FDI AND ADMINISTRATIVE DECENTRALIZATION: THE IMPORTANCE OF EMPOWERING LOCAL GOVERNMENTS

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Abstract. This study analyzed the relationships between administrative decentralization, empowering local governments, and attracting foreign direct investments (FDI) based on an online questionnaire completed by government officials in Uzbekistan. The examined data suggests that empowerment of local governments is positively related to attracting foreign direct investments as mediating variable, while administrative decentralization does not directly affect foreign direct investments attraction. The paper presents the first comprehensive analysis of the mediating role of empowering local governments in Uzbekistan, and highlights policy implications that need to be implemented to establish a new legal status for local authorities. Further research is required on the specific way that the survey will be conducted only among government officials who are in charge of departments in investment policy. Based on the analysis, the study developed recommendations for changing the administrative environment that can create conditions that are more favorable for foreign investors. This study might help public administration, policy scholars, and, to be more specific, the policymakers, government officials to put better regulation into their agendas.

Introduction

It has been four years since the administrative reforms introduced by the central government. Over this period, the administrative development has taken a giant leap from the medium-level static era to a dynamic cycle. The social, political, and economic changes have rightly satisfied the perceptions of the citizens nor only in urban places, but also in rural areas as well.

One of the most comprehend debates over the seven decades is the decentralization or the interrelations between central and local bodies of the public administration. In this case, the example of Uzbekistan is unique and merely touches on the administrative structure due to the organizational environment. Administrative reform questions are tempted for policymakers.

The explanation of decentralization has been used by international scholars in terms of changing a central character. However, there is little consensus on what decentralization is and how this could be measured. In spite of different measurements, the scholars are in consent on standard criteria of decentralization that incorporate three cornerstones: administrative, fiscal, and political (Schneider, 2003). These essential dimensions refer to the theories of fiscal federalism, public administration, and political science.

The advance of the performance and contemporary paradigm in terms of new public administration and the President's strategy for the development of a country is the demand of our time. At the same time, a comprehensive analysis of the past stage of the country's development, the changing situation in the world economy in the context of globalization and increasing competition require the development and implementation of fundamentally new ideas and principles of further sustainable and forward-looking development of the country. To radically improve the effectiveness of reforms, create conditions for the comprehensive and accelerated development of the state and society, the implementation of priority areas for the modernization of the country and the liberalization of all spheres of life – the Strategy of Action on Five Priority Areas of Development of the Republic of Uzbekistan in 2017–2021 was approved. The Strategy is based on a comprehensive analysis of current issues of concern to the population and entrepreneurs, the analysis of current legislation, law enforcement, and best foreign practices (Decree of the President of the Republic of Uzbekistan, 2017). In this case, administrative decentralization in Uzbekistan is a universal claim as a developing country. Nevertheless, this research will go through best practices. It will depend on the current agendas and national strategies to implement the above reforms.

Literature review

Administrative decentralization

There is considerable literature on the various types and concepts of decentralization. They should be distinguished because they have distinct policy implications and conditions for implementation. The types of decentralization include political, administrative, fiscal, and market decentralization (World Bank Group,

2001). In this case, administrative decentralization tends to be used in three forms: deconcentration, devolution, and delegation (UNDP, 1999). Scholars generally accept this concept.

This study is going to examine reciprocal relationships between variables in theoretical prospective. The theory could help to examine the framework of administrative decentralization in the context of reforms to reconsider the role of regional governments in attracting more FDI for the economy of Uzbekistan. In this case, many types of research have highlighted the administrative reforms in terms of sustainable development; nonetheless, there is still significant room for improvement.

For example, we claim that the state institution's elements such as civil reforms, and more precisely, decentralization reforms should be considered, as appropriate, in devising the aforementioned national policies and strategies. In the preceding decades, a developing perception has risen that active public service is a significant requirement for sustainable progress (Scott, 2011).

