The Importance of Discount Rate and Trustfulness of A Local Currency for the Development of Local Tourism

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Abstract
Local currencies have been used to achieve local economic, social and environmental goals that are not attained by national currencies. Thus, they can also be applied as a mean of the regional development focused on the development of the local tourism. However, trustworthiness and costs of local currencies have been some of the main impediments in their widely usage. Therefore, discount rates that practitioners (including municipal authorities and governments) of local currencies present for potential users might play a key role to deal with these issues. Within this context, this research intends to assess the relationship between discount rates that potential users demand to use local currencies (a paper-based and a digital) and their trust to these currencies. To hit this target, a questionnaire survey was directed to 407 employees of a regional business in Cieszyn Silesia region and the responses were analyzed by binary logistic regression test in SPSS Statistical Software. The results confirm that potential users with more trust to local currencies have more tendencies to demand higher discount rates. Cultural values, occupational status, age, income levels of respondents and potential roles of governments and local authorities in local currency implementations might be the reasons of these findings.

Key Words: local currency, community currency, digital currency, trust, discount rate, local tourism, Cieszyn Silesia region.

JEL Classification: D31, M29, O44.

1. Introduction

Implementations of community currencies have become a popular functional strategy in all over the world to sustain and increase local development by providing keys for social, economic and environmental problems. Although there are different types of classifying community currencies (e.g. Blanc, 2011 divides it to three types), this study uses the categorization of some important studies regarding local currency schemes (Michel & Hudon, 2015; Gimenez & Tamajon, 2019 ; Seyfang & Longhurst, 2013) as they classify the types of community currencies as follows: Service Credits, Mutual Exchange Systems, Barter Markets and Local Currencies. But the researchers of this paper will be interested with only one type of community currencies namely, local currency.

As being a type of community currencies, local currencies can be converted to national currencies (Seyfang & Longhurst, 2013; Ali et al., 2014; Kim et al., 2016, Ključnikov et al, 2017) and are processed in line with the functions of national currencies (Kim et al., 2016; Michel & Hudon, 2015; Seyfang & Longhurst, 2013) by circulating in limited geographical territories and specified areas (Gomez & Helmsing, 2008; Blanc, 2011; Ali et al., 2014). Similar with paper-based local currencies, there is no need to collaborate with any financial institutions to convert digital currencies (Dwyer, 2015; Ali et al., 2014; Tschorsch & Scheuermann, 2016) and central banks or other related government institutions do not inspect their inventions (Ali et al., 2014; Tschorsch & Scheuermann, 2016).

The appearance of modern local currencies was based on after the great World economic crisis around 1930s by the existence of Worgl local money in Austria (Aldridge & Patterson, 2002; Miszczuk, 2018; Ryan-Collins, 2011). Then it has become a wide-spread phenomenon around the globe. According to De Carrillo et al. (2018), more than 4000 community currencies exist in all over the world. The extent of the benefits of local currencies is also very wide since it has positive impacts on GDP of countries (De Carrillo et al., 2018), financial stability of businesses (Pfajfar et al., 2012) and the wealth of its users (Gregory, 2009; Michel & Hudon, 2015). Local currency is a useful tool to cope with economic issues such as inflation, recession, and crises (Brenes, 2011). Under these periods, local currencies raise local purchasing power (Miszczuk, 2018).

Except above mentioned economic benefits, local currency also provides solutions for environmental and social issues. For instance, it increases social relations between its users and their participations to social activities (Wheatley et al., 2011; Sobeiecki, 2018). Furthermore, mutual understanding, and reliance between its users increase (Wheatley et al., 2011; Peruta & Torre, 2015). When it comes to environmental benefits of local currencies, they reduce to consume oils and emissions of carbon dioxide by enabling to trade in shorter ways (Kim et al., 2016).

However, some constraints exist in the widely usage of these currencies. The charges of local currencies create an obstacle for potential users to accept the usage of these currencies. For instance, some local currencies ask for redemption fee to exchange local currency to national currency for its users (Ryan-Collins, 2011; Kim et al., 2016) while some others require membership fees from its users to finance their services such as for security networks and for operating costs(Ryan-Collins, 2011; Ruddick et al., 2015). On the other hand, Eurakos currency asks for a commission (De Carrillo et al., 2018).Except their costs,lack of financial and nonfinancial supports from the government(Sobeiecki, 2018; De Carrillo et al.,2018, Androniceanu et al., 2019), and other external institutions(Gregory, 2009;Brenes, 2011),and lack of trust of potential users influence the usage of local currencies (Marshall& O'Neill, 2018; De Carrillo et al., 2018).

