaction between institutions may develop differently. Informal institutions can strengthen the impact of formal rules but also weaken or even make them inoperable. Gërxhani and Cichocki (2023) stress that “formal and informal institutions go hand in hand, and their interaction should be an essential part of the new institutional perspective.” Their cooperation contributes to institutional resilience against shocks (Buchen, 2024). Seligson and McCants (2021, p. 367) note that informal institutions matter more than one might expect.

As the author has already noted, the research on formal institutions is extensive. They are operationalised in different ways and studied using different approaches. What we still lack is a similar understanding of informal institutions. Ménard and Shirley (2014, p. 559) mention “expanding the empirical and theoretical work on informal institutions” as a challenge the New Institutional Economics faces. Moreover, while there are different approaches to measuring formal institutions, attempts to measure informal institutions remain neglected. As Voigt (2018, p. 2) noted, “the measurement of informal institutions constitutes a weak spot in institutional economics and might even be called institutional economics’ most serious challenge”. Lipsey (2009, p. 266) underlined that “the absence of a clear causal link between growth and any one institution (or a small set of related ones) makes it extremely difficult to measure the importance of institutions empirically by correlating the existence and nonexistence of a selected set (usually containing two or three items) with various national growth performances”. Therefore, analysing an extensive set of informal institutions and considering their role might be helpful.

In her research, the author aims to construct a wide range of informal institutions’ indices to enable comparisons in terms of quality and investigations into their role in various fields. Her work was inspired by Kuncic’s (2014) analysis attempting to divide different available institutional indicators into homogeneous groups of formal institutions capturing a country’s complete formal institutional environment. However, as those indicators are limited to formal institutions, the author intends to base her analysis on informal constraints. A similar conceptualisation of informal institutions is hampered as there are no existing indicators. To create such, the author makes use of questions from social surveys describing attitudes, beliefs, and habits and group them to reflect certain informal institutions. Unlike prior studies, this will not be limited to a narrow operationalisation of exemplary institutions such as frequently-used variables connected with levels of trust. The author uses factor analysis to create the indices and obtained ten of them with this method. They involve trust, happiness, bonds with relatives, social capital, interest

in politics, tolerance, resourcefulness, religiousness, attitude to work, and attitudes to traditional values. Then, the author estimates the appropriate indices to assess institutions' quality in selected European countries. Afterwards, the relationship between formal and informal institutions is explored. The results show divergent patterns in capitalist and post-socialist countries. A simplified evaluation of informal institutions' indices can help investigate their relevance in various fields, however, the author focuses on economic well-being. The findings confirm the crucial role of informal institutions.

This analysis contributes to a better understanding of informal institutions. As the research in this field remains scarce, it proposes how informal institutions can be captured comprehensively. It can also be perceived as part of comparative institutional analysis literature, as it infers the effectiveness of formal and informal institutions' combinations in different countries. Finally, it becomes part of development studies, as it attempts to investigate informal institutions' role in general development.

This paper presents the role of informal institutions and outlines the problems encountered in their analysis, describes the author's approach to investigating informal institutions and their evaluation, explains the relationships between formal and informal institutions analysing their impact on economic well-being and, finally, the conclusions are presented.

Informal Institutions in Analyses

Informal institutions appear in theoretical reflections on the nature of institutions (Boettke, Coyne, 2009; Hodgson 2002; 2006; Richter, 2005; Voigt 2018; 2013), changes in institutions (Aoki, 2001; Chavance, 2008; Greif, Mokyr, 2017; Kingston, Caballero, 2009; Roland, 2004; Seligson, McCants, 2021), and problems with institutional reform and transplanting institutions (Boettke et al., 2008; Eggertsson, 2006). Another important field of consideration concerns the cooperation between formal and informal institutions (Chavance, 2008; Chung, Kim, 2021; Cruz-García, Peiró-Palomino, 2019; Helmke, Levitsky, 2004; Leković, 2011; Pejovich, 1999; Platje, 2008; Williamson, 2009). Such analyses, though referring to different issues, identify the significant links between institutions and explore the influence of their various combinations on economic performance.

