Wiadomości Statystyczne. The Polish Statistician, 2024, *69*(3), 38–68 https://doi.org/10.59139/ws.2024.03.3
Studia interdyscyplinarne. Wyzwania badawcze / Interdisciplinary studies. Research challenges
Zgłoszony/submitted: 13.04.2023, poprawiony/revised: 4.10.2023, zaakceptowany/accepted: 10.11.2023

Impact of Hofstede's cultural dimensions on insurance demand[1]

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Abstract. Factors determining the demand for different types of insurance and consumer behaviours have been the subject of many studies. The analysed factors included cultural dimensions, i.e. certain aspects of culture that could be measured, which allows determining the position of a given culture in relation to others. However, the research results were very diverse, which motivated the authors to conduct their own research. The aim of the study discussed in the article was to verify the relationship between Hofstede's cultural dimensions and insurance demand in selected European countries. It covered various types of insurance: life insurance, property and casualty insurance, motor insurance, general liability insurance and health insurance, as well as all types of insurance in total. The study used secondary data relating to 27 countries and the years 2004–2020 presented on the Insurance Europe and Geert Hofstede websites. Six Hofstede's cultural dimension indices: the power distance index, individualism vs. collectivism, masculinity vs. femininity, the uncertainty avoidance index, long-term normative orientation vs. short-term normative orientation and indulgence vs. restraint, as well as insurance density (total premiums per inhabitant) were used as variables in the models. The research confirmed the lack of or a very weak relationship between most Hofstede's cultural dimensions and the demand for insurance, except the indulgence dimension. The relationship between this factor and insurance demand proved significant, which is important not only from a methodological point of view (little interest devoted to this indicator in the literature), but also from a business perspective (e.g. from a marketing communication perspective).

Keywords: insurance, demand, cultural dimensions, Geert Hofstede

JEL: G22, G40

[1] Artykuł został opracowany na podstawie referatu wygłoszonego na pierwszej ogólnopolskiej Konferencji Naukowej Doktorantów SGH z cyklu „Nauka odpowiedzią na niepewność" pn. „Interdyscyplinarne podejście do sytuacji kryzysowej w Europie", która odbyła się w dniach 24–25 marca 2023 r. w Warszawie, oraz na 2023 Second Annual Conference of the Eastern European Risk and Insurance Association, która odbyła się w dniach 24–26 września 2023 r. w Poznaniu / The article is based on a paper delivered at the first national SGH Doctoral Student Conference in the series 'Science – the answer to uncertainty' entitled 'Interdisciplinary approach to a crisis situation in Europe', held on 24–25th March 2023 in Warsaw, and EERIA Second Annual Conference, held on 24–26th September 2023 in Poznań.

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Wpływ wymiarów kulturowych Hofstedego na popyt na ubezpieczenia

Streszczenie. Czynniki determinujące popyt na różnego rodzaju ubezpieczenia i zachowania konsumentów były przedmiotem licznych badań. Do analizowanych czynników należały m.in. wymiary kulturowe, czyli pewne aspekty, które można zmierzyć i dzięki temu określić pozycję danej kultury w stosunku do innych. Jednak wyniki badań były bardzo zróżnicowane, co skłoniło autorów do podjęcia własnego badania. Celem badania omawianego w artykule jest weryfikacja zależności między wymiarami kulturowymi Hofstedego a popytem na ubezpieczenia w wybranych krajach europejskich. Obejmuje ono różne rodzaje ubezpieczeń: na życie, majątkowe i osobowe, komunikacyjne, odpowiedzialności cywilnej i zdrowotne oraz wszystkie rodzaje ogółem. Wykorzystano dane wtórne za lata 2004–2020, które dotyczyły 27 krajów i zostały zaczerpnięte z serwisu Insurance Europe oraz ze strony Geert Hofstede. Jako zmienne w modelach przyjęto wskaźniki dotyczące sześciu wymiarów kulturowych Hofstedego: dystansu władzy, indywidualizmu i kolektywizmu, męskości i kobiecości, unikania niepewności, orientacji długoterminowej i krótkoterminowej oraz pobłażania i powściągliwości, a także gęstość ubezpieczeń (składki ogółem na mieszkańca). Badanie wykazało brak korelacji lub bardzo słabą korelację większości analizowanych wymiarów kulturowych i popytu na ubezpieczenia z wyjątkiem powściągliwości. Związek tego wymiaru z popytem na ubezpieczenia okazał się istotny, co jest znaczące nie tylko z metodologicznego (małe zainteresowanie tym wskaźnikiem w literaturze), lecz także biznesowego punktu widzenia (np. z perspektywy komunikacji marketingowej).

Słowa kluczowe: ubezpieczenia, popyt, wymiary kulturowe, Geert Hofstede

1. Introduction

Culture plays an important role in all spheres of human life. Therefore, economic analyses increasingly often take into account cultural factors, as they play a significant role in the sphere of business, economics, finance and management (Kostro, 2009). Although it is more and more common to state that the role of cultural factors in economic processes will decrease as globalisation gains momentum, this role will not be completely marginalised. Despite the convergence of the economic environments around the world based on the emergence of a universal system of values, beliefs and attitudes, cultural differences will continue to exist (Kostro, 2009).

One of the breakthroughs in the study of culture came with the cultural dimensions theory, formulated in 1980 by a Dutch management expert, Geert Hofstede. It is presented in a variety of papers, including those of Hofstede (1983, 1995, 2001). This concept was established as a framework for cross-cultural communication. The theory is based on factor analysis and shows the effects of a society's culture on the values of its members and how these values relate to their behaviour. Hofstede (2001) included six key aspects of national culture presented on country comparison scales: the power distance index (PDI), individualism vs. collectivism (IDV), masculinity vs. femininity (MAS), the uncertainty avoidance index

(UAI), long-term normative orientation vs. short-term normative orientation (LTO) and indulgence vs. restraint (IVR). The creation of cultural indices made it relatively easy to incorporate cultural factors into management, economic and finance research, including insurance.

Since Hofstede's (1995) publication in *The Geneva Papers on Risk and Insurance*, which opened the door to research on the influence of cultural factors on the insurance market (Outreville, 2013), many widely cited papers have been published (Chui & Kwok, 2009; Park et al., 2002; Park & Lemaire, 2011a, 2011b; Treerattanapun, 2011). Nevertheless, it is surprising that this subject has not yet been thoroughly explored (Outreville, 2013). Furthermore, the results presented in research works are very diverse, which is a direct motivation of the research presented in this paper.

The aim of this study is to verify the relationship between Hofstede's cultural dimensions and insurance demand in selected European countries. Hofstede's cultural dimensions indices as well as insurance density (total premiums per inhabitant in EUR) in constant exchange rates have been used as variables in the models. The relationship between culture and insurance was studied for insurance in general and for its particular types: life insurance, property and casualty insurance (P&C), motor insurance, property insurance, general liability (GL) insurance and health insurance.

2. Hofstede's cultural dimensions

Hofstede's cultural dimensions were first identified during a sizable study carried out throughout the 1960s and 1970s that examined value variations among the different divisions of IBM, a worldwide computer manufacturer (Hofstede, 2001).

Over 100,000 workers from 50 different nations participated in this survey which concerned three business areas of the firm. Using a particular statistical technique known as factor analysis, Hofstede defined the first four value dimensions: IDV, PDI, UAI, and MAS. Later chinese sociologists discovered the fifth dimension in their investigation, i.e. LTO (Bond, 1991). Finally, a replication of Hofstede's research (2001) carried out in 93 different countries, confirmed the validity of the five dimensions and discovered a sixth, referred to as IVR. The dimensions of culture established by Hofstede are briefly characterised in Table 1. The exact method of each cultural index calculation can be found on the geerthofstede.com website (in the 'values survey module 2013' and 'research and values survey module' section), as well as in Hofstede (2013), where detailed manuals and methodological notes are provided.