To cope with issues regarding costs of using local currencies and users' concerns about their security, some government and municipal authorities' supports are needed to encourage the usage of these currencies and to increase potential users' trust. This is because participation of municipalities and local governments into local currency systems and their usage of these currencies carry high importance in the awareness, trustworthiness, and widespread usage of them (Mauldin, 2015;Blanc; 2011).For instance, Sol-Violette (in France) created by the municipality of Toulouse in France Moreover, municipal authorities in England have given funding opportunities to local currencies.Montpelier, in US gained funds from the US Department of Health and Human Services to set a Time Bank. BristolandBrixtoncouncils accepted payment of taxes, fees and services by local currencies(Mauldin, 2015; Sebestova et al. 2018).

Except from these above-mentioned activities, governments and other authorities can apply some influential strategies such as making discount to increase usage of these countries.

This is because discount has been used as an effective tool to increase demands of good and services (Lee et al., 2012). Discounts provide economic and social benefits for individuals by depending on individuals' trust to discount maker (Lee et al., 2015). Since governments and municipal authorities are reliable institutions, the discount that they make can increase potential users' trust to local currencies. Moreover, discounts are effective strategies for promotion and these kinds of actions make local currencies to have a good reputation from the perspective of potential users and increase users trust (Li et al., 2018). However, when discount rate is too high, individuals might become skeptical about the quality of product and services (Lee et al., 2015; Cao et al., 2018) and they become less eager to trust (Li et al., 2018). Therefore, determining an effective discount rate carries high importance to increase trust of users to use local currencies.

Some local currencies that make discounts are in existence in some countries such as in Kenya (Ruddick et al. (2015), in Brazil (De Oliveira et al., 2011) and in the UK (Ryan-Collins, 2011; Mauldin, 2015). But the researchers that investigate these currencies have not analyzed the relationship between discount rates and the trust of potential users regarding usage of these currencies. Although reliability and price discounts have been studied by many researchers (Bode, et al, 2011; Qu et al., 2009; Hammami et al., 2014), they mainly focus on marketing and supplier selection approaches. Therefore, different from existing studies in the literature, this research aims to find the answers of following questions; Does a positive relationship exist between discount rates that potential users demand for usage of local currencies and their trust to these currencies? (a paper based and digital). To find the answer of this question, this paper aims to discover and investigate the association between discount rates that potential users demand and trust to paper based and digital local currencies.

This study also differs from other researches that investigate relationship between trust and discount rate by conducting this research in Cieszyn Silesia region. In 2015, GDP differences between the wealthiest and the least wealthy regions of the Czech Republic was approximately 31.8% (Kokocinska, & Puziak, 2018). Moreover, this difference has been risen years to years (Marta, 2017). Since the GDP of the Cieszyn Silesia region is less than most of the other regions in Czech Republic, investigating perceptions of citizens in line with selected aim might create a value addition in the literature.

This study is organized as follows. The next section sheds on lights about related literature of the stated factors. The aim, methodology and data will be provided in Section 3. Section 4 indicates main results, discussion and suggestions about the findings and potential strategies for implementation of a successful local currency scheme. Lastly, the research focuses and summarizes the main points of the concludes.

2. Literature Review

Except their positive impacts on economic factors, the positive effects of local currencies on social, environmental and cultural activities should not be underestimated too. This is because, they not only increase collective behaviors among community dwellers but also reduce emission gas that harms the nature of regions since having less trading activities with other regions. Local currencies are neither created against the national currency nor to take position of national currency. Thus, they are completely agreed with the sovereignty of national currencies (Blanc, 2011). These currencies can be formed by municipalities, public authorities, enterprises, individuals (Miszczuk, 2018) and voluntary organizations (Kim et al., 2016).

Dwellers or citizens of these specific regions can trade and exchange good or services between each other by a specific local currency (Ali et al., 2014). Since local currencies process only in selected regions, the operations become quicker and the number of transactions

increases. Therefore, they accelerate economic activities in the specified areas and people in these regions get higher revenues. Adverse impacts of external factors can be minimized due to their resisting responsive features (Gomez & Helmsing, 2008). They can circulate in restricted areas in both formats, a paper based and a digitally.