References to informal institutions can be found in descriptive studies of certain countries or regions, often with a broad historical perspective (Acemoglu et al., 2001; 2005; Cunningham, Dibooglu, 2020; Lipsey, 2009; Seidler, 2018). A significant advance has also been made due to case studies

and fieldwork confirming the indispensable role of informal rules for effective institutional arrangements (e.g., Murtazashvili, Murtazashvili, 2015; Ostrom, 1990; 2000; 2011). Such studies significantly enrich our understanding of informal institutions. However, due to a wide variety of approaches, varying degrees of detail, and the addressing of different issues, they seem to lack, to some extent, a comprehensive view of informal institutions.

Empirical studies of informal institutions confirm those institutions' role in many areas such as economic development (Aron, 2000; Casson, Della Giusta, Kambhampati, 2010; Cunningham, Dibooglu, 2020, pp. 166–175; Glaeser et al., 2004; Knack, Keefer, 1997; Lipsey, 2009; Tabellini, 2010; Williamson, 2009) but also in specific problems of efficiency in certain areas, e.g., securing property rights (Williamson, Kerekes, 2011), response to shocks and disasters (Bentkowska, 2021; Paniagua, Rayamajhee, 2022; Rayamajhee et al., 2024; 2021; Storr, 2021), impeding or supporting entrepreneurship (Frølund, 2021; Nabisaalu, Bylund, 2021; Smith, Brownlow, 2022), income inequality (Chong, Gradstein, 2019), and informal economy expansion (Gërxhani, Cichocki, 2023; Odera, 2013; Webb et al., 2009). Nevertheless, the studies are confined to a narrow operationalisation of informal institutions and primarily relate to a single variable or a scant set. As noted, this is mainly due to the problems with a lack of consensus on what informal institutions are, the difficulties in operationalisation, and significant obstacles to measurement. Data on indicators related to informal institutions are limited, cover short periods, and are often unsuitable for broad comparative analysis purposes. Therefore, we still lack studies attempting to comprehensively consider the shape of informal institutions in different countries and assess their impact on entities.

Most commonly, informal institutions are operationalised as measures of trust (Chung, Kim, 2021; Cruz-García, Peiró-Palomino, 2019; Muringani, 2022; Tabellini, 2008; 2010) or social capital (Knack, Keefer, 1997). However, there are also narrower measures capturing certain features, such as control over life (Williamson, 2009; Williamson, Kerekes, 2011) or respect and obedience (Tabellini, 2010; Park, 2023; Williamson, 2009; Williamson, Kerekes, 2011).

The proxies used to evaluate informal institutions are often criticised for being subjective, reflecting results of different circumstances or, rather, being outcomes of institutions than institutions themselves (e.g., Voigt, 2018; 2013). As regards being subjective, no social survey data in any field can be perceived as being able to capture actual behaviours, but they still offer essential insight into societies. As to reflecting outcomes of different

circumstances, we may refer to an often investigated proxy, i.e., trust; a low level of trust may result from a particular social trait connected with general distrust or the poor performance of entities and organisations observed in everyday life. This problem, however, concerns not only informal institutions but also formal ones, as they cannot be perceived as *purely* formal since they depend on informal institutions to operate (Hodgson, 2006). Even if some measures are, to a great extent, rather the outcomes of institutions, they still bring us closer to understanding how actual institutions work. Therefore, such proxies can provide essential insights into individuals' attitudes and behaviours, even if they have their limits and cannot be seen as entirely reflective of the whole complexity of informal institutions. Being aware of the limits, we can use them to capture regularities in the operation of institutions. Also, the proxies in this paper might be perceived as not being free of these restrictions. However, as we have not developed superior proxies to describe informal institutions precisely, the author shall refer to her variables as "informal institutions".

Data and Methodology

In her analysis, the author constructed indices of several informal institutions, then calculated their values and assessed how they vary between countries. She also used available data on formal institutions to verify how they connect with informal rules. Finally, the relationship between institutions and economic well-being was verified.

Twenty-two European countries were selected, for which data were available in all four surveys designated for the study. The analysis is restricted to European countries due to the availability of similar, comparable data concerning informal institutions from different sources. A broad spectrum of variables was used at the expense of narrowing the group of countries. The countries comprise capitalist and post-socialist states, which results in two equally-numbered groups of eleven each. The different development trajectories of the two groups may result in the relationships between institutions and their impact on well-being being shaped in various ways.

In the analysis of formal institutions, time series are sometimes used to capture their changes. This is justified, as formal institutions can be modified relatively quickly, and, often, a static picture cannot be relied upon. However, the author has confined her analysis to the latest available data. With profoundly ingrained and slow-changing informal institutions, such an approach seems sufficient; here, changes over time are not very significant.