Table 1. Hofstede's cultural dimensions definitions

Dimension	Definition
Power distance index (PDI)	'The extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally' is how the PDI is defined. A higher PDI means that a society's hierarchy is undeniably established and followed without hesitation or justification. A lower value of the index indicates that individuals challenge authority and want to share power.
Individualism vs. collectivism (IDV)	IDV investigates how well members of a society are integrated into organisations. Individualistic cultures tend to have weak relationships that frequently connect a person only to his or her immediate family. Instead of emphasizing 'us', they focus on 'I'. Its opposite, collectivism, defines a society where closely interwoven ties arrange people into in-groups, including extended families. These in-groups have an undeniable bond of loyalty and stand by one another when there is a dispute with another in-group arises.
Uncertainty avoidance index (UAI)	UAI is referred to as 'a society's tolerance for ambiguity', and it measures how willingly or reluctantly individuals accept or avoid an occurrence that is unexpected, uncharted or inconsistent with the *status quo*. Societies with high UAIs tend to have strict rules of conduct, regulations and a general belief in absolute truth or the idea that there is one single truth that governs everything and that everyone is aware of it. A lower UAI indicates a greater tolerance for opposing viewpoints. The environment is more free-flowing, ambiguity is more common and the society tends to impose few restrictions.
Masculinity vs. femininity (MAS)	Men are classified as being masculine if they 'prefer achievement, heroism, aggressiveness, and pecuniary incentives for success in society'. A propensity for collaboration, modesty, helping the weak and quality of life is represented by its opposite, i.e. femininity. Women tend to exhibit distinct ideals in their respective communities. They hold the same humble and compassionate ideals as males in feminine civilizations. On the other hand, women are relatively forceful and competitive in a society that values masculinity, but far less so than males. In other words, women still acknowledge the discrepancy between male and female values. In communities that are predominately masculine, this distinction is typically seen as forbidden.
Long-term normative orientation vs. short-term normative orientation (LTO)	This dimension links the relationship between the past and present-day actions and obstacles. A lesser degree of this indicator (short-term) suggests that constancy is prized while customs are respected and upheld. Societies with a high LTO (over the long term) see adaptability and pragmatic, contextual problem-solving as essential. While long-term-oriented nations continue to rise to a level of wealth, short-term-oriented impoverished nations often have little or no economic progress.
Indulgence vs. restraint (IVR)	This dimension is the extent to which societal standards permit individuals to pursue their human aspirations. According to the definition of indulgence, it is 'a culture that permits virtually unrestricted satisfaction of fundamental and normal human wants to be connected to enjoying life and having pleasure'. Its opposite (restraint) is described as 'a society that controls gratification of needs and regulates it by means of strict social norms'.

Source: authors' work based on Hofstede (2001).

Hofstede's book on the cultural dimensions model, published in 1980 became one of the most widely referenced works in the sphere of social sciences (Green, 2016). The cultural dimensions theory has sparked a great deal of empirical research over the past 40 years, broadening the field of study from pure psychology to many other areas, making the study of its use and effects a challenging endeavour. Some studies have, nevertheless, focused on the application and impact of Hofstede's cultural

model within the context of this research stream in order to recommend future research options (Beugelsdijk et al., 2017; Kirkman et al., 2006; Taras et al., 2010).

It is worth noting, however, that there is a noticeable variability in terms of researchers' interest shown in each of Hofstede's dimensions. A review of the literature on the subject indicates that the PDI, IDV and MAS cultural dimensions are underrepresented relative to the remaining values. However, according to the table below, the IVR dimension has been the least occurring theme in Hofstede-inspired research (Leonavičienė & Burinskienė, 2022). Although Table 2 concerns research on internationalisation, it provides an interesting view of the popularity of each cultural dimension among researchers.

Table 2. Extent of Hofstede's cultural dimensions research

Year	Number of papers	Hofstede's cultural dimensions					
		PDI	IDV	MAS	UAI	LTO	IVR
Total	**12,147**	**66**	**157**	**16**	**1,303**	**2,779**	**15**
1994–1998	360	2	3	–	6	10	–
1999–2003	487	2	2	1	103	141	3
2004–2008	1,790	7	7	3	245	453	2
2009–2013	2,040	40	58	4	287	843	3
2014–2018	3,870	7	79	4	329	656	3
2019–2021	3,600	8	8	4	333	676	4

Source: Leonavičienė and Burinskienė (2022).

Research shows that since the initial publishing of Hofstede's theory in 1980, the cultural dimensions framework has been incorporated in more than 1,000 studies (Kirkman et al., 2006; Zhou & Kwon, 2020). Authors of the meta-analysis of Hofstede-related inquiries indicate that the publications primarily cover psychology, sociology and general social sciences, therefore there is a theoretical and application gap in the context of Hofstede-inspired research in the economy and insurance sector (Zhou & Kwon, 2020). This paper addresses not only this application gap but also focuses on the least covered cultural dimension, i.e. IVR.

Table 3 provides an exhaustive literature review of Hofstede-inspired research in the following areas: change management, human resource management (HRM), leadership & entrepreneurship, work-related attitudes, negotiation, group processes and personality, entry modes, foreign direct investment, joint venture characteristics and performance, innovation and research and development, societal outcomes (e.g. wealth, national accounting systems, number of intellectual property violations) and insurance (Kirkman et al., 2006). A literature review devoted specifically to the area of insurance is presented in Section 3 of the paper.

Table 3. Summary of the subjects covered in Hofstede's cultural dimensions research papers

Covered subject	Research papers
Change management	Firican (2022), Seidenfuss & Storm (2022)
Human resource management	Newman and Nollen (1996), Roth & O'Donnell (1996), Ryan et al. (1999)
Leadership & entrepreneurship	Offerman & Hellmann (1997), Thomas & Mueller (2000)
Work-related attitudes	Gong et al. (2001), Peterson & Smith (1997), Robie et al. (1998), Schneider & De Meyer (1991), Van de Vliert & Van Yperen (1996)
Negotiation	Shen (2023), Smith et al. (1998)
Group processes and personality	Krug & Nigh (1998), Oyserman et al. (2002)
Entry modes	Anand & Delios (1997), Arora & Fosfuri (2000), Barkema & Vermeulen (1998), Brouthers & Brouthers (2000, 2001), Chang & Rosenzweig (2001), Erramilli (1991, 1996), Erramilli et al. (1997), Erramilli et al. (2002), Harzing (2002), Hennart & Larimo (1998), Kim & Hwang (1992), Kogut & Singh (1988), Nachum (2003), Pan (1996, 2002), Shane (1992, 1994)
Foreign direct investment	Andrianova (2022), Benito & Gripsrud (1992), Habib & Zurawicki (2002), Kallunki et al. (2001), Li & Guisinger (1992), Loree & Guisinger (1995)
Joint venture characteristics and performance	Barkema et al. (1996), Barkema et al. (1997), Barkema & Vermeulen (1997), Datta & Puia (1995), Glaister & Buckley (1999), Gómez-Mejia & Palich (1997), Håkanson & Nobel (2001), Li & Guisinger (1991), Luo (2001a, 2001b), Luo & Park (2001), Luo & Peng (1999), Luo et al. (2001), Merchant & Schendel (2000), Park & Ungson (1997), Pothukuchi et al. (2002)
Innovation and research and development	Richards & De Carolis (2003), Shane et al. (1995)
Societal outcomes (e.g. wealth, national accounting systems, number of intellectual property violations)	Diener & Diener (1995), Diener et al. (1995), Diener et al. (2000), Franke et al. (1991), Husted (1999), Riahi-Belkaoui (1998), Salter & Niswander (1995)
Insurance	Chui & Kwok (2009), Park et al. (2002), Park & Lemaire (2011a, 2011b), Treerattanapun (2011)

Source: authors' work based on Kirkman et al. (2006), Leonavičienė and Burinskienė (2022), and Outreville (2013).

3. Literature review

As insurance plays a significant role in the economy, factors influencing the demand for insurance have been the subject of many studies (Duczkowski, 2022). These factors were analysed across different perspectives such as geographical, social or economic and were also considered in terms of their impact on the different types of insurance, including life and non-life insurance (Duczkowski, 2022; Śliwiński, 2019). The multitude of studies and publications has also resulted in the availability of several papers that summarise the results of other research, by authors such as Jaspersen (2016), Śliwiński (2016, 2019), or Zietz (2003). These publications point to the role and importance of cultural factors in the demand for insurance.

The most important publications include those indicated in the Introduction (Chui & Kwok, 2009; Park et al., 2002; Park & Lemaire, 2011a, 2011b; Treerattanapun, 2011). The study published by Park et al. (2002) was one of the first

to examine the relationship between culture and insurance pervasiveness in various countries. Using data from a representative sample of 37 countries across the globe, the authors of the aforementioned paper found that certain cultural and socio-political variables can significantly influence the level of insurance pervasiveness. Specifically, it turned out that Hofstede's MAS dimension of national culture had statistically significant effects (among other variables such as aggregate income, socio-political stability and government regulation).

A classic research position describing the impact of culture on the demand for insurance is also presented in two papers published by Park and Lemaire (2011a, 2011b). In the first one, they used regression techniques to an unbalanced panel data set relating to 68 countries observed over a ten-year period to explore the factors that affect non-life insurance demand. The authors discovered that non-life insurance consumption is adversely impacted in countries where a large fraction of the population holds Islamic beliefs. Moreover, three of Hofstede's dimensions turned out to be statistically significant: PDI, IDV and UAI (Park & Lemaire, 2011a). Another important finding the work shows is that culture impacts non-life insurance in affluent countries, with an adjusted R-square coefficient increasing by 11.7%, more than in developing countries, where the R-square coefficient increase due to cultural impacts is only 1.2%. These results have implications for multinational insurers seeking to enter a new market. *Ceteris paribus*, these insurers should target locations and population segments within countries with a low PDI and high IDV and UAI.