The European Central Bank identifies digital currencies as the money that is used by its members as a payment instrument, circulates freely and is supervised by its creators without supervision of governments and any other legal institutions (De Carrillo et al., 2018). Similar with other digital currencies Local digital currencies (LDCs) also provide online mutual exchanges among member (Gimenez & Tamajon, 2019) and they are an alternative payment method and currency (Ali et al., 2014). Due to using new technologies, and improvements in these technologies, they have increased the quality of services (Bartok, 2018). For instance, digital currencies have some systems to collect complete, extensive and exact data, and enable its users to minimize their transaction costs and other costs such as printing, papering, stamping and rending money (Ruddick et al., 2015; Dwyer, 2015; Shahzad et al., 2018).

Regarding local currencies influences on local economic development, it provides benefits for local businesses, residents and also states. Corresponding to the advantages that firms might have, sales, performance, (Pfajfar, et al., 2012). credit access (Williams, et al., 2001), business operations and commercial activities of businesses increase (Bonanno, 2018; Peruta & Torre, 2015; de Carrillo et al., 2018). Output growth, local production (Brenes, 2011; Gregory, 2009) and demand of goods and services might be enhanced by usage of these currencies (Wheatley et al, 2011). When it comes to benefits of local currencies for citizens, these currencies encourage people to have new abilities that make them to increase their potential to be more active in labor market (Williams et al., 2001; Gomez & Helmsing, 2008). Local currencies also enable unemployed people to find more job opportunities, thus, decrease unemployment (Peruta & Torre, 2015; Sobeiecki, 2018). On top of that, they foster entrepreneurship and play an important role in the creation of new businesses especially in single proprietorship (Michel & Hudon, 2015; Gomez & Helmsing, 2008). Thus, living and economic conditions (Gregory, 2009; Michel & Hudon, 2015) and wealth of citizens (Bonanno, 2018; Gregory, 2009), and households (Gomez & Helmsing, 2008) get better and poverty becomes reduced (Brenes, 2011; Ruddick et al., 2015). For these reasons, local currencies financially enrich to local companies and residents, thus, states get more tax incomes (Kim et al., 2016). All these facts foster economic development (Brenes, 2011; Gregory, 2009).

Corresponding to its benefits on human and social capital, local currencies make residents and local firms to have close relationship with each other. Thus, mutualization and cooperation among these players stay strong (Ryan-Collins, 2011), and trust among them increases (Miszczuk, 2018). Moreover, local currencies improve competencies to create new ideas and provide information to increase financial literacy between local business and people so it increases social capital. All these facts also make regions to become well known and might draw tourists' attention (Ryan-Collins, 2011). Local people can fulfill their psychological needs from the advantages of using local currencies (Seyfang & Longhurst, 2013). In relation with their environmental benefits these currencies direct local people to attend recycling activities and to use public transportation so fuel consumption for transportation decreases and this fact increases environmental protection (Seyfang & Longhurst, 2013). These innovative R&D activities and expenses provide advantages for economic, social and environmental sustainability (Marikina, 2018; Razminiene, 2019) that develop competitiveness of regions so countries (Kiselakova, 2018).

Although local currencies provide many benefits, security of community currencies is one of the major barriers that effects trustworthiness and usage of these currencies by its users including firms and individuals. Some authors highlight that the users are not secured efficiently in local currency implementations (Bansal & Zahedi, 2014; McCrohan, 2003;

Pavlou et al., 2007; Shahzad et al., 2018) and this fact makes them to be less prone to use these currencies. For instance, the reason of lack of trust for digital currencies might be due to existence of hacking, technological faults and cyber-crimes (Bansal & Zahedi, 2014; McCrohan, 2003; Pavlou et al., 2007). Although, some digital currencies have cryptographic algorithms and block chain technology (Shahzad et al., 2018; Ali et al., 2014; Dwyer, 2015) to secure privacy of their users when making transactions in virtual platform, it is still a complicated process to make potential users to trust these currencies.