Data was used from the following:

- European Values Study (EVS, 2020)
- European Social Survey (ESS, 2018)
- European Quality of Life Survey (EQLS, 2018)
- Legatum Prosperity Index (LPI) (2020).

The surveys constitute large-scale, cross-national, repeated research programmes on fundamental human values. They provide insights into European citizens' beliefs, attitudes, values, and opinions. From the surveys, questions were selected that may capture various informal institutions. The answers to the questions enabled an assessment of the intensity of some norms and attitudes in society and thus the strength (quality) of a given informal institution. The answers were grouped to reflect specific institutions, often appearing in various studies. Thus, the surveys' questions constitute the basis for creating informal institutions' indices and calculating their value.

The selection is a proposal of measurable informal institutions that could be considered in comprehensive and comparative studies of institutions. As already mentioned, informal institutions are most commonly operationalised as measures of trust, social capital, or certain narrow features such as control over life. Such proxies are also included in the analysis. However, as informal institutions comprise deeply rooted unwritten customs, shared rules, traditions, culture, codes of conduct, and behavioural norms (North, 1994, pp. 3–9), such operationalisation does not fully reflect the concept. Therefore, in an attempt at enriching the existing approach, the author proposes a more comprehensive range of informal institutions that may be useful for research. The recommended informal institutions do not comprise a complete list. Data availability largely determines their selection. In further research, other institutions can be selected to enrich their picture. The author's approach represents the first proposal for their broad study.

The resulting institutions include:

- Attitudes to traditional values – the extent to which people are attached to conventional, well-established principles and ideals.
- Attitudes to work – insights on how people perceive work and focus on work versus leisure.
- Bonds with relatives – relations with those to whom an individual is closest.
- Happiness – people's perception of life, sense of fulfilment, and their evaluation of achievements and potential possibilities.
- Interest in politics – interest in current events, societies' awareness of various subjects, and political participation.

- Religiousness – the importance of faith in peoples' lives.
- Resourcefulness – individuals' attitudes towards life circumstances and their ability to cope with challenges.
- Social capital – this reflects more general ties with society. Along with the aforementioned “bonds with relatives”, the ties mirror the shape of society, possible exclusion, sense of community, and responsibility for others.
- Tolerance – the degree of respect for other people's views, beliefs, and inclinations different from one's own.
- Trust – how different actors perceive and behave towards each other, the nature of all interactions. This also determines the possibilities of encouraging desired individual behaviours and acting according to rule-based personal conduct.

The author used factor analysis to verify the proper selection of questions for each of the ten identified institutions.¹ This made it possible to determine whether the group of questions measures similar phenomena, and also to determine the scale's internal structure and to extract the component factors. It can thus be shown whether latent factors can describe different variables. The number of factors was determined comprising a given informal institution with the Kaiser criterion – the eigenvalue had to exceed the value of one. The factors were defined using the Varimax orthogonal rotation.

Finally, based on the rotated component matrix, the author obtained a few factors for each institution arranged according to the size of the variables' factor loadings. Table 1 below shows the composition of each informal institution resulting from factor analysis.

To check the appropriate selection of questions and determine the internal consistency of each institution, the author conducted a Cronbach's alpha test.²

Based on factor analysis, indices were estimated for the identified informal institutions. They were calculated as weighted averages, considering the values of the individual factors' loadings that make up a given institution.³

¹ The necessary conditions for the factor analysis (value of the determinant, KMO and Bartlett's test) are fulfilled.

² It is generally assumed that the value of Cronbach's alpha test should be at least 0.7 for the scale to be considered reliable; sometimes, though, even 0.6 is acceptable. In the author's analysis, scales for all institutions meet this condition – the value of Cronbach's alpha is often very high and exceeds 0.9. It is minimally lower than the value of 0.7 only in two cases (“Bonds with relatives”, and “Attitudes to work”).