Many studies reveal that a systematic examination of the specific literature on administrative reforms in development has been conducted on the part of some investigations. Many studies also state the political way, red tape legacy, and administrative faculty to be the main decisions of reform outcomes (Rinnert, 2015). The imminent reforms, best described as 'performance-based decentralization,' liberated a period of innovation and rose through the calculation of different levels of capability (Wu, Ramesh and Yu, 2017). The Conception of the Administrative Reform of Uzbekistan provides a new trajectory that the central authority should be decentralized and local government's standing can be revised (Decree of the President of the Republic of Uzbekistan, 2017).

Moreover, other studies aim to contribute to this debate by analyzing the role of decentralized governance in attracting foreign direct investment (FDI). It is often argued that decentralization is beneficial for improving the investment climate. In particular, competition among regional governments can lead to improved investment conditions for private investors and a reduction in the ability of local governments to allocate part of the return on investment through taxation after investing in a particular location. This competitive effect is due to the horizontal aspect of decentralization (Kessing, Konrad and Kotsogiannis, 2007).

Conclusively, incentives for officials can only play an essential role if they have the capacity and authority to carry out reforms or take measures to stimulate growth, etc. (Xu, 2011). The empowering local governments must also be accompanied by human resource development issues. In this case, FDI attraction could be included in personal contracts (Wang, 2010 cited by Rochlitz, Kulpina, Remington and Yakovlev, 2015).

Empowering local governments

In public administration, and more precisely in economics, the issues of economic development are related to the institutional structure of the central and local governments. In general, well-organized administrative institutions are very crucial factors in driving economic growth. Fiscal, political, and administrative decentralization issues is no exception in this perspective. It is worth to note

that these kinds of institutional reforms can encourage the empowering of local governments as well. In its own right, the forthcoming study represents a quantum leap compared to much of the previous literature on public administration (Hutchcroft, 2001).

In the case of Uzbekistan, social and economic improvement at the local area is controlled by khokims (local mayors) on a special basis and concerning national and local agendas targeted at particular welfare issues. Local mayor of the region, district, city annually submits a report to the relevant local councils on the most important and current socio-economic development issues (Law on Local Public Administration, 1993).

In recent years, there has been a growing interest in decentralization, the strengthening of local governments, and its relationship to economic growth. For instance, the study by scholars of Institute for the Study of Regionalism and Self Government, Department of Geography and Environment – London School of Economics and Political Science, Governance and Economics research Network (GEN). They pointed out that the growth-enhancing effect of fiscal decentralization depends to no small extent on the powers of subnational governments: tax decentralization leads to higher (lower) economic growth rates if combined with high (little) administrative and political decentralization (Filippetti and Sacchi, 2016). However, the issues of investment promotion policy should consider a balance between the central government's decision-making and an appropriate parallel for local governments to exercise their power. It is nearly impossible for the central government alone to increase economic attractiveness in local areas. Therefore, a multi-level mechanism is crucial (OECD, 2021).

Attracting foreign direct investments

In the modern world and the rapidly changing regulatory environment validated iteratively the fact of the worthiness of central-local relations, which are a core issue in the countries reform process, therefore, for both economic development and of course, in attracting foreign direct investments. Foreign direct investment (FDI) is a kind of international financing that involves a long-term relationship. It reflects the long-term interest and control of a resident organization in one country of an enterprise resident in another country (Kokkinou and Psycharis, 2004). Many international scientists provide theoretical and practical knowledge of FDI. According to these perceptions, FDI can play an essential role in the development process.

In the literature, we can see how relevant the administrative environment is for FDI. The coexistence of different organizational management structures has generated essential debates on the determinants of specific government structures, as well as issues related to the optimality of various forms of attracting FDI. For example, some studies aim to contribute to this debate by analyzing the role of decentralized governance in attracting foreign direct investment (FDI). It is often argued that decentralization is beneficial for improving the investment climate. In particular, competition among regional governments can lead to improved investment conditions for private investors and a reduction in the ability of local governments to allocate a part of investment return through taxation after invest-

ing in a particular location. This competitive effect is due to the horizontal aspect of decentralization (Kessing, Konrad and Kotsogiannis, 2007).