Trust is a feeling that someone who is reliable and honest will not convince you and meet your expectations with no doubt. Trust plays a vital role in the assimilation of virtual currencies by societies and it increases mood of optimism among potential users to use these currencies (Shahzad et al., 2018). Trust has also effects on social factors such as participation of communities, creation of social capital (Bonanno, 2018; Seyfang & Longhurst, 2013; Miao et al., 2015). Miao et al. (2015) states that some authors identify social capital by including trust and trustworthiness. Due to not being familiar with other users of a community currency, some potential users cannot trust them, thus they might be not willing to participate local currency activities. Moreover, non-existence of adequate guarantees and service quality assurance might impact trust of potential users to take a part in the implementations of these currency schemes (Aldridge & Patterson, 2002). Miao et al. (2015) also claim that when trust of individuals increases their willingness to participate collective activities raise. The positive relationship between trust of potential users and their tendency to use a digital currency has also substantiated by Shahzad et al. (2018).

Since governments and local authorities have more administering power, they can provide less costly solutions (Aldridge & Patterson, 2002) and more financial supports to widen the usage of these currencies. Moreover, existence of effective legislative, political (De Carrillo et al., 2018) and administrative strategies of governments (Miao et al., 2015) play substantial roles in the participation of potential users to common actions of communities (De Carrillo et al., 2018). In this regard, governments and financial organizations can collaborate to control these types of currencies and increase their trustworthiness (Shahzad et al., 2018). Local authorities should also play an active role to cooperate with national and international institutions such as NGOs, enterprises, state institutions and organizations to have an effective local currency implementation (Miszczuk, 2018). When local authorities and government institutions play a mediation role between practitioners of collective activities and its participants, individuals become more likely to attend these activities. Without this role of the authorities, people avoid themselves to join these actions (Miao et al.,2015).

When it comes to implementations that the governments, municipal authorities and practitioners can provide, subsidies have positive influences on the participation of individuals to collective activities (Miao et al.,2015). Permanent financial and social incentives should be provided to increase security of digital currencies that increase trust of potential users (Grossklags et al, 2010). In this similar vein, discount rates can be another way to increase usage and trustworthiness of these currencies. Some community currencies exist to provide some different discount rates. A community currency namely UDIS in US provide 2% discount for its users. When the user who goes shopping to the firms that use this currency and spend US$100 receives 2 dollars back (Brenes, 2011). Another example is a digital currency namely RES (Belgium). To increase income of its users, this currency provides 3 to 5% revenues when they make trade between each other. Moreover, this currency enables users to receive loans with 0% interest. The Eurakos currency firstly founded in Catalonia (Spain) and users could get 10% discount when being members of it (De Carrillo et al., 2018). BerkShares (5%), (Ryan-Collins, 2011; Kim et al.,2016; Mauldin, 2015), B-Notes (10%) and Potomac (5%) (Kim et al., 2016) also make discounts to increase participation of potential users. Potential users of BerkShares can buy 100 Berkshares by paying $95 US. Similarly, a local currency in Brazil,

namely, Sampaio provided 5% discount for its users and this discount played and growth enhancing role for small enterprises (De Oliveira et al., 2011). These price incentives had also positive influences on customers to participate the usage of these currencies.

When the price of products or services are less, people are more likely to appreciate them (Li et al., 2018). Lee et al. (2015) expresses that individuals who are interested with price reductions are more prone to discounted prices of promotional good and services. In this regard, markdowns are the prevalence and forceful strategies to increase awareness and usage of goods and services by its consumers and potential users of services. (Lee et al., 2015). The positive association between markdowns in the goods or services and trust of customers to service providers has also confirmed by some studies (Lee et al., 2015; Li et al., 2018).

3. Methods

The purpose of this research is to determine and examine how discount rates that potential users demand influence potential users' propensity to trust local currencies. Potential users in this research, are the respondents of the survey and they are all employee of a large regional producer of Cieszyn Silesia region of the Czech Republic. In accordance with this aim, the researchers chose three questions from a questionnaire survey to evaluate the selected variables as follows; "Would you trust a DIGITAL local currency that is secured by a trusted entity (bank, state, significant large private enterprise) and whose exchange rate is firmly tied to the Czech koruna? (Yes, No) and "Would you trust a PAPER local currency that is secured by a trusted entity (bank, state, significant large private enterprise) and whose exchange rate is firmly tied to the Czech koruna? (Yes, No). "How much discount for regional products and services would motivate you to actively use the local currency? (0%, 0.01% to 4.99%, 5 to 20%, more than 20%). In the light of the results of previously mentioned researches in literature review section, the following hypotheses might be assumed:

H1: Trust of potential users to a digital local currency is positively associated with the discount rate that they demand for regional products and services.