³ The calculation was the following (on the example of the *Trust* index) – three factors explain 85.8% of the variables' variance – the first factor is 39.7%, the second is 27.8%,

Table 1. A Composition of Informal Institutions Based on Factor Analysis

| Attitudes to Traditional Values | Attitudes to Work |
|--|---|
| Approve if a person: - chooses never to have children (ESS) - lives with a partner outside of marriage (ESS) - has a child with a partner without marriage (ESS) A child suffers due to having a working mother (EVS) A man's job is to earn money; a woman's job is to look after the home and family (EVS) Men make better business executives than women (EVS) Men make better political leaders than women (EVS) When jobs are scarce, men have more right to a job than women (EVS) A university education is more important for a boy than for a girl (EVS) | Perception of work as a value Your willingness to teach children hard work at home (EVS) The importance of leisure time in your life (EVS) People who do not work become lazy (EVS) It is humiliating to receive money without working (EVS) Willingness to work The importance of work in your life (EVS) Preferred number of working hours (EQLS) Work always comes first (EVS) Perception of leisure time The importance of: - generous holidays in a job (EVS) - good hours in a job (EVS) Sense of duty towards society Work is a duty towards society (EVS) |
| Bonds with Relatives | Happiness |
| Close relationships The number of people with whom you can discuss intimate and personal matters (ESS) Satisfaction with family life (EQLS) The opportunity to make friends (Legatum) The frequency of meeting with friends, relatives or colleagues (ESS) Personal contact The frequency of face-to-face contact with: - family members or relatives (EQLS) - friends or neighbours (EQLS) Remote contact The frequency of phone/internet contact with: - family members or relatives (EQLS) - friends or neighbours (EQLS) Support in a close environment I feel close to people in the area where I live (EQLS) Help from family and friends when in trouble (Legatum) | Satisfaction with everyday life In my daily life, I seldom have time to do the things I enjoy (EQLS) Job satisfaction (EQLS) Satisfaction with: - accommodation (EQLS) - education (EQLS) My daily life has been filled with things that interest me over the last two weeks (EQLS) I have felt calm and relaxed over the last two weeks (EQLS) I feel that the value of what I do is not recognised by others (EQLS) I have felt particularly tense over the last two weeks (EQLS) Overall life satisfaction Taking everything into consideration, how happy you are (EVS) Satisfaction with your life (EVS) Optimism Optimism about: - children's or grandchildren's future (EQLS) - one's own future (EQLS) |

and the third is 18.4%. Since 85.8 is the total, i.e., 1, 39.7% is x. Hence, the first factor weighs $39.7 \times 100/85.8$ and so 0.46, the second 0.32, and the third 0.21. The final trust index is $0.46 \times \text{factor 1} + 0.32 \times \text{factor 2} + 0.21 \times \text{factor 3}$. Their value was calculated as the variables' arithmetic mean for the two indices consisting of a single factor.

| Interest in Politics | Religiousness |
|---|---|
| <p>Political participation Voting in elections at the national level (EVS) The importance of politics in your life (EVS) Political interest (ESS) Posted or shared anything about politics online in the last 12 months (ESS) Voting in elections at the local level (EVS)</p> <p>Following political events The frequency of following politics: - on television (EVS) - in the daily papers (EVS)</p> | <p>The importance of religion in your life (EVS) Belonging to a religious denomination (EVS) Your willingness to teach children religious faith at home (EVS) How religious are you? (ESS) Your frequency of praying apart from at religious services (ESS) The importance of God in your life (EVS) Your frequency of attending religious services (EVS)</p> |
| Resourcefulness | Social Capital |
| <p>Ability to handle problems When things go wrong in my life, it generally takes me a long time to get back to normal (EQLS) Life has become so complicated today that I almost cannot find my way (EQLS) I find it difficult to deal with important problems that come up in my life (EQLS) I feel I am free to decide how to live my life (EQLS)</p> <p>Control over life Plan for the future or take each day as it comes? (ESS) Your willingness to teach your children independence at home (EVS) How much freedom of choice and control do you have over your life? (EVS)</p> | <p>Social participation The frequency of participation in social activities of a club, society, or association (EQLS) Have you: - boycotted certain products in the last 12 months (ESS) - signed a petition in last 12 months (ESS) - donated money to charity? (Legatum) I feel left out of society (EQLS)</p> <p>Social tension Tension between: - older and younger people in the country (EQLS) - poor and rich people in the country (EQLS) - management and workers in the country (EQLS) - men and women in the country (EQLS)</p> <p>Social concern Concern with: - people in the neighbourhood (EVS) - fellow countrymen (EVS)</p> |
| Tolerance | Trust |
| <p>Tolerance of diversity Gays and lesbians are free to live life as they wish (ESS) Ashamed if a close family member is gay or lesbian (ESS) When jobs are scarce, employers should give priority to native people over immigrants (EVS) Gay and lesbian couples have the right to adopt children (ESS) Do not like: - homosexuals as neighbours (EVS) - people of a different race as neighbours (EVS) - Jews as neighbours (EVS)</p> | <p>Personal trust Trust in people: - you know personally (EVS) - you meet for the first time (EVS) - of a different nationality (EVS) - in your neighbourhood (EVS) Most people can be trusted / You cannot be too careful in dealing with people (ESS) Most of the time, people are either helpful or mostly looking out for themselves (ESS) Most people try to take advantage of you or try to be fair (ESS)</p> |