There are long-lasting efforts towards FDI policy liberalization, and the initiatives of central governments to reduce of approval procedures in FDI to enhance local economic development. Followed by decreasing approval processes in attracting foreign direct investments the competition among local governments will be increased (OECD, 1999).

It is worth to note that according to national legislation of Uzbekistan, more precisely, in conformity with the new Tax Code, the government may provide holidays for land, property and water use taxes to some companies with FDI. Within this framework, local governments have limited administrative power to offer some additional preferences, and only presidential decrees or special government resolutions can grant tax incentives for foreign investors (Bureau of Economic and Business Affairs, 2021).

Districts compete for the economic increase, the attraction of foreign direct investment, etc. At the same time, the improvement of the status of local government also creates high incentives for all county administrations to compete for promotion opportunities. National statistics and the media consistently announce regional indicator rankings, which are becoming an essential part of the assessments to fix the elevation of officials of subnational governments. Chinese subnational governments have the capacity and authority to take responsibility for the economy inside their domain. They are granted a relatively high degree of autonomy in economic action. Opportunities and empowerment are in themselves vital sources of incentives. Conclusively, incentives for officials can only play an essential role if they have the capacity and authority to carry out reforms or take measures to stimulate growth, etc. (Xu, 2011). Furthermore, few studies have been published on flexible contractual forms. The article asserts that some policies, such as flexible forms of contracts and the creation of special economic zones, besides lessen the transaction costs of doing business and attract foreign direct investment (Fan, 1998).

Research question

Therefore, various literature on the topic of this research tried to define the relationships of variables between the independent, mediating, and dependent variables, and in this case – administrative decentralization, empowering local governments, the attraction of foreign direct investments. The administrative decentralization reforms are very important in terms of the institutional context of each country, respectively. Hence, as a researcher to investigate the relationships of the variables in the theoretical framework (Figure 1), the research question is as follows:

a. Research Question: Does empowering local governments play a mediating role between administrative decentralization and attracting foreign direct investments?

In this study, based on this question, there is an intention to investigate how the new experience will work, mainly because of the fundamental assumptions of the consequent changes in Uzbekistan.
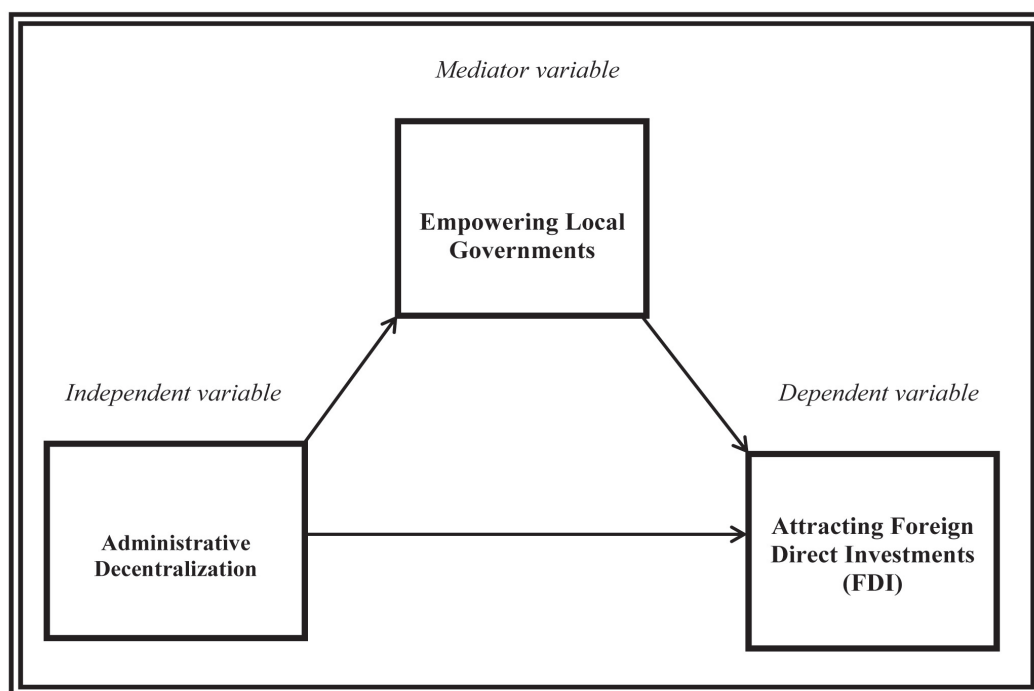
Figure 1. **Theoretical framework**