H2: Trust of potential users to a paper based local currency is positively related with the discount rates that they demand for regional products and services.

The researchers apply binary logistic regression test to analyze whether positive association exists between trust of potential users and discount rates that they demand. All performed analyses in this paper were done by applying a statistical software, Amos SPSS Version 23. The dependent variable in this study is binary as "Trust (Yes)" or "Do not trust (No)". Independent variable is continuous, and ordinal data that shows discount rates from 0% to more than 20%. To determine the significance of independent variable in the logistic regression models, the researchers use Wald Statistics. The level of significance is considered at 5% and p values that are more than this confidence level make researchers to support null hypothesis that is set up as follows:

Null hypotheses: Trust of potential users to local currency (a paper based and a digital) is not positively associated with the discount rate that they demand from providers.

With respect to the binary logistic regression models that this study sets, they are as follows:

Binary Logistic regression models: $Y_{1,2} = (\beta_0 + \beta_1 X_{1,})$

X_1: Independent variable (discount rate)

$Y_{1,2}$: Dependent variable (trust to a digital (Y_1) and a paper based (Y_2) local currencies by potential users)

B_1: Regression coefficients

β_0: Constant or intercept term

To evaluate whether the models are fit or not and also how overall model predicts variations in dependent variable, the research considers -2 log likelihood statistic. The smaller

values of -2 log likelihood than the base model's -2likelihood statistics show better model fit. By adding discount rate as a predictor variable in model-1 and model-2 has decreased Base model's -2 LL statistics by 56.772 and 62.228 respectively. These values are indicated under Chi-square results in the Table 1 and they are both significant at 5% significance level. These values confirm that Model-1 and Model-2 are better at estimating to trust of potential users to local currencies (a paper based and digital format) than base model that only includes the constant term.

Table 1

Models	-2 Log likelihood					Cox-Snell R^2 and Nagelkerke R^2	
	Base model's -2 LL statistics	-2 L likelihood with predictors	**Chi-Square**	df	Sig	Cox-Snell	Nagel-kerke
Model 1 (digital)	515.782	459.010	56.772	1	**0.000**	0.130	0.181
Model 2 (paper-based)	535.758	473.530	62.228	1	**0.000**	0.142	0.194

Source: Own processing.

To evaluate overall model fit, the research also looks at the values of Cox and Snell R^2 and the Nagelkerke R^2 . These measurements indicate how independent variable contributes the variability of dependent variable. According to the results of Nagelkerge R^2 values for Model-1 and Model-2 (0.181 and 0.194 respectively) 18.1% and 19.4% of variations in the dependent variable (for model-1 and model-2) are explained by the predictor variable that is same for both models namely, discount rate. It can be highlighted that decreasing role of the predictor variable in -2 log likelihood values and the high values of Cox-Snell R^2- Nagelkerke R^2 cause improvements in base model that only includes constant.

Corresponding to the assumptions of logistic regression model, the paper firstly investigates linearity. To examine this assumption, the paper focuses on "interaction term between the predictor and its log transformation" (Field, 2009, p.273). In case of having p values (Sig.) that are less than 5%, linearity assumption violates. According to Table 2, both p values in the table are greater than .05. Therefore, p values fulfill the linearity assumption for the models of this paper.

Table 2

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
LOGISTIC REGRESSION MODEL-1						
Lindis by discount	-0,074	,101	,534	1	**,465**	,929
LOGISTIC REGRESSION MODEL-2						
Lindis by discount	-0,138	,102	1,850	1	**,174**	,871

Source: Own processing.

Another assumption of logistic regression is independence of errors. To evaluate this assumption Durbin Watson test was applied by the authors. This is because this test indicates whether errors are correlated or not. Value of 2 indicates no autocorrelation. Due to having values that are close to 2, it can be stated that the errors are not correlated. Thus, the research also fulfills the assumption of independence of errors. Since the models have only one independent variable, the researchers did not investigate multicollinearity assumption of the logistic regression model.

Table 3

Logistic Regression Models	Durbin Watson Test Statistics
Model-1	1,690
Model-2	1,919

Source: Own processing.