| | |
|--|--|
| Perceived tolerance of immigrants (Legatum) | Trust in organisations |
| Your willingness to teach children tolerance and respect at home (EVS) | Confidence in: |
| Perceived tolerance of ethnic minorities (Legatum) | - environmental organisations (EVS) |
| Attitude towards immigrants | - major companies (EVS) |
| The country should allow: | - police (EVS) |
| - many/few immigrants of the same race/ethnic group as the majority (ESS) | - education system (EVS) |
| - many/few immigrants of different races/ethnic groups from the majority (ESS) | Trust in the media and government |
| | Trust in the news media (EQLS) |
| | Confidence in the government (EVS) |

Source: the author's own elaboration.

Afterwards, the author calculated the aggregate index of informal institutions for the investigated countries. It was estimated as an arithmetic mean of 10 indices of informal institutions.⁴ Its values allow for assessing the quality of the informal institutions. The aggregated index will be used in further analysis alongside the individual indices describing informal institutions.

Since the role of informal institutions cannot be investigated without reference to formal institutions, the author intends to capture the interactions as well. To evaluate formal institutions in selected countries, the latest available data from the Worldwide Governance Indicators (2021) was used, assessing the following (Kaufmann et al., 2010):

- Voice and Accountability – the ability of citizens to participate in selecting their government, freedom of expression, freedom of association, and free media,
- Political Stability and Absence of Violence – the risk of a destabilisation of the authorities, and politically motivated violence and terrorism,
- Government Effectiveness – the quality of public and civil services, the degree of their independence from political pressure, the quality of policy formulation and implementation, and the credibility of government commitments,
- Regulatory Quality – the ability of government to formulate and implement sound policies and regulations supporting private sector development,
- Rule of Law – actors' confidence and respect for accepted norms in society, in particular regarding the enforcement of contracts, property rights, the police, and the courts,

⁴ As the correlation of the three indices with GDPpc indicates inverse co-occurrence, when the index of informal institutions was calculated, the scales were inverted so that high values of all indices coexist with the high GDPpc.

- Control of Corruption – the extent to which public power is exercised for private gain, and the so-called “capture” of the state by private interest groups.

As in the case of informal institutions, the author calculated the aggregate index of formal institutions for the studied countries. It was assessed as the arithmetic mean of the 6 WGI indices. It will be used as a measure of the formal institutions’ quality.

In the analysis, the author also considers the relationship between institutions and economic well-being in the selected European countries using the following indicators as measures:

- GDP per capita,
- Life expectancy at birth (HDI),
- Expected years of schooling (HDI),
- Living conditions (LPI),
- Health (LPI),
- Education (LPI),
- Natural Environment (LPI),
- The Poverty Gap,
- The Gini Index.

Having arranged the indices and all the data, the author seeks answers to the following research questions:

- How are the identified informal institutions in the selected European countries shaped?
- What is the relationship between formal and informal institutions?
- Does the index of informal institutions show a relationship with economic well-being?
- Which informal institutions are most strongly associated with economic well-being?

Formal and Informal Institutions

As noted, the relationships between formal and informal institutions are highly complex. Both formal and informal institutions can be strong, providing a stable environment conducive to economic well-being, yet can also be weak, thus potentially disrupting the system. They can also substitute for one another in generating institutional quality (Park, 2023). Therefore, countries may have different combinations of the quality of formal and informal institutions. This is represented by the matrix below, which is determined by the strength of formal and informal institutions (Table 2). It is inspired by Helmke and Levitsky’s (2004) typology of informal institutions, however, the categories were slightly different, as the

first one captured the degree to which formal and informal institutional outcomes converge, and the second included the effectiveness of the relevant formal institutions. A similar matrix is considered by Williamson (2009), though the categories are not named in terms of mutual interactions and their impact on the institutional system.