In their other paper, Park and Lemaire (2011b) extend Chui and Kwok's work (2009) by analysing the fifth Hofstede cultural dimension, i.e. LTO. After building a database that includes values of 17 variables for 27 countries over a period of 9 years, they apply an unbalanced panel GLS regression model to prove that LTO has a strong positive influence on life insurance demand. Their findings were then confirmed by several robustness tests.

The study by Chui and Kwok (2009) is also of great importance to the analysis of the impact of culture on insurance demand. It involved cross-disciplinary research that examined how national culture and cultural practices affect cross-country variations in life insurance consumption. The authors use the refined measure of the GLOBE project, which includes several additional cultural dimensions, not presented in Hofstede's analysis, as the proxy for national culture dimensions. Using 1966–2004 data relating to 38 countries, the analysis reveals a strong relationship between life insurance consumption and the practice scores of IDV and PDI. A strong relationship was observed between cultural variables and the insurance demand, which continues to hold even after controlling for other country-level variables, such as national income, expected inflation rate, banking sector development, investor protection index, dependency ratio, life expectancy and religion.

Recent research on the impact of culture on non-life insurance consumption is presented in a paper by Treerattanapun (2011). Various economic, institutional and cultural variables regarding 82 countries across a 10-year period were considered in order to build the most efficient and most parsimonious regression model. This research found that high non-life insurance consumption is observed among nations with a low PDI, and a high IDV and UAI. The empirical results suggest that consumers may respond to insurance solicitations according to their cultural beliefs, not only economic rationality.

Table 4 summarises the cited studies where Hofstede's dimensions of culture were found to be significant.

Table 4. Selected research papers describing the impact of Hofstede's cultural dimensions on insurance demand

Research paper	Hofstede's cultural dimensions considered significant
Park et al. (2002)	MAS
Chui & Kwok (2009)	PDI, IDV
Park & Lemaire (2011a, 2011b)	PDI, IDV, UAI, LTO
Treerattanapun (2011)	PDI, IDV, UAI

Source: authors' work.

It is worth noting that the IDV dimension is underrepresented in the literature not only pertaining to the subject of insurance but also in general (as presented in Table 2).

Not only the diversity of the results shown in the table above is worth emphasising, but also the fact that the researchers did not always obtain the same results. An example of this is the publication by Esho et al. (2004), who highlighted that the demand for property-liability insurance is not significantly affected by cultural factors. In conclusion, the impact of Hofstede's cultural dimensions on insurance demand remains unexplored (Outreville, 2013).

4. Research method

In order to conduct the empirical part of this study, widely available secondary data have been used. Hofstede's cultural dimensions indices come from a website dedicated to this project (Geert Hofstede, n.d.) and the insurance density (EUR, total premiums per inhabitant) in constant exchange come from Insurance Europe (n.d.). The data used to prepare the regression models are presented in Tables 5 and 6. The study was based on statistics from 27 countries covering the years 2004–2020.

Table 5. Hofstede's cultural dimensions indices

Country	PDI	IDV	MAS	UAI	LTO	IVR
Austria	11	55	79	70	60	63
Belgium	65	75	54	94	82	57
Bulgaria	70	30	40	85	69	16
Croatia	73	33	40	80	58	33
Czechia	57	58	57	74	70	29
Denmark	18	74	16	23	35	70
Estonia	40	60	30	60	82	16
Finland	33	63	26	59	38	57
France	68	71	43	86	63	48
Germany	35	67	66	65	83	40
Greece	60	35	57	112	45	50
Hungary	46	80	88	82	58	31
Ireland	28	70	68	35	24	65
Italy	50	76	70	75	61	30
Latvia	44	70	9	63	69	13
Malta	56	59	47	96	47	66
Netherlands	38	80	14	53	67	68
Norway	31	69	8	50	35	55
Poland	68	60	64	93	38	29
Portugal	63	27	31	104	28	33
Romania	90	30	42	90	52	20
Slovakia	104	52	110	51	77	28
Slovenia	71	27	19	88	49	48
Sweden	31	71	5	29	53	78
Switzerland	34	68	70	58	74	66
Turkey	66	37	45	85	46	49
United Kingdom	35	89	66	35	51	69
Average	51	59	47	70	56	45

Source: authors' work based on Geert Hofstede (n.d.).

Table 6. Average insurance density per inhabitant in the years 2004–2020

Country	All insurance	Life insurance	P&C insurance	Motor insurance	Property insurance	GL insurance	Health insurance
	in EUR, constant exchange rates						
Austria	19,55.54	770.69	10,48.56	360.51	295.49	89.06	211.63
Belgium	25,75.67	16,56.48	703.40	315.79	230.19	67.67	268.08
Bulgaria	125.29	18.48	107.44	76.17	17.76	2.43	3.35
Croatia	287.92	80.35	192.51	108.28	39.50	9.81	15.05
Czechia	540.86	217.39	297.48	151.11	83.98	26.86	19.15
Denmark	43,44.33	30,38.19	12,70.94	322.23	417.72	68.44	47.11
Estonia	252.66	64.59	187.19	116.29	48.22	5.57	5.39
Finland	3,733.93	2,987.38	650.40	264.13	160.84	37.31	106.36
France	3,109.79	2,011.15	917.92	295.88	229.02	90.71	207.36
Germany	2,198.85	1,070.10	707.75	287.87	206.36	88.51	421.02
Greece	399.54	189.13	204.19	122.50	28.77	7.67	7.45
Hungary	252.25	124.15	126.08	62.38	44.88	6.12	2.36
Ireland	4,121.12	3,612.84	706.02	323.75	211.73	113.83	517.36
Italy	2,375.79	1,703.31	650.86	324.83	90.07	58.53	38.29
Latvia	198.59	39.14	133.00	73.72	23.14	4.81	30.53
Malta	1,194.12	752.95	381.54	197.99	77.27	24.74	66.67
Netherlands	4,375.54	1,163.78	2,143.32	264.25	204.89	62.67	2,223.19
Norway	2,275.84	1,479.19	840.93	342.52	313.27	26.67	111.75
Poland	264.47	111.00	151.63	89.82	28.66	9.17	2.93
Portugal	1,242.25	806.70	378.62	155.26	69.95	9.94	105.47
Romania	80.59	13.72	63.93	46.72	10.26	2.03	2.90
Slovakia	335.07	186.29	177.97	110.67	42.89	11.26	14.59
Slovenia	959.79	271.46	594.60	246.01	105.77	25.60	219.46
Sweden	2,660.47	1,916.70	630.27	220.49	278.30	29.74	143.97
Switzerland	6,452.57	3,525.51	2,644.90	659.54	455.79	228.45	1,051.12
Turkey	49.26	6.64	35.37	18.86	9.24	1.06	5.65
United Kingdom	3,697.87	2,568.31	1,092.60	265.39	267.74	150.12	86.09
Average	1,854	1,125	631	216	148	47	220

Source: authors' work based on Insurance Europe (n.d.).

In the next step, regression models were built between the explained variable (insurance density (total premiums per inhabitant) for all insurance, life insurance, P&C insurance, motor insurance, property insurance, GL insurance and health insurance) and the explanatory variable (all Hofstede's cultural dimensions indices). This is how 42 econometric models were created. However, what is important is that the indices describing Hofstede's cultural dimensions cannot be considered individually, but only when compared to a selected point of reference (e.g. another country). That is why the final form of the estimated models can be presented according to the formula below:

$$\ln(density_{i,j}/ < density_i >) = A_i \cdot \ln(HOF_{i,j}/ < HOF_i >) + C_i, \qquad (1)$$

where:
$density_{i,j}$ – density for i-th type of insurance, j-th country,
$HOF_{i,j}$ – Hofstede's index value for i-th dimension, j-th country,
$<\cdot>$ – arithmetic mean value,
A_i (for i-th dimension) – estimated model parameters (slope coefficient),
C_i – estimated model parameters (constant).