Hypotheses

Independent variable: Administrative decentralization

Administrative decentralization is not aimed at undermining the position of the central government, but at empowering local governments and taking into account the needs that are more sympathetic to users. It intends to lessen dependence on the central government, enhance accountability, systematize change, and spur economic growth (Grindle, 2007). Moreover, decentralization is characterized as a trigger for local development. It is believed that more considerable local autonomy could stimulate local development, as it could support local authorities and communities to take the inventiveness necessary to make the required measures and regulate in their interest. Empowering local institutions and building the potential of local leaders is therefore critical for decentralization to move forward (Firman, 2009).

Mediating variable: Empowering local governments

The pro-arguments for empowering local governments and some experimental proofs have led to a broad decentralization trend, especially among countries with economies in transition like Uzbekistan. The systematic study was carried out on decentralized economic development initiatives that allow local governments. The study examined the results of the improvement of the empowerment system in China. It shows that the change has not contributed as much to the development of the county economy as expected, but has led to a significant increase in income. This county empowerment study in Zhejiang Province has some policy

implications for other developing countries (Fan, Wu, Y., Wu, A. and Wang, 2018). What is more, as local governments are better informed about local circumstances and choices, attempts have ordinarily been reoriented to match the need for public goods. In most cases, the high degree of autonomy granted to local authorities at all levels of the administrative hierarchy has had an unexpected impact on the level of infrastructure conditions (Démurger, 2001).

We have defined in some circumstances the positive sides of empowering, and therefore we should also remember the opposite sides. For example, decentralization policy can be considered challenging for states with a unitary system; meanwhile, if the central government change rules to enable local governments in establishing local FDI policy, then the central-local relations should be predictable in by-laws. They should be at the permissible level to monitor local governments in a certain way.

Dependent variable: Attracting FDI

The positive impact of FDI on local economic development and growth is enormous. However, Kessing and his co-workers (2007) recommend that the policymakers seeking to attract FDI need to be aware of the pitfalls of decentralization. The horizontal aspect of decentralization should not address the problem of delays in FDI, as it is rooted in the persistent irreversibility of investment. Also, the vertical dimension of decentralization, which involves the inevitable multiplicity of levels of government that are created in the process of devolution, potentially harms FDI.

There are different types of FDI attraction in local areas. In particular, local governments use a tournament approach to participate in regional production, and the study reveals that local governments manage to choose less regulation to strive for more FDI (Deng, Zhang, Ahmad and Draz, 2019). Another striking observation that emerged from the data comparison was using statistics on FDI inflows at the provincial level from 1995 to 2002; this research shows that provinces with more economic power have more significant FDI inflows (Canfei, 2006). When choosing a location, investors should consider that they will fall under the jurisdiction of all these levels of government. When the private sector is dealing with multiple levels of government, this can create problems of competition between different levels of government, failures in coordination, preferential conditions for decision-makers at different levels of government, universal issues of the pool in making independent tax and financial decisions, problems in the performance of implicit contracts between the state and private investors. An investor should deal with a single agency rather than with many other agencies.