Table 2. A Matrix of Formal and Informal Institutions

| | Weak Formal Institutions | Strong Formal Institutions |
|-------------------------------------|---|---|
| Strong Informal Institutions | <p>Substitutive Strong informal institutions fill the gaps of weak formal institutions.</p> | <p>Supportive Both institutions are strong and mutually reassuring, creating an effective framework for actors to operate and develop.</p> |
| Weak Informal Institutions | <p>Inhibiting Both institutions are weak; neither supports nor fills gaps in the other. Therefore, they do not provide an effective framework for actors and well-being.</p> | <p>Divergent Weak informal institutions impede the effective functioning of formal institutions.</p> |

Source: The author's own elaboration.

The most desirable combination is that of supportive institutions; by working effectively, they support each other. There is no undermining of the rules, and acting according to both formal and informal institutions should produce similar results. If there are any gaps in the institutions, they can be quickly filled. As a result, they offer a stable and predictable framework for actors.

With divergent institutions, strong formal institutions encounter weak informal institutions, and their performance is undermined. Weak informal institutions fail to support the formal institutions, fail to fill the possible gaps, and may even act against them. This occurs when actors cling to rules different from those imposed by formal institutions and circumvent them. It then becomes difficult to anticipate the actors' actions and design good formal institutions, as their effects may differ from those intended. Such divergence can lead to changes in formal institutions and a deterioration in their quality.

The formal rules are ineffective with substitutive institutions, but informal institutions can fill in the gaps and gradually even lead to changes in the formal institutions. This combination may prove to be more favourable than the combination described above. Formal institutions can be changed relatively quickly, and the reliance on strong informal institutions supports this. Countries with substitutive institutions appear to have the potential to develop a stable environment.

In the case of inhibiting institutions, it is challenging to expect substitution or complementarity of institutions, as both types are ineffective. Thus, there is neither mutual support of institutions nor a fulfilment of deficiencies. This is the least desirable combination and seems unfavourable to economic well-being.

The countries in the author’s analysis seem to have a very strong relationship between the quality of institutions; the indices of formal and informal institutions show a robust correlation (0.870) (Table 4). This evidences that either weak or strong types of both institutions characterise them. In the scatter plot (Figure 1), countries are divided into four groups based on the relative strength of institutions (determined by the average of the calculated indices of formal and informal institutions). Higher values of the indices indicate higher quality of institutions.

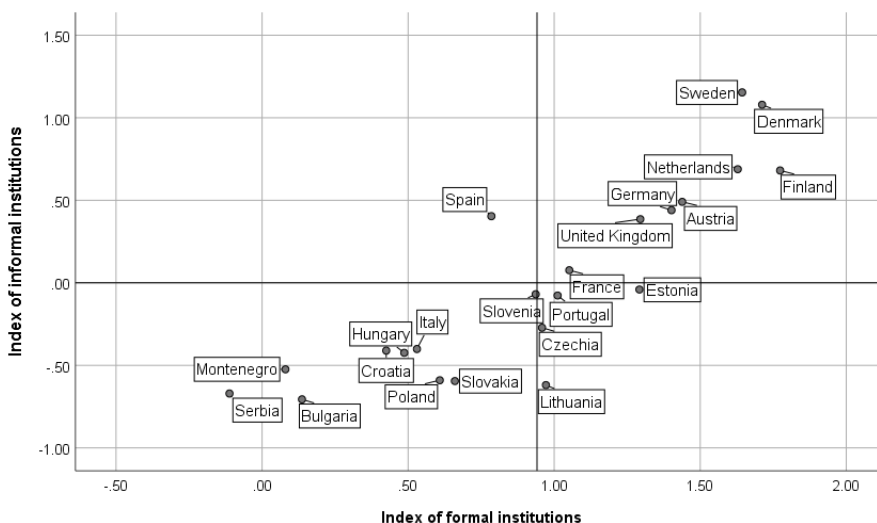


Figure 1. Indices of Formal and Informal Institutions in Selected Countries

Source: the author’s own elaboration.