To gain data from these respondents, the research performed a questionnaire survey. The researchers randomly chose a sample that consisted of one tenth of the workers of the company and handed out the surveys in paper form to 500 workers. The sample reflected all data including whole common job positions, gender, work experience, place of residence and marital status of the survey respondents. The response rate was around 84% (422 respondents). But because of missing values and inaccurate responses, 15 of them were excluded and 407 potential users' responses were taken to consideration by the researchers for the analyses. The binary logistic regression models have only one independent variables, thus, having more than 100 respondents (Long, 1997) confirm the fact that this research fulfill the required sample size. Another approach to calculate whether sample size is adequate or not is Cochran's formula (1963) as follows:

$$\boldsymbol{n_0} = \frac{\mathbf{1.96\ (0.5)(0.5)}}{\mathbf{(0.05)^2}} = \mathbf{384}$$

Since the result of this formula is 384 and the data includes more than 100 respondents (407), this research fulfill the requirement of logistic regression about sample size. Moreover, observations are not repeated and does not come from matched data.

The characteristics of the selected sample are as follows; 13.27% (54 respondents) of the survey participants are female, while 86.73% (353 survey participants) of them are male. Regarding age of the respondents, 12.77% (52 survey participants) of potential users are less than 35 years, 46.93% (191 respondents) of employees are between 35 and 49 years old, 40.3% of total respondents (164 workers) are 50 and more than 50 years old. 13.02% of survey participants (53 employees) have been working for this regional producer less than 5 years, 10.07% of them (41 respondents) work for 5 to 10 years, and 76.91% (313 participants) of workers have assignment in this company for more than 10 years. Corresponding to marital status, 16.7% (68 respondents) of survey participants are single and divorced, 66.6% (271 participants) of potential users are married. With respect to job positions of the respondents, 15.23% (62 employees) of them work in administrative staff, 6.39% (26 workers) of them are manager, 66.09% (269 respondents) of the potential users work in production department, 8.6% (35 potential users) of the employees are in leader position at production, and 3.69% (15 employees) of them work in other positions. The next characteristic is the place of residence of the respondents. 49.88% (203 respondents) of employees stay in Třinec, 9.58% (39 potential users) of workers dwell in Jablunkov, 7.13% (29 workers) of survey participants reside in Bystřici, 4.67% (19 respondents) of employees live in Vendryně, 4.42% of workers (18 survey participants) sojourn in Český Těšín, and 24.32% (99 potential users) of the respondents reside in other regions.

4. Results

The results of binary logistic regression analysis for discount rates and trust to a digital local currency are presented in Table 4. The research applied Wald statistic not only to find if independent variable (discount rate) is significant to estimate trust to a digital currency but also to predict whether coefficient (β) in the model is statistically significant (different from 0).

Table 4

Variable	B	SE	OR	95% CI	Wald statistic	p
Discount rate	0.759	0.107	2.137	[1.734 2.634]	50.633	0.000
Constant	-1.649	0.183	0.192		81.342	0.000
Model-1: Trust = − 1.649+0.759*Discount rate						

Source: Own processing.

According to results from Wald statistics, discount rate is found to be statistically significant predictor in logistic regression equation. (B= 0.759, Wald χ^2 = 50.633, p= 0.000 < 0.05). The coefficient (B) is 0.759 that is different than 0, thus, it can be stated that potential users who trust to a digital currency have higher tendencies to demand higher discount rates. If a potential user increases his demanded discount rate by a unit, his odds of trusting to a digital currency will increase by 0.759. For these reasons, the research supports H1 hypothesis that supposes positive relationship between discount rate and trust to a digital local currency.

Moreover, odds ratio (OR) is depicted in the table to evaluate strength of the relationship between the predictor and the dependent variable and to show how odds change when one-unit change occurs in predictor variable. It also elucidates "how many times higher the odds of occurrence are for each one-unit increase in the independent variable" (Ho, 2014). An increase in discount rate by one unit, 2.137 times higher the odds of occurrence to trust to a local currency with 95% confidence interval (CI) between 1.734 and 2.634. On the other hand, having odd ratio more than 1 means that as value from the predictor variable (discount rate) increases, the odds of dependent variable (trust to a digital local currency) is more likely to occur. The research also illustrates the findings from binary logistic regression analysis for discount rates and trust to a paper based local currency in Table 5.