Consequently, administrative decentralization is argued to be positively related to empowering local government, which states the following hypotheses:

Hypothesis 1. *Administrative decentralization is positively related to empowering local governments in Uzbekistan.*

Hypothesis 2. *Administrative decentralization is positively related to attracting foreign direct investments directly.*

Hypothesis 3. *Administrative decentralization is positively related to attracting foreign direct investments indirectly*

Hypothesis 4. *Empowering local governments is positively related to attracting foreign direct investments.*

Research methodology

This research uses a quantitative method to conduct research based on the questionnaire to examine our conceptual framework and its hypotheses to develop practical recommendations in designing the new administrative policy for the objectives of the study. Notably, the means of accumulating descriptive quantitative data is often pointed as "conducting a survey" or "survey research," and several researchers accept the word "survey" as an analog for the questionnaire (Simion, 2016). Hence, our quantitative method will define the interrelationship of different variables in terms of investment policy reform in Uzbekistan. The responses could identify the main reasons for the reform, positive sides of change, and of course, legal barriers in the existing administrative two-way relationship between local governments and central authority. The researcher tried to define indicators and external issues by creating a survey for the study. Overall, 158 government officials were surveyed in the public sector.

The questionnaire in this study was conducted among government officials, and the gender distribution shows that 82.9% of them are male, while 17.1% are female. The age distribution shows that the majority of the respondents are in the range of 25–34 years old covering 57% of the total population, 23.4% are between 18 and 24 years old, the third category comprises 16.5% of 35 to 44 years old, while other 2.5% are in the range of 45–54 years old. The last group, 0.6%, is ranged over 55 years old, respectively. In terms of educational background, most of the respondents have public officials with a bachelor's degree that comprised 54.4% of the total population, 37.3% of the sample have a master degree, 6.3% have a PhD degree, and last sample category belongs to high school degree with 1.9% respectively. In the context of responsibilities, 43.7% of the respondents work in middle management, 23.4% consider themselves as non-management professionals, 17.7% are in the sample of a supervisory position, and 15.2% is the last sample, which comprises of officials in senior management category. In the sphere of experience, the most respondents or 43% have been working in the public sector from one to five years, and interestingly, 25.3% of the sample have been working for government over ten years with substantial practical experience. Accordingly, 17.7% of the total sample is in the service from 5 to 10 years. Last but not least, 13.9% of the respondents have less than 1-year experience, respectively.

Geographically, the public officials are from Andijan – 8.9%, Bukhara – 2.5%, Fergana – 6.3%, Jizzakh – 5.1%, Khorezm – 7.6%, Namangan – 1.9%, Navoi – 2.5%, Kashkadarya – 5.1%, Samarkand – 20.3%, Syrdarya – 3.8%, Surkhandarya – 3.8%, Tashkent region – 10.1%, Karakalpakstan – 2.5%, and Tashkent (capital area) – 19.6%, accordingly.

The questions of the survey are made according to the previous literature review, and most importantly, some indicators have been added in national perspectives to be more relevant to provide insights into the policy recommendation agenda for the potential outcome. The questionnaire items were compiled from validated indicators correlated to the existing administrative environment, and all items in the questionnaire were measured using a five-level Likert scale from 1 to 5, that is, strongly disagree, disagree, neutral, agree, and strongly agree.

Analysis and results

Descriptive statistics

This part of the research consists of descriptions of the independent, mediating, and dependent variables. In this context, the means of all items in variables display a high level of perception by the respondents. Determination of respondents' perception is based on the Likert Scale, and this analysis categorization will be seen in other studies as well that the possible mean scores related to five-point Likert Scales. The classification is divided into three levels of low (1–2.33), moderate (2.34–3.66), and high (3.67–5) (Nazari et al., 2014). Hence, independent variable administrative decentralization has a mean value of 4.25 (Std. Deviation = 0.69), and on the other hand, our mediating variable empowering local governments has a mean value of 4.20 (Std. Deviation = 0.73). Meanwhile, the last variable as an outcome or dependent variable attracting foreign direct investments has a mean value of 4.09 (Std. Deviation = 0.81). Consequently, in our descriptive statistics, we can see a high level of mean value as more than 4 points. The Table 1 below displays the descriptive statistics.