The only country with relatively stronger informal institutions and weaker formal institutions is Spain (substitutive institutions). Portugal, the Czech Republic, Lithuania, and Estonia all have better-than-average formal institutions, but weaker informal institutions (divergent institutions). The scatter plot shows an interesting relationship in that strong types of both institutions (supportive institutions) are found only in capitalist countries. Northern European countries stand out here. Concerning the

above considerations, this is the most desirable combination to promote stability and predictability in operating conditions. In most post-socialist countries (plus Italy), both institutions are weak (inhibiting institutions). As indicated, this combination of failing and uncooperative institutions does not provide suitable conditions for well-being. The outcomes confirm the results of other studies showing that the quality of institutions in post-socialist countries remains faltering (e.g., Chavance, 2008; Gërxhani, Cichocki, 2023). It also indicates that informal institutions have not developed sufficiently to support formal institutions (Bentkowska, 2021). Only a few post-socialist countries can be included in the group with relatively stronger formal institutions, but none make it to the group with stronger informal institutions. This confirms that informal institutions are more resistant to change.

Institutions and Economic Well-Being

The role of informal institutions can be analysed in various fields, however, the author will focus on the example of economic well-being. Hence, it is inescapable to mention the controversies surrounding the nature of these relations. It remains questionable whether effective institutions cause growth or, inversely, growth enables effective institutions (Chang, 2011; Gleaser et al., 2004). However, this paper is not aimed at inquiring into the nature of this relationship, as economic well-being is only an example used to demonstrate the potential impact of informal institutions and possible areas of further research.

The index of informal institutions is strongly correlated with GDPpc (0.933).⁵ The index of formal institutions also shows a robust correlation with GDPpc, although it is slightly lower (0.883) (Table 3). The author calculated a partial correlation to verify whether the relationship between the informal institution index and GDPpc might be apparent. She used the index of formal institutions as the control variable because the formal institutions' role in development is analysed more often, and the high correlation coefficient also confirms its strong relationship with GDPpc. The partial correlation, however, also indicates a strong relationship between the index of informal institutions and GDPpc (0.711) (Table 5). Such results are consistent with those of other studies. As an example, Muringani (2021) shows that “informal and formal institutions matter for economic growth, individually and in combination”. Park (2023) indicates that countries characterised by high-quality formal and informal institutions tend to have an institutional comparative advantage.

⁵ The level of significance for all the investigated correlations is 0.05.

Williamson (2009) confirms that formal institutions are only successful when embedded in strong informal institutions.

Table 3. Correlations Between Institution Indices and Economic Well-Being

| N = 22 (* sig. at 0.05) | Trust | Happiness | Bonds with relatives | Social capital | Interest in politics | Tolerance | Resourcefulness | Religiousness | Attitudes to work | Attitudes to traditional values | Index of informal institutions | Index of formal institutions |
|-----------------------------|--------|-----------|----------------------|----------------|----------------------|-----------|-----------------|---------------|-------------------|---------------------------------|--------------------------------|------------------------------|
| | GDPpc | .907* | .830* | .446* | .815* | .799* | .856* | .827* | -.582* | -.553* | -.851* | .933* |
| Life expectancy at birth | .640* | .498* | .507* | .624* | .459* | .837* | .579* | -.407 | -.422 | -.785* | .724* | .638* |
| Expected years of schooling | .850* | .791* | .411 | .656* | .646* | .718* | .812* | -.541* | -.691* | -.780* | .855* | .826* |
| Living Conditions | .882* | .793* | .400 | .729* | .731* | .872* | .802* | -.602* | -.593* | -.838* | .908* | .913* |
| Health | .758* | .640* | .499* | .711* | .642* | .871* | .578* | -.496* | -.438* | -.837* | .826* | .669* |
| Education | .853* | .721* | .279 | .586* | .659* | .683* | .721* | -.644* | -.602* | -.717* | .813* | .891* |
| Natural Environment | .664* | .689* | .097 | .400 | .516* | .369 | .720* | -.514* | -.383 | -.486* | .610* | .754* |
| GINI | -.414 | -.518* | .043 | -.174 | -.184 | -.177 | -.475* | .402 | .224 | .307 | -.365 | -.515* |
| Poverty Gap | -.499* | -.513* | -.097 | -.423* | -.306 | -.570* | -.445* | .688* | .343 | .611* | -.655* | -.650* |

Table 4. Correlations Between the Index of Informal Institutions and Index of Formal Institutions

| | (* sig. at 0.05) | Index of formal institutions |
|--------------------------------|---------------------|------------------------------|
| Index of informal institutions | Pearson Correlation | .870* |
| | N | 22 |