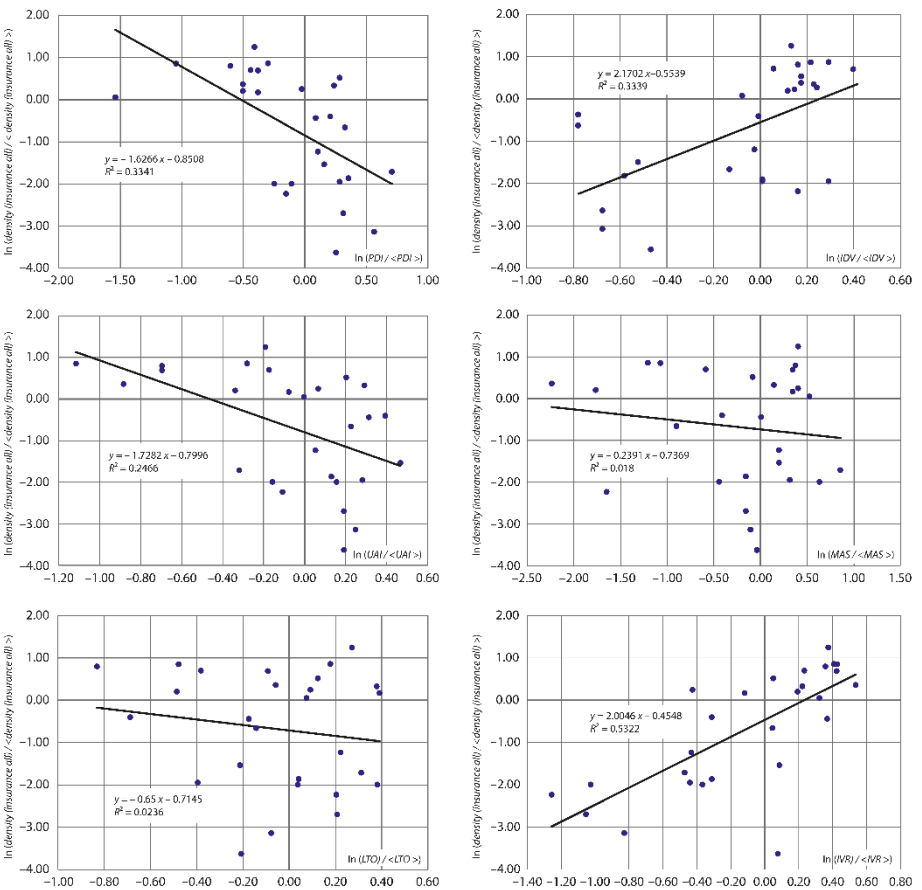
In the next step, econometric models were estimated, where all Hofstede's cultural dimensions indices were analysed in the first iteration for each type of insurance, and then statistically insignificant variables were removed. In other words, equation (2), as presented below, was calculated:

$$\ln(density_{i,j}/ < density_i >) = \sum_{i=1}^{6} A_i \cdot \ln(HOF_{i,j}/ < HOF_i >). \qquad (2)$$

5. Results and discussion

Figure 1 presents the results of research carried out in accordance with the procedure described in Section 4 for all insurance.

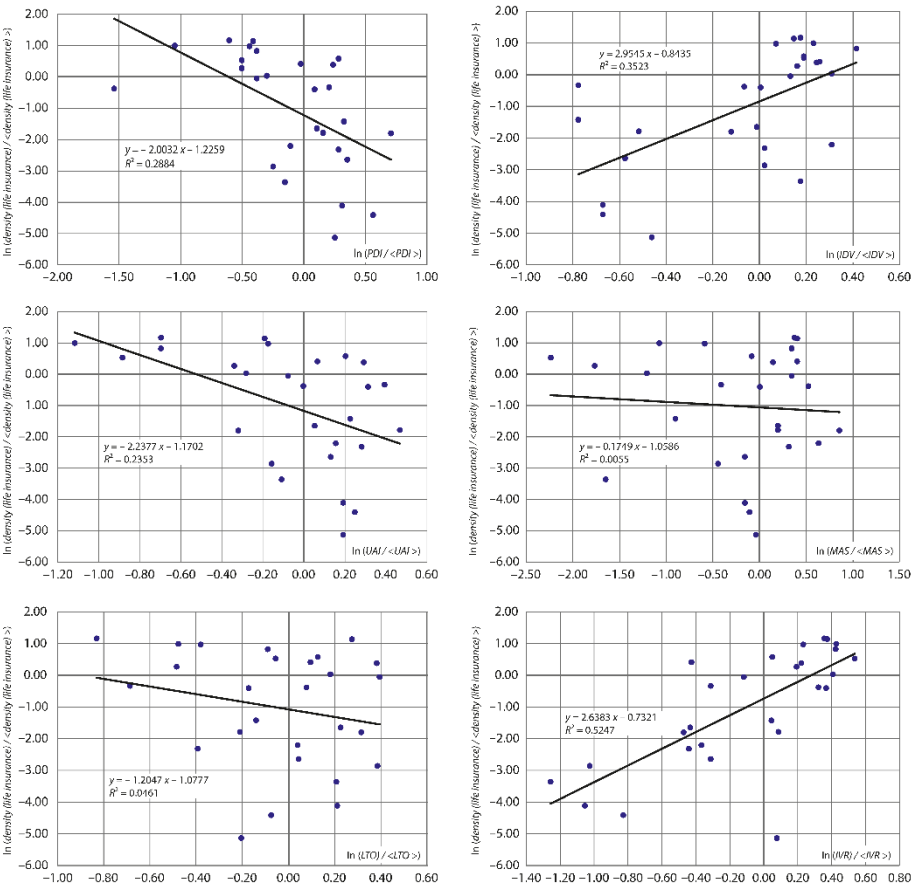
Figure 1. Results of linear regression models for all insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 2 presents the results of research carried out in accordance with the procedure described in Section 4 for life insurance.

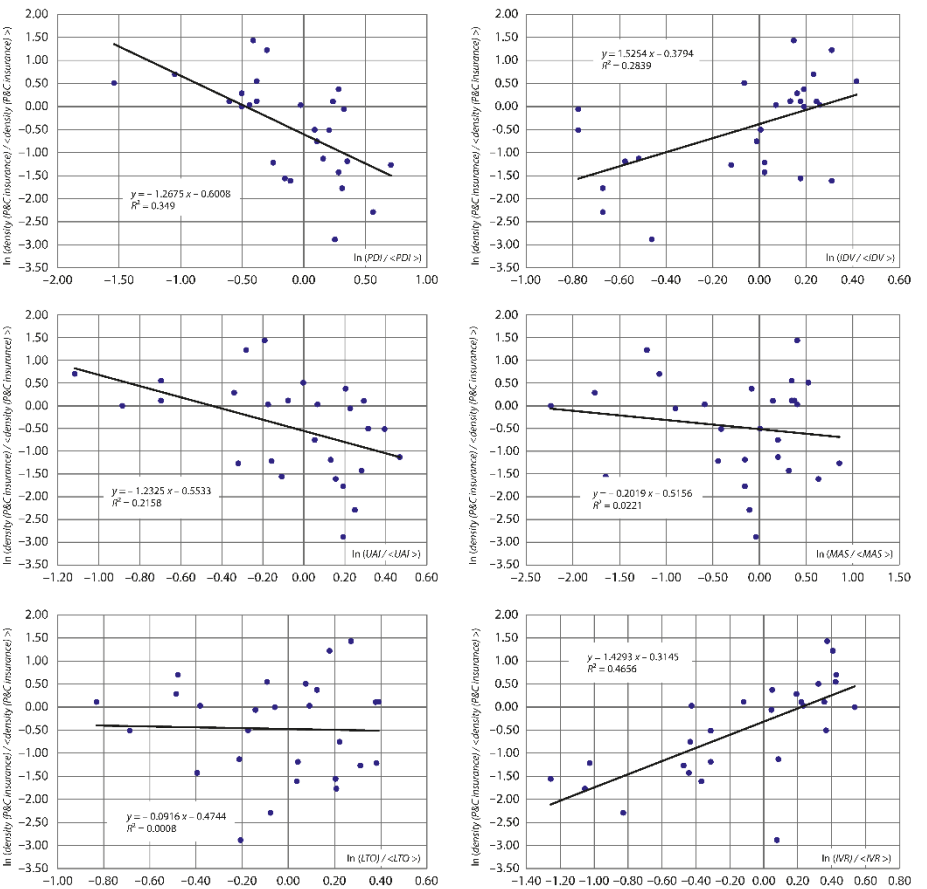
Figure 2. Results of linear regression models for life insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 3 presents the results of research carried out in accordance with the procedure described in Section 4 for P&C insurance.