Table 1

Descriptive statistics of variables

Variables	Mean	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
Independent Variable						
Administrative decentralization	4.25	0.69	1.00	5.00	-1.29	2.80
Mediating Variable						
Empowering local governments	4.20	0.73	1.20	5.00	-1.32	2.66
Dependent Variable						
Attracting FDI	4.09	0.81	1.00	5.00	-0.85	0.49
Demographics						
Gender	1.17	0.37	1	2	1.76	1.13
Age	2.00	0.74	1	5	0.73	1.32
Education	2.48	0.64	1	4	0.57	-0.14
Responsibility	2.49	1.01	1	4	0.25	-1.08
Working experience	2.54	1.020	1	4	0.20	-1.14
Region	8.52	4.27	1	14	-0.31	-1.10

Sources: Compiled by the author (-and hereafter, unless otherwise noted).

Reliability and Validity Analysis

Reliability and validity as concepts demonstrate how well a method measures something. Reliability relates to the coherence of measurement, and validity means

the accurateness of this measurement (Figure 2). It is crucial to assess reliability and validity when writing up results in quantitative research (Middleton, 2022).
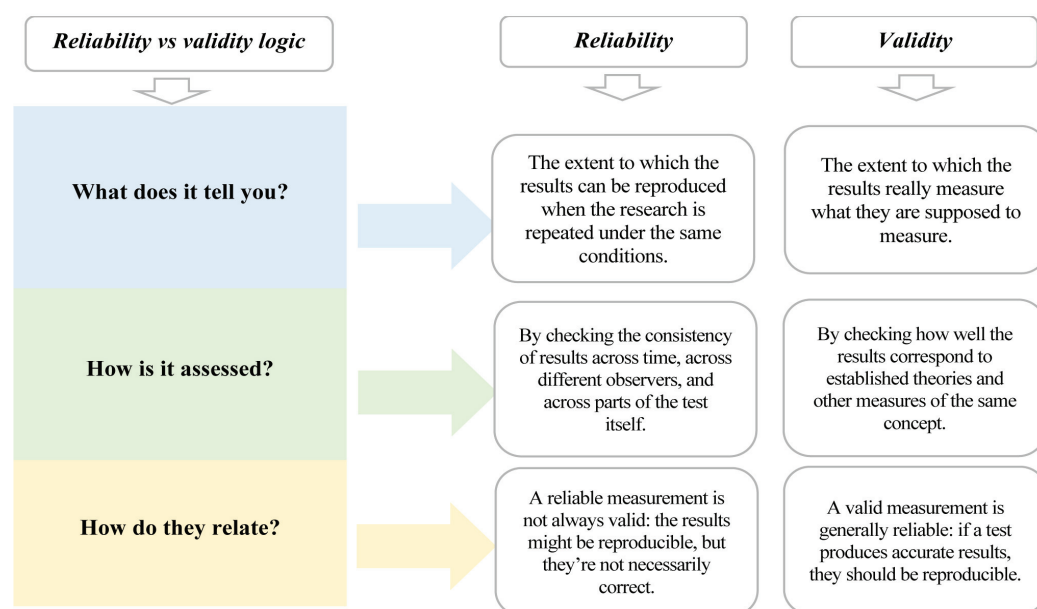
Reliability vs validity logic	*Reliability*	*Validity*
What does it tell you?	The extent to which the results can be reproduced when the research is repeated under the same conditions.	The extent to which the results really measure what they are supposed to measure.
How is it assessed?	By checking the consistency of results across time, across different observers, and across parts of the test itself.	By checking how well the results correspond to established theories and other measures of the same concept.
How do they relate?	A reliable measurement is not always valid: the results might be reproducible, but they're not necessarily correct.	A valid measurement is generally reliable: if a test produces accurate results, they should be reproducible.