Table 5. Partial Correlation Between the Index of Informal Institutions and GDPpc

| Control Variables | Index of informal institutions | Correlation, (* sig. at 0.05) | GDPpc |
|------------------------------|--------------------------------|-------------------------------|-------|
| Index of formal institutions | | | .711* |
| | | df | 19 |

The role of informal institutions is also evident when considering other indicators of countries’ economic well-being (Table 3). “Life expectancy” and “Expected years of schooling” show a strong relationship with almost all indices of informal institutions. Correlations are also confirmed for aggregate indices of formal and informal institutions, while the relationship is more robust in the latter case. The aggregate indices of formal and informal institutions strongly correlate with “Living conditions”, “Health”, and “Education”. Most of the individual indices

of informal institutions also correlate with these variables. Regarding the Natural Environment and measures of social inequality, the links are less apparent.

Summarising the above conclusions, it is worth referring to the role of the individual indices. “Trust”, “Tolerance”, “Resourcefulness” and “Attitudes to traditional values” seem the most crucial of all the informal institutions analysed. They indicate relationships with all or almost all measures of economic well-being, and their strength is the most significant. “Happiness”, “Social capital” and “Interest in politics” are also associated with almost all measures of well-being, although these relationships are somewhat less intense. Regarding “Religiousness” and “Attitudes to work”, the relationships are not as strong as with the other indices, although they can still be described as strong or moderate. ‘Bonds with relatives’ appear less critical for well-being, as there is no relationship with some of the measures, and the strength of those confirmed is lower.

Remarkably, “Religiousness”, “Attitudes to work” and “Attitudes to traditional values” are negatively correlated with the development measures. In the case of “Attitudes to work”, this can be explained by the fact that poorer countries are more focused on development and their peoples place more emphasis on work. The negative correlation in the case of “Religiousness” and “Attitudes to traditional values” shows that the high intensity of these institutions in a society is associated with lower development. This may indicate their negative impact on a country’s development. However, poorer countries may be more inclined towards religion and tradition.

Conclusions

This paper presents an attempt to investigate informal institutions. Based on available social surveys, the author has tried to capture and measure ten deeply ingrained informal institutions governing societies’ perception of reality, attitudes to life circumstances, and determining behaviours. The awareness of the quality of informal institutions can help predict institutional performance.

The paper fills the evident gap in the literature concerning informal institutions. It moves away from focusing mainly on formal rules while both components of the institutional system should be considered if we want to obtain the complete picture. In addition, because of the links between institutions, we also do not perceive how formal institutions operate since they can be supported and complemented by informal rules but also be hampered by them. Despite the different possible combinations

of formal and informal institution quality, most investigated European countries have developed either weak or strong institutions in both areas. This conclusion shows that the quality of institutions is strongly related. It also indicates that post-socialist countries still require improvements in both institutions, especially since the study proves the link between the quality of institutions and well-being. Of particular importance, the role of often-neglected informal institutions is confirmed here. According to the inferences concerning the most potent institutions, trust, tolerance, resourcefulness, and attitudes to traditional values can be included here. They seem crucial for economic well-being, so they require further attention, as their role is not limited to this area.

Findings on the role of informal institutions have some practical implications as they indicate which fields it is crucial to support. Even if informal institutions are reluctant to change deliberately, there are still some possible improvements which can be made, at least in the long run. Governments may do their best to increase trust, for example, by improving their own performance. This can also, to some extent, support the building of social capital, for example, by encouraging citizens to become involved in various initiatives. Social campaigns and promoting desired attitudes can persuade people to be more open or resourceful. As mentioned, economic well-being is combined with strong informal institutions. Strong formal institutions are insufficient if appropriate informal rules do not accompany them.

The most significant limitation of the research is that it does not exhaust all informal institutions. Including further institutions in future research is essential to capture their shape as comprehensively as possible. Another limitation is the small number of countries included due to limited data availability, thus, it is worth attempting similar studies on a larger group of countries. Nevertheless, the author's research enables the role of informal institutions to be investigated in various fields. Although their position has started to be recognised, there is still little empirical analysis. The study confirms that all the identified informal institutions are related to economic well-being. However, in further research, the role of informal institutions could be verified in other more detailed problems, for example, the protection of property rights, the performance of contracts, the structure and level of transaction costs, the agency relationship, quality of governance or institutional change.

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