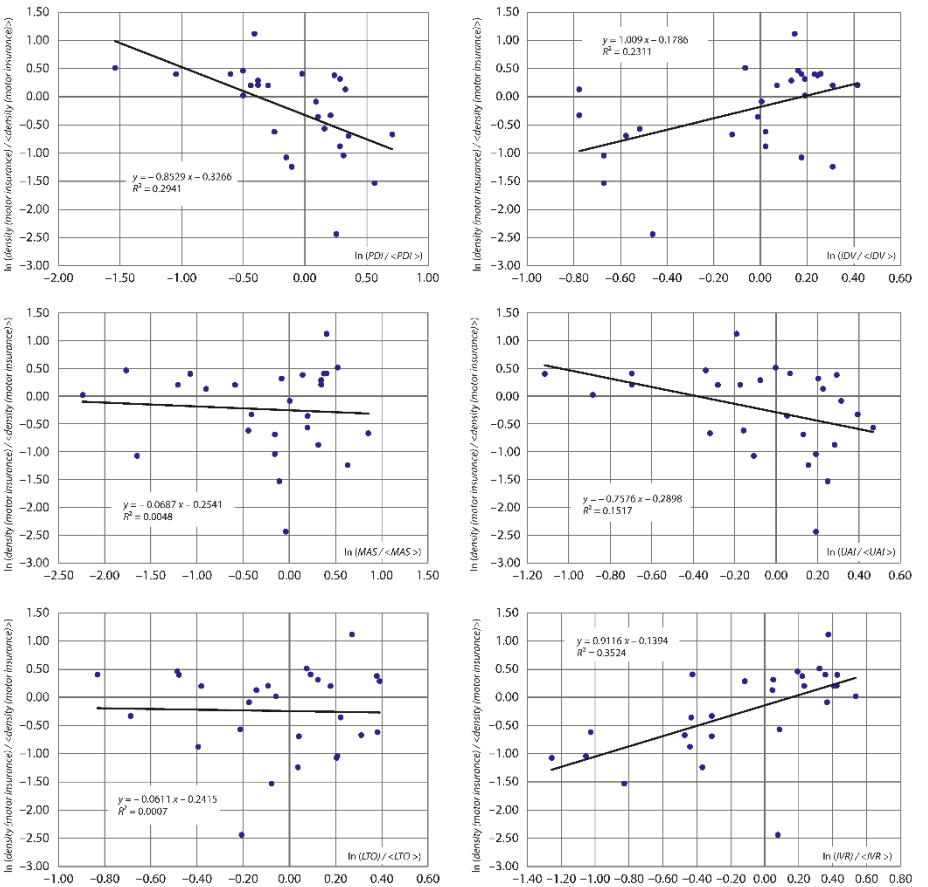
Figure 3. Results of linear regression models for P&C insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 4 presents the results of research carried out in accordance with the procedure described in Section 4 for motor insurance.

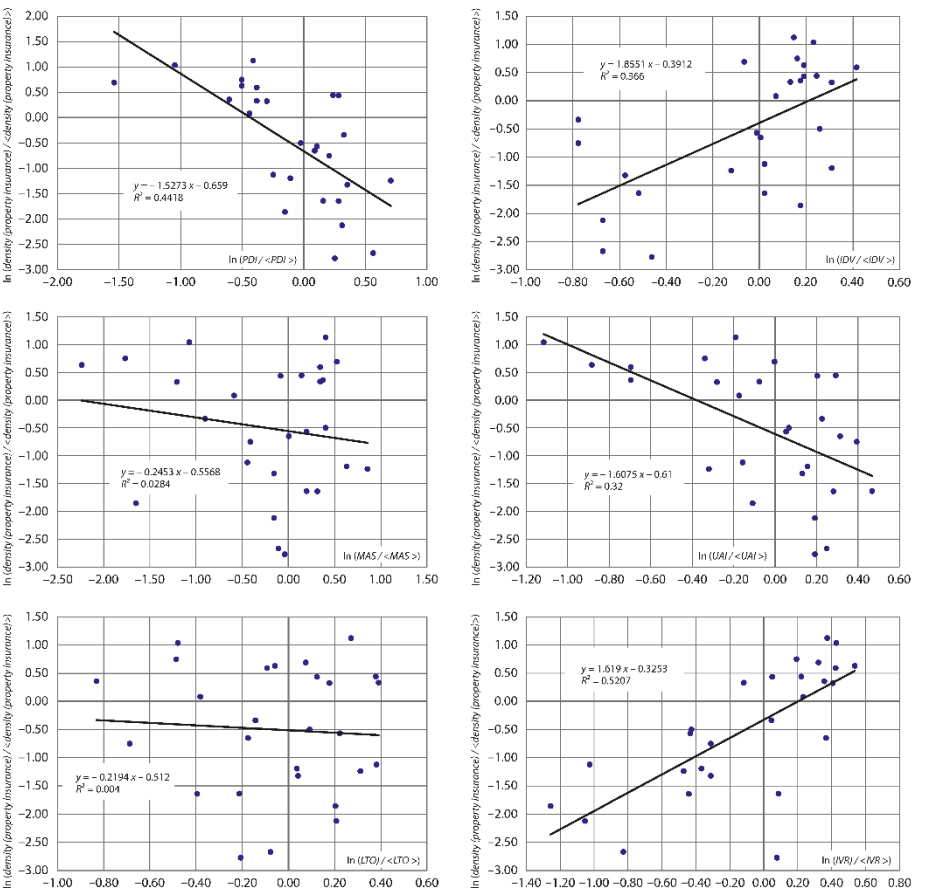
Figure 4. Results of linear regression models for motor insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 5 presents the results of research carried out in accordance with the procedure described in Section 4 for property insurance.

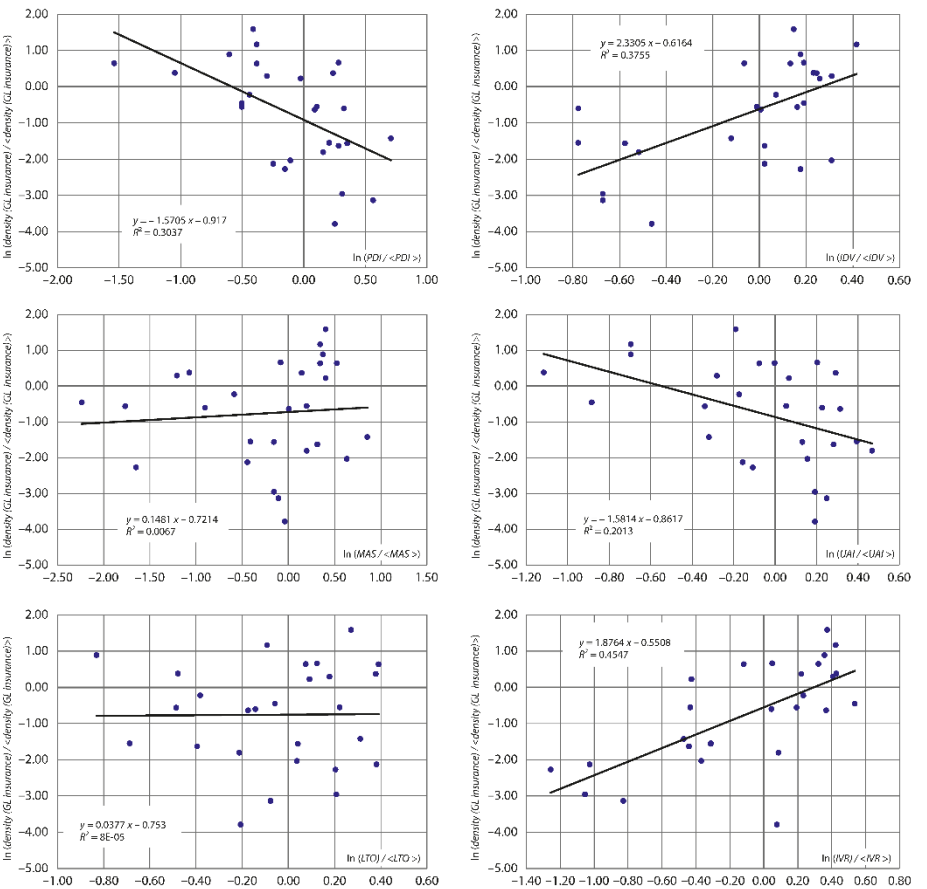
Figure 5. Results of linear regression models for property insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 6 presents the results of research carried out in accordance with the procedure described in Section 4 for general liability insurance.