Figure 2. **Reliability and validity**

Cronbach's alpha is an examination reliability procedure that needs only a sole test organization to present a different estimation of the reliability for a delivered analysis. Cronbach's alpha is the medium rate of the reliability coefficients one would receive for all potential sequences of details when breaking into two half-tests (Gliem and Gliem, 2003). The reliability test was conducted using IBM® SPSS® Statistics Version 20 to predict the validity of each independent, dependent, and mediating variables. The following table demonstrates the reliability coefficient that ranges between 0 and 1, and accordingly, Cronbach's alpha of independent variable =.830, Cronbach's alpha of mediating variable = .700, Cronbach's alpha of outcome variable = .896 respectively (Table 2). According to scholars, these rules of thumb are comparable to the results of the analysis: "_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor and _ < .5 – Unacceptable" (Mallery and George, 2003 quoted by Gliem and Gliem, 2003).

Table 2

Reliability statistics of Cronbach's Alpha

Variable	Number of items	Cronbach's Alpha
Administrative Decentralization	4	.830
Empowering Local Governments	2	.700
Attracting FDI	7	.896

Exploratory factor analysis (EFA)

Factor analysis is a set of methods used to investigate how the underlying design influences the response to several measured variables. Exploratory factor analysis (EFA) seeks to identify the characteristics of the constructs that affect the set of reactions.

We used IBM® SPSS® Statistics Version 20 to decrease numerous individual items into a less amount of dimensions. The app was ordered to define descriptives with initial solutions in the reproduced model, and we organized to extract KMO and Bartlett's test of sphericity.

The rotation part of the analysis method was in the Varimax model with a rotated solution, which displayed maximum iterations for convergence as 25. Factor analysis extraction was in the principal component's method. In this case, the correlation matrix was analized, and the display was in the unrotated factor solution. The fixed number of factors was 3 as our variables. Importantly, our analysis shows the loadings of more than .500. Consequently, our result in the table below demonstrates the fillings ranging from 519 to 847 in terms of variables, namely administrative decentralization, empowering local governments, and attracting foreign direct investments. More details are in Table 3 below.

Table 3

Results of exploratory factor analysis

Rotated Component Matrix[a]			
	AFDI	*ELG*	*AD*
AD_1			.520
AD_2			.579
AD_3			.847
AD_4			.775
AFDI_13	.698		
AFDI_15	.762		
AFDI _16	.723		
AFDI _17	.633		
AFDI _18	.609		
AFDI _19	.519		
AFDI _20	.639		
ELG_7		.647	
ELG_9		.726	

Notes: Extraction method: principal component analysis.
Rotation method: varimax with Kaiser normalization.

[a] Rotation converged in 7 iterations.

The sampling adequacy of the analysis is assessed by using the Kaiser-Meyer-Olkin (KMO). It has been suggested that a KMO correlation above 0.60–0.70 is supposed to be sufficient for analyzing the EFA result (Netemeyer et al. 2003 cited by Taherdoost et al., 2014). The table of Kaiser-Meyer-Olkin (KMO) below shows a measure of sampling adequacy in the range of .922, and Bartlett's Test of Sphericity was more concise than 0.001, which means the appropriateness of EFA (Table 4).

Table 4

KMO and Bartlett's test

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy	.922
Bartlett's Test of Sphericity	
Approx. chi-square	1949.209
df	190
Significance	.000

Confirmatory factor analysis (CFA)

CFA enables the researcher to question the hypothesis that a connection within the checked variables exists and their underlying latent construct(s) subsists. The researcher applies information from the theory, empirical study, or both, guesses the link model a priori, and then examines the hypothesis statistically (Suhr, 2006). The given information as results displays that the model fits for CFA. Our data summary of public sector in terms of fit indices shows the following evidence (CMIN/DF, GFI, NFI, IFI, TLI, CFI and RMSEA): minimum discrepancy per degree of freedom (CMIN/DF) = 1.992 >1 is acceptable (Kline, 1998). Goodness-of-fit index (GFI) = .905 The GFI range between 0 and 1, with a value of more than .9 generally meaning passable model fit (Baumgartner and Homburg, 1996). Normed fit index (NFI) = .907 (>.90), Incremental Fit Index (IFI) = .952 (>.90), Tucker-Lewis Index (TLI) = .934 (>.90), Comparative fit index (CFI) = .951, and root mean square error of approximation (