Table 5

Variable	B	SE	OR	95% CI	Wald statistic	p
Discount rate	0.783	0.106	2.188	[1.778 2.693]	54.759	0.000
Constant	2.278	0.175	0.228		71.617	0.000
Model-2: Trust = − 1.477 + 0.783*Discount rate						

Source: Own processing.

According to table 5, discount rate has been a significant predictor and has had significant influences on trust to a paper based local currency (B= 0.783, Wald χ^2 = 54.759, p= 0.000 < 0.05). The positive coefficient (0.783) confirms that trust to a paper based local currency becomes more likely as discount rates that potential users demand, increase. Frankly, trust to a paper local currency is 0.783 times more likely to occur for the potential users that demand more discount rates than their counterparts who request lower discount rates.

Moreover, a unit increase in discount rate rises log odds of trust to a paper local currency by 0.783. Thus, it can be inferred that potential users who ask for more discount rates are more likely to trust to a paper local currency. All these above-mentioned facts make this research to support H2 hypothesis that assume positive relationship between trust of potential users and their demand to higher discount rates.

When it comes to Odds Ratio, one unit increase in discount rate, 2.188 times higher the odds of occurrence to trust to a paper local currency with 95% confidence interval (CI) between 1.778 and 2.693. Thus, a potential user who demand more discount rates is 2.188 times more likely to trust to a paper local currency comparing to a potential user who ask for lower discount rates. Odds ratio is greater than 1 (OR=2.188) so as score of discount rate rises, the odds of trust to a paper currency occurring increase.

5. Discussion

The findings of this paper regarding positive association between discount rate and trust are compatible with the studies of Lee et al. (2015) and Li et al. (2018) as they have found similar results. On the other hand, these results contradict with some studies (McCrohan, 2003; Pavlou et al., 2007; Bansal & Zahedi, 2014). This is because these studies validate the fact that when users or online consumers have security concerns, their trust to websites comes into prominence rather than the discount rates that these websites provide.

The reasons why potential users trust to paper-based and digital currencies increases with higher discount rates might stem from the cultural norms and values of the potential users. This is because culture plays an influential role in the trust of individuals. Countries with high uncertainty avoidance cultures are more willing to face with legal rules, formal institutions and organizations in their connections. These countries are also more likely to trust certain, secured and guaranteed facts, shaped beliefs and mounting evidences to reduce their anxiety, thus, their perceptions for anomalous situations are not positive (Park et al., 2012). According to According to Hofstede's Insight (2019), the Czech Republic has a high score in uncertainty avoidance (score is 74 out of 100). Therefore, Czechs with high uncertainty avoidance are risk averse and they might be not willing to trust local currencies without supports or sponsoring activities of policy makers (Ključnikov et al., 2016, 2017). But the existence of formal institutions, governments and municipal authorities and potential discounts to increase usage of local currencies might have increased potential users' tendencies to trust.

Another reason why trust of potential users increases by higher discount rates might be related with their income levels and occupational status. Since majority of the respondents in this research do not work in administrative staff or in manager-leader positions, their income levels might be low. This is because a higher occupational status is positively related with a higher income level (Sgobbi and Suleman, 2013; Blazquez et al., 2018) and demanded discount rate by individuals is negatively related their income (Kim & Kim, 2019; Lee et al., 2012) and occupational status (Kim & Kim, 2019). As, the research has already mentioned the regional differences between GDP of Czech regions, Prague has the highest GDP and has big difference with other regions regarding their GDP levels (Czech Statistical Office, 2017). Thus, having lower income levels in Cieszyn Silesia region might have made the respondents to appreciate with higher discount rates to trust. These facts might be mounting evidences to support why trust and discount rate are positively associated. Moreover, age of individuals also has influences on people's demands on discounts and the usage of services. Older people accept for more discounts to use services comparing to older individuals (Lee et al., 2012). Most of the potential users in this study are older than 35 years old, thus, this can be another proof to explain the positive relationship between trust and discount rate.

The existence of effective rules, principles and activities of governments and municipal authorities in the encouragement of local currency implementations might be a vital motivational factor for potential users to use and trust to these currencies. For instance, when these policy makers allow users to pay local taxes by local currencies success of local currencies increases (Blanc, 2011; Kim et al., 2016; Mauldin, 2015). This is because municipal authorities' incentives to pay local fees and taxes increase trust of users to use local currencies and increase its usage (Mauldin, 2015).