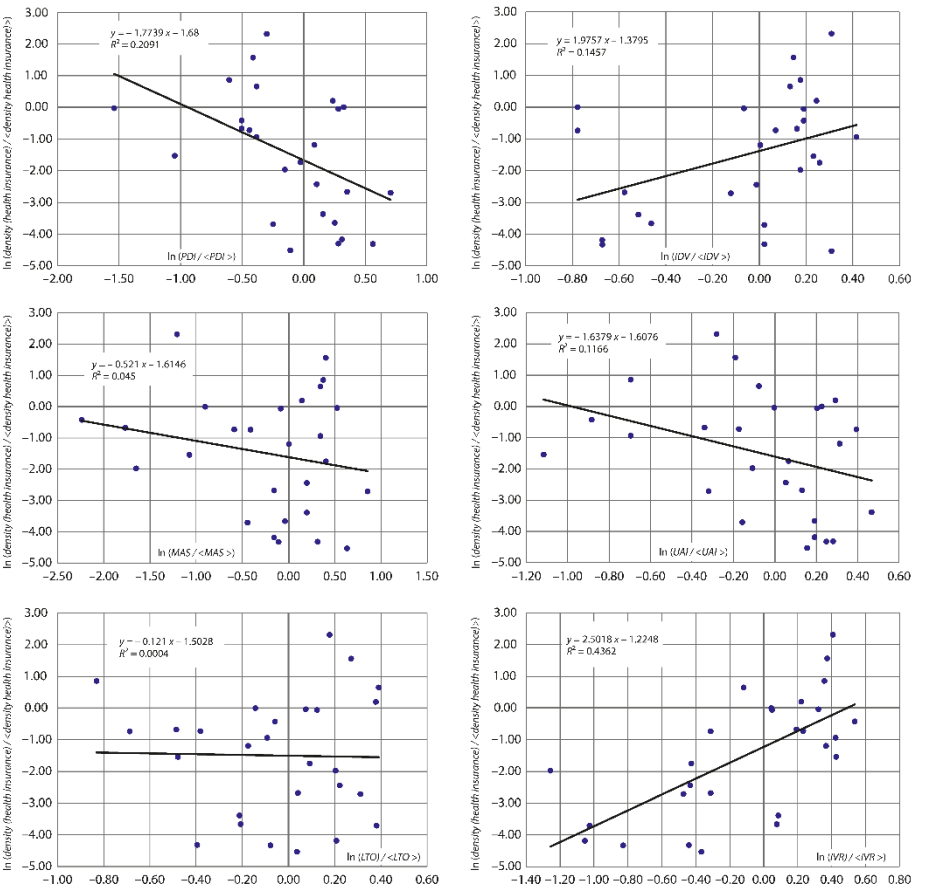
Figure 6. Results of linear regression models for GL insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Figure 7 presents the results of research carried out in accordance with the procedure described in Section 4 for health insurance.

Figure 7. Results of linear regression models for property insurance density in EUR, constant exchange rates



Source: authors' work based on data from Tables 5 and 6.

Table 7 summarises the linear regression results presented in Figures 1–7 for all the analysed types of insurance.

Table 7. Hofstede's cultural dimensions regression results – summary

Type of insurance	PDI		IDV		MAS		UAI		LT0		IVR	
All insurance	$y = -1.6266\ x - 0.8508$ $R^2 = 0.3341$ $F = 12.5406$ significance $F = 0.0016$		$y = 2.1702\ x - 0.5539$ $R^2 = 0.3339$ $F = 12.5342$ significance $F = 0.0016$		$y = -0.2391\ x - 0.7369$ $R^2 = 0.018$ $F = 0.4582$ significance $F = 0.5047$		$y = -1.7282\ x - 0.7996$ $R^2 = 0.2466$ $F = 8.1809$ significance $F = 0.0084$		$y = -0.65\ x - 0.7145$ $R^2 = 0.0236$ $F = 0.6038$ significance $F = 0.4444$		$y = 2.0046\ x - 0.4648$ $R^2 = 0.5322$ $F = 28.4405$ significance $F = 1.579E\text{-}05$	
	A_i −1.6266	C −0.8508	A_i 2.1702	C −0.5539	A_i −0.2391	C −0.7369	A_i −1.7282	C −0.7996	A_i −0.6500	C −0.7145	A_i 2.0046	C −0.4648
	SE 0.4593	SE 0.2287	SE 0.6130	SE 0.2267	SE 0.3532	SE 0.2831	SE 0.6042	SE 0.2414	SE 0.8365	SE 0.2739	SE 0.3759	SE 0.1919
	t_{stat} −3.5413	t_{stat} −3.7205	t_{stat} 3.5404	t_{stat} −2.4438	t_{stat} −0.6769	t_{stat} −2.6025	t_{stat} −2.8602	t_{stat} −3.3121	t_{stat} −0.7771	t_{stat} −2.6083	t_{stat} 5.3330	t_{stat} −2.4221
	p_{value} 0.0016	p_{value} 0.0010	p_{value} 0.0016	p_{value} 0.0219	p_{value} 0.5047	p_{value} 0.0153	p_{value} 0.0084	p_{value} 0.0028	p_{value} 0.4444	p_{value} 0.0151	p_{value} 0.0000	p_{value} 0.0230
Life insurance	$y = -2.0032\ x - 1.2259$ $R^2 = 0.2884$ $F = 10.1301$ significance $F = 0.0039$		$y = 2.9545\ x - 0.8435$ $R^2 = 0.3523$ $F = 13.5974$ significance $F = 0.0011$		$y = -0.1749\ x - 1.0586$ $R^2 = 0.0055$ $F = 0.1378$ significance $F = 0.7136$		$y = -2.2377\ x - 1.1702$ $R^2 = 0.2353$ $F = 7.6915$ significance $F = 0.0103$		$y = -1.2047\ x - 1.0777$ $R^2 = 0.0461$ $F = 1.2085$ significance $F = 0.2821$		$y = 2.6383\ x - 0.7321$ $R^2 = 0.5247$ $F = 27.5968$ significance $F = 1.938E\text{-}05$	
	A_i −2.0032	C −1.2259	A_i 2.9545	C −0.8435	A_i −0.1749	C −1.0586	A_i −2.2377	C −1.1702	A_i −1.2047	C −1.0777	A_i 2.6383	C −0.7321
	SE 0.6294	SE 0.3133	SE 0.8012	SE 0.2963	SE 0.4712	SE 0.3777	SE 0.8069	SE 0.3224	SE 1.0958	SE 0.3589	SE 0.5022	SE 0.2564
	t_{stat} −3.1828	t_{stat} −3.9124	t_{stat} 3.6875	t_{stat} −2.8472	t_{stat} −0.3712	t_{stat} −2.8029	t_{stat} −2.7733	t_{stat} −3.6300	t_{stat} −1.0993	t_{stat} −3.0031	t_{stat} 5.2533	t_{stat} −2.8554
	p_{value} 0.0039	p_{value} 0.0006	p_{value} 0.0011	p_{value} 0.0087	p_{value} 0.7136	p_{value} 0.0096	p_{value} 0.0103	p_{value} 0.0013	p_{value} 0.2821	p_{value} 0.0060	p_{value} 0.0000	p_{value} 0.0085
P&C insurance	$y = -1.2675\ x - 0.6008$ $R^2 = 0.349$ $F = 13.4049$ significance $F = 0.0012$		$y = 1.5254\ x - 0.3794$ $R^2 = 0.2839$ $F = 9.9116$ significance $F = 0.0042$		$y = -0.2019\ x - 0.5156$ $R^2 = 0.0221$ $F = 0.5647$ significance $F = 0.4593$		$y = -1.2325\ x - 0.5533$ $R^2 = 0.2158$ $F = 6.8795$ significance $F = 0.0146$		$y = -0.0916\ x - 0.4744$ $R^2 = 0.0008$ $F = 0.0202$ significance $F = 0.8882$		$y = 1.4293\ x - 0.3145$ $R^2 = 0.4656$ $F = 21.7798$ significance $F = 8.835e\text{-}05$	
	A_i −1.2675	C −0.6008	A_i 1.5254	C −0.3794	A_i −0.2019	C −0.5156	A_i −1.2325	C −0.5533	A_i −0.0916	C −0.4744	A_i 1.4293	C −0.3145
	SE 0.3462	SE 0.1723	SE 0.4845	SE 0.1792	SE 0.2687	SE 0.2154	SE 0.4699	SE 0.1878	SE 0.6450	SE 0.2112	SE 0.3063	SE 0.1564
	t_{stat} −3.6613	t_{stat} −3.4862	t_{stat} 3.1483	t_{stat} −2.1175	t_{stat} −0.7515	t_{stat} −2.3939	t_{stat} −2.6229	t_{stat} −2.9467	t_{stat} −0.1421	t_{stat} −2.2461	t_{stat} 4.6669	t_{stat} −2.0116
	p_{value} 0.0012	p_{value} 0.0018	p_{value} 0.0042	p_{value} 0.0443	p_{value} 0.4594	p_{value} 0.0245	p_{value} 0.0146	p_{value} 0.0069	p_{value} 0.8882	p_{value} 0.0338	p_{value} 0.0001	p_{value} 0.0552
Motor insurance	$y = -0.8529\ x - 0.3266$ $R^2 = 0.2941$ $F = 10.4146$ significance $F = 0.0035$		$y = 1.009\ x - 0.1786$ $R^2 = 0.2311$ $F = 7.5160$ significance $F = 0.0111$		$y = -0.0687\ x - 0.2541$ $R^2 = 0.0048$ $F = 0.1195$ significance $F = 0.7323$		$y = -0.7576\ x - 0.2898$ $R^2 = 0.1517$ $F = 4.4724$ significance $F = 0.0446$		$y = -0.0611\ x - 0.2415$ $R^2 = 0.0007$ $F = 0.0167$ significance $F = 0.8981$		$y = 0.9116\ x - 0.1394$ $R^2 = 0.3524$ $F = 13.6033$ significance $F = 0.0012$	
	A_i −0.8529	C −0.3266	A_i 1.0090	C −0.1786	A_i −0.0687	C −0.2541	A_i −0.7576	C −0.2898	A_i −0.0611	C −0.2415	A_i 0.9116	C −0.1394
	SE 0.2643	SE 0.1316	SE 0.3680	SE 0.1361	SE 0.1987	SE 0.1593	SE 0.3583	SE 0.1431	SE 0.4729	SE 0.1549	SE 0.2472	SE 0.1262
	t_{stat} −3.2272	t_{stat} −2.4826	t_{stat} 2.7415	t_{stat} −1.3127	t_{stat} −0.3458	t_{stat} −1.5953	t_{stat} −2.1148	t_{stat} −2.0242	t_{stat} −0.1293	t_{stat} −1.5598	t_{stat} 3.6883	t_{stat} −1.1050
	p_{value} 0.0035	p_{value} 0.0201	p_{value} 0.0111	p_{value} 0.2012	p_{value} 0.7324	p_{value} 0.1232	p_{value} 0.0446	p_{value} 0.0538	p_{value} 0.8982	p_{value} 0.1314	p_{value} 0.0011	p_{value} 0.2797

Table 7. Hofstede's cultural dimensions regression results – summary (cont.)

Type of insurance	PDI	IDV	MAS	UAI	LT0	IVR
Property insurance	$y = -1.5273\ x - 0.659$ $R^2 = 0.4418$ $F = 19.7854$ significance $F = 0.0002$	$y = 1.8551\ x - 0.3912$ $R^2 = 0.366$ $F = 14.4347$ significance $F = 0.0008$	$y = -0.2453\ x - 0.5568$ $R^2 = 0.0284$ $F = 0.7309$ significance $F = 0.4007$	$y = -1.6075\ x - 0.61$ $R^2 = 0.32$ $F = 11.7643$ significance $F = 0.0022$	$y = -0.2194\ x - 0.512$ $R^2 = 0.004$ $F = 0.1012$ significance $F = 0.7530$	$y = 1.619\ x - 0.3253$ $R^2 = 0.5207$ $F = 27.1646$ significance $F = 2.156E\text{-}05$
	A_i −1.5273 C −0.6590 SE 0.3434 SE 0.1709 t_{stat} −4.4481 t_{stat} −3.8555 p_{value} 0.0002 p_{value} 0.0007	A_i 1.8551 C −0.3912 SE 0.4883 SE 0.1805 t_{stat} 3.7993 t_{stat} −2.1665 p_{value} 0.0008 p_{value} 0.0400	A_i −0.2453 C −0.5568 SE 0.2869 SE 0.2299 t_{stat} −0.8549 t_{stat} −2.4214 p_{value} 0.4007 p_{value} 0.0230	A_i −1.6075 C −0.6100 SE 0.4687 SE 0.1873 t_{stat} −3.4299 t_{stat} −3.2574 p_{value} 0.0021 p_{value} 0.0032	A_i −0.2194 C −0.5120 SE 0.6897 SE 0.2259 t_{stat} −0.3182 t_{stat} −2.2669 p_{value} 0.7530 p_{value} 0.0323	A_i 1.6190 C −0.3253 SE 0.3106 SE 0.1586 t_{stat} 5.2120 t_{stat} −2.0511 p_{value} 0.0000 p_{value} 0.0509
GL insurance	$y = -1.5705\ x - 0.917$ $R^2 = 0.3037$ $F = 10.9034$ significance $F = 0.0029$	$y = 2.3305\ x - 0.6164$ $R^2 = 0.3755$ $F = 15.0349$ significance $F = 0.0007$	$y = 0.1481\ x - 0.7214$ $R^2 = 0.0067$ $F = 0.1696$ significance $F = 0.6840$	$y = -1.5814\ x - 0.8617$ $R^2 = 0.2013$ $F = 6.3023$ significance $F = 0.0189$	$y = 0.0377\ x - 0.753$ $R^2 = 8e\text{-}05$ $F = 0.0019$ significance $F = 0.9652$	$y = 1.8764\ x - 0.5508$ $R^2 = 0.4547$ $F = 20.8470$ significance $F = 0.0001$
	A_i −1.5705 C −0.9170 SE 0.4756 SE 0.2368 t_{stat} −3.3020 t_{stat} −3.8729 p_{value} 0.0029 p_{value} 0.0007	A_i 2.3305 C −0.6164 SE 0.6010 SE 0.2222 t_{stat} 3.8775 t_{stat} −2.7738 p_{value} 0.0007 p_{value} 0.0103	A_i 0.1481 C −0.7214 SE 0.3597 SE 0.2883 t_{stat} 0.4118 t_{stat} −2.5019 p_{value} 0.6840 p_{value} 0.0193	A_i −1.5814 C −0.8617 SE 0.6299 SE 0.2517 t_{stat} −2.5104 t_{stat} −3.4237 p_{value} 0.0189 p_{value} 0.0021	A_i 0.0377 C −0.7530 SE 0.8572 SE 0.2807 t_{stat} 0.0440 t_{stat} −2.6828 p_{value} 0.9653 p_{value} 0.0128	A_i 1.8764 C −0.5508 SE 0.4110 SE 0.2098 t_{stat} 4.5659 t_{stat} −2.6254 p_{value} 0.0001 p_{value} 0.0146
Health insurance	$y = -1.7739\ x - 1.68$ $R^2 = 0.2091$ $F = 6.6091$ significance $F = 0.0164$	$y = 1.9757\ x - 1.3795$ $R^2 = 0.1457$ $F = 4.2628$ significance $F = 0.0495$	$y = -0.521\ x - 1.6146$ $R^2 = 0.045$ $F = 1.1774$ significance $F = 0.2882$	$y = -1.6379\ x - 1.6076$ $R^2 = 0.1166$ $F = 3.2985$ significance $F = 0.0814$	$y = -0.121\ x - 1.5028$ $R^2 = 0.0004$ $F = 0.0108$ significance $F = 0.9182$	$y = 2.5018\ x - 1.2248$ $R^2 = 0.4362$ $F = 19.3454$ significance $F = 0.0002$
	A_i −1.7739 C −1.6800 SE 0.6900 SE 0.3435 t_{stat} −2.5708 t_{stat} −4.8908 p_{value} 0.0165 p_{value} 0.0000	A_i 1.9757 C −1.3795 SE 0.9569 SE 0.3538 t_{stat} 2.0646 t_{stat} −3.8987 p_{value} 0.0495 p_{value} 0.0006	A_i −0.5210 C −1.6146 SE 0.4802 SE 0.3849 t_{stat} −1.0851 t_{stat} −4.1952 p_{value} 0.2882 p_{value} 0.0003	A_i −1.6379 C −1.6076 SE 0.9018 SE 0.3603 t_{stat} −1.8162 t_{stat} −4.4612 p_{value} 0.0814 p_{value} 0.0002	A_i −0.1210 C −1.5028 SE 1.1666 SE 0.3820 t_{stat} −0.1037 t_{stat} −3.9338 p_{value} 0.9182 p_{value} 0.0006	A_i 2.5018 C −1.2248 SE 0.5688 SE 0.2904 t_{stat} 4.3983 t_{stat} −4.2180 p_{value} 0.0002 p_{value} 0.0003

Note. The colours used in the table correspond to the level of the R^2 coefficient and thus the level of the explanation of the dependencies between the analysed variables: $R^2 \in$: [0,0–0,1) – no dependencies, grey colour; [0,1–0,4) – weak explanation, green colour; [0,4–0,6) – clear explanation, blue colour. SE – standard error.

Source: authors' work based on data from Tables 5 and 6.

Based on Figures 1–7 and Table 7, it can be concluded that:

- the PDI, IDV and UAI dimensions allow for a weak explanation of insurance demand measured as insurance density in constant exchange;
- LTO does not allow for an explanation of insurance demand measured as insurance density in the constant exchange rate;
- the greatest importance (the highest R^2) allows for an explanation of insurance demand measured as insurance density in constant exchange from Hofstede's cultural dimensions; the relationship between the IVR factor and the insurance density turned out to be the most significant;
- finally, the results achieved for various insurance groups as well as for insurance in general are very similar: in each case, the significance of distinct Hofstede's cultural factors is very similar.

Summary of the linear regression results, according to equation (2), is presented in Table 8 for all analysed types of insurance.