Governments and local authorities can also provide some trainings and create events for individuals, enterprises, and practitioners and inform them about process and procedures of a successful local currency initiative. These educations can minimize issues about exchanging a local currency to national currency, show people to gain benefits of collaboration, reduce their security concerns, increase their digital competencies. These policy makers should also give organizational and administrative supports to the participants of local currency schemes. By guiding and directing people and firms to use local digital currencies, these authorities can make users to reduce their transaction costs and they might become interested with usage of these currencies. A control mechanism can be created to secure and investigate all transactions to make them more transparent that increases trustworthiness. A widen strategic program that include promotions of local currencies can be created by these authorities. This is because reputation of local currency implementations is also vital factor that influences trust of potential users.

Regarding financing of local currency schemes, instead of charging their users with redemption and membership fees and asking for commissions, practitioners of these currencies might look for supports from governments, local authorities and other financial institutions. For instance, practitioners, governments and local authorities can also cooperate with local or national banks and apply supports of other international organizations such as European Union. Banks can also create micro-credit schemes to support local currency implementations.

Receiving funds for local currency implementations from policy makers can motivate not only practitioners to make discounts for its users but also participating firms to make discounts for their customers. Although some participants of local currencies can be directed to make discounts, they might not be willing to do so. Governments should provide similar opportunities for these participants to break their resistance. For instance, a bonus system can be created and participants can gain benefits regarding their amount of sales and transactions. Applying these above-mentioned strategies and policies might increase awareness, trust and usage of potential users by drawing their attention to obstacles of the local development and the solutions of the local problems and how to cope with these issues. Thus, potential users might be willing to a part of these solutions by improving their networking, trading, exchanging activities. By making more business operations, their incomes increase and they create more job opportunities for unemployed people. Governments receive more taxes, local economies enhance and economic sustainability of regions might be achieved.

6. Conclusion

Due to economic benefits of local currencies for households, employers, firms, and states and their positive influences on social and environmental issues, practitioners of local currencies have paid sufficient attention to implement these schemes. However, the costs such as redemption, membership fees and commissions of these currencies for potential users and their reliability have impeded their widely usage. Thus, instead of charging their potential users and to solve their issues regarding their trustworthiness and widely usage, practitioners should present some other opportunities to potential users. In this regard, discount rates that might be

provided by governments, municipal authorities and practitioners might draw potential users attention and increase their trust to improve the usage of these currencies.

For these reasons, this paper purposes to analyze and explore whether a positive association exists between the discount rates that policy makers provide to increase the usage of local currencies (a paper based and a digital) and trust of potential users. To achieve this selected aim, 407 workers of a large local company in Cieszyn Silesia region were analyzed by the researchers. A questionnaire survey was employed to gain data from these respondents. To find whether a positive relationship exists between discount rate and trust, the paper used binary logistic regression test by running SPSS Statistical Program. The research also showed how the assumptions of binary logistic regression tests fulfilled and how created models were fit with the data by employing Wald statistic -2 Log likelihood, Cox-Snell R^2 and Nagelkerke R^2, and Durbin Watson test. The results of this research confirm that the trust of potential users for local currencies is positively related with discount rates that potential users demand (or practitioners provide). In other words, higher values of discount rates are associated with greater possibilities of being trusted to local currencies.

One of the reasons of this finding might be related with a cultural factor such as having high uncertainty avoidance. In this regard, existence of municipal authorities and governments in a local currency scheme and the possibility that they can provide higher discounts might have increased the trust of potential users. Other reasons of these results might stem from age, income level and job positions of potential users.

Investigating relationship between discount rate and trust in a local currency implementation makes this study to differ from other existing sources and the results of this research make policy makers, practitioners and other financial organizations to be interested with this study. However, this study is limited to some extent. For instance, the characteristics of the respondents and differences in their trust have not considered by this research. Moreover, this research has investigated only workers of a company. The researchers also have only considered price discounts and their association with trust. In this regard, other academicians and researchers can focus on other subsidies and incentives of policy makers and analyze the relationship between these factors and trust level of users of local currencies. They can also include different characteristics of the respondents to their analyses to find differences among users. To have more wide-ranging research, workers of international and national companies and other community currency types can be investigated by further studies.

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