Table 8. Results of Hofstede's cultural dimensions regression models based on equation 2

Specification	All insurance	Life insurance	P&C insurance	Motor insurance	Property insurance	GL insurance	Health insurance
Statistically significant explanatory variables (after the last iteration of model estimation)	IVR IDV	IVR IDV	IVR IDV	IVR	IVR IDV	IVR IDV	IVR
Evaluation of model parameters							
$A_1(IVR)$	1.8017	2.3841	1.2852	0.9697	1.4073	1.6382	3.0129
Standard error A_1	0.3801	0.5230	0.3115	0.2425	0.2960	0.4135	0.7130
t_{stat}	4.74061	4.55833	4.12546	3.99892	4.75412	3.96166	4.22594
p_{value}	0.00007	0.00012	0.00036	0.00047	0.00007	0.00055	0.00026
If $p_{value} < 0{,}05$?	yes	yes	yes	yes	yes	yes	yes
$A_2(IDV)$	1.5052	2.1226	1.0442	–	1.3177	1.7748	–
Standard error A_2	0.5247	0.7221	0.4301	–	0.4087	0.5709	–
t_{stat}	2.8687	2.9396	2.4277	–	3.2242	3.1089	–
p_{value}	0.0083	0.0070	0.0227	–	0.0035	0.0046	–
If $p_{value} < 0{,}05$?	yes	yes	yes	–	yes	yes	–
Model quality assessment							
R^2	0.6519	0.6437	0.5821	0.3808	0.6706	0.6128	0.4072
Adjusted R^2	0.5979	0.5894	0.5254	0.3424	0.6175	0.5574	0.3687
Model standard error	0.94	1.29	0.77	0.64	0.73	1.02	1.89
F-value for the variance test	23.41	22.58	17.41	15.99	25.45	19.79	17.86
Significance of F	0.00000	0.00000	0.00002	0.00050	0.00000	0.00001	0.00028
If significance of $F < 0{,}05$?	yes	yes	yes	yes	yes	yes	yes
Residuals randomness based on the series test	yes	yes	yes	yes	yes	yes	yes

Note. The explanatory variables used in the first iteration of model estimation: PDI, IDV, MAS, UAI, LTO, IVR. Constant: No ($C = 0$). Dependency type: linear.

Source: authors' work based on data from Tables 5 and 6.

The conclusions drawn from the combined models (presented in Table 8) are, in principle, very similar to those drawn from Figures 1–7 and Table 7:

- the IVR factor shows the greatest importance (statistical significance observed in each model) for an explanation of insurance demand measured as insurance density in constant exchange from Hofstede's cultural dimensions;
- IDV proves second most important Hofstede cultural dimensions index (statistical significance noted in five out of seven econometric models). However, from a statistical point of view, the impact of IDV is much more limited than that of the IVR factor.

The results shown in Table 8 have significant methodological and practical implications in the field of cross-cultural insurance research. Most importantly, this study sheds light on the sometimes disregarded, yet crucial significance of the IVR cultural factor in clarifying the dynamics of insurance demand across various types of insurance. This analytical addition highlights the significance of IVR a factor that has hitherto been given very limited consideration in the current body of literature. Moreover, the consistent importance of IVR across many insurance domains highlights the strength and generalisability of our results. The findings of this study suggest a strategic necessity for insurance businesses to align their product portfolios and marketing communication with the cultural norms upheld by indulgent civilizations. These principles prioritise not only the reduction of risk but also the improvement of quality of life, personal satisfaction and the quest for pleasure. The implementation of strategic alignment has the capacity to enhance market competitiveness and foster customer resonance within culturally varied environments. What is more, the aforementioned findings are supported by previous research, particularly the investigations conducted by Chui and Kwok (2009), Park and Lemaire (2011a, 2011b), and Treerattanapun (2011), which further strengthen the empirical basis of these conclusions. The study's adherence to the framework of Hofstede's cultural aspects confirms its theoretical foundation, deepening our understanding of the complex interaction between culture and insurance behaviour. In brief, this study contributes to the existing empirical information and enhances the theoretical underpinnings in the field of cross-cultural insurance research. It provides practical insights for the insurance sector stakeholders who aim to achieve relevance and competitiveness in varied worldwide markets.

How could these results be interpreted and what are the practical implications of this finding? An indulgent society is one that permits its citizens to freely satisfy their basic human wants to enjoy life (Hofstede, 2001). It is important to acknowledge that leisure preferences vary across societies, irrespective of their classification as either indulgent or constrained. The perception of leisure within society is

characterised by intricate and diverse elements, shaped by a confluence of economic, historical and individual determinants. In the field of insurance marketing, being aware of the complexities associated with the value of leisure time is crucial. Instead of assuming a direct correlation between cultural characteristics and the valuation of leisure, it is more precise to examine the intersection of cultural values with broader society-related trends and economic situations. Insurance firms must customise their approaches to the distinct expressions of cultural values within the area of leisure, acknowledging that these values might be intricate and influenced by several factors. Moreover, in the context of insurance marketing, the understanding of the subtleties of freedom of expression within different cultural and political contexts becomes crucial. Insurance companies should be mindful of the diversity of perspectives within societies and avoid presumptions that certain political affiliations or cultural orientations uniformly dictate attitudes towards freedom of expression. The vast majority of leisure activities (i.e. summer and winter sports, water sports, extreme sports, hiking, etc.) cause significant health risks as well as potential personal liability. Moreover, indulgent societies in general perceive longevity and well-being as the most important values. For this reason, insurance companies could tailor their offering (different types of insurance) to the citizens of the countries with a high IVR. This may be of practical importance for the marketing communication of insurance companies which should consider the possibility of enjoying life and maintaining current standards of living in the case of unforeseen events covered by insurance.

Although this study offers interesting insights into the correlation between cultural aspects and the need for insurance, it is also important to acknowledge its limitations. The findings presented in this paper are contingent upon a particular dataset and sample size, thus constraining the possibility to extend the conclusions to a broader population. It is recommended that future investigations based on this work employ datasets that are both larger in scale and more diversified in nature. Furthermore, cultural aspects, while serving a practical purpose, offer a streamlined framework for comprehending the complexities of culture. The use of qualitative research approaches and the incorporation of other cultural frameworks might provide a more detailed and comprehensive viewpoint. The present study is based on cross-sectional data, which poses difficulties in demonstrating causality. Longitudinal research and experimental methods might potentially offer a means to overcome this constraint. Moreover, it is important to delve into the issue of cultural variety among nations and the possible variances that exist within subcultures. This calls for further investigation in future study, which might be effectively conducted through the use of mixed-methods techniques. It is essential to acknowledge that cultural values have the potential to undergo transformations with time,

necessitating periodic reassessments of this study to account for the shifting cultural landscapes. These numerous features offer prospective avenues for advancing our understanding of the evolutionary process of cultural influences and their impact on the dynamics of insurance behaviour. The investigation of these dynamics encompasses not only the interconnectivity of diverse variables but also the analysis of the individual progression of each of these phenomena over time. It is crucial to establish clarity in order to thoroughly analyse the interaction between culture and insurance behaviour by precisely defining the distinctive characteristics of these dynamics. Ultimately, an examination of how insurance businesses modify their marketing and communication tactics to conform to cultural values can yield valuable practical insights for the sector. These pathways serve to expand the academic investigation into the impact of culture on insurance demand, enhancing the field's comprehension and resolving the constraints of this study. An important limitation of the study is also the analysis of the cultural aspect in isolation from other factors which undoubtedly influence the assessment of the impact of culture on the demand for insurance (e.g. the wealth of nations, as in Park and Lemaire (2011a)).

6. Conclusions

In the research, the relationship between Hofstede's cultural dimensions indices and insurance demand (insurance density – total premiums per inhabitant) has been analysed. The study was conducted for various types of insurance: all insurance, life insurance, P&C insurance, motor insurance, property insurance, GL insurance and health insurance.

The findings of the study emphasize the significant impact of the IVR cultural component on different insurance types. These findings have important implications for insurance policies and marketing tactics. Insurance firms have the potential to use this knowledge by strategically emphasizing the importance of enjoying life as a key value proposed in their marketing endeavours. This surpasses the conventional methods of reducing risk since it redefines insurance as a mechanism to facilitate leisure, individual satisfaction and overall well-being. Moreover, it emphasizes the significance of customising insurance offerings to correspond with the lives and tastes of affluent civilizations, providing coverage for risks and activities associated with leisure that have great value in these particular cultures. Marketing techniques that are successful should be consistent with the cultural norms of civilizations that prioritize indulgence. These strategies should highlight longevity and well-being as the most important values within the insurance industry. The research promotes the practice of focused market segmentation, utilising cultural characteristics such as

IVR, which allows insurance companies to pinpoint areas or nations with high IVR scores. This enables them to tailor their goods and communication strategies appropriately, thus achieving a competitive advantage in various markets. Ultimately, the research serves as a source of inspiration for product innovation, leading to the creation of insurance offerings that align with the preferences and concerns of individuals in these cultural contexts. These offerings encompass various features such as adaptable policies, comprehensive coverage for recreational pursuits and the integration of wellness initiatives within insurance packages. In conclusion, our findings serve to address methodological limitations and offer practical insights that can effectively improve customer interaction, broaden market reach and stimulate company expansion for insurance companies operating in culturally varied regions.

The indicated results are not only of methodological importance (little interest in this indicator is present in the literature) but also from the business perspective. The marketing communication of insurance companies should consider the possibility of positioning enjoyment of life and longevity as the key values in the context of their marketing strategy built for indulgent societies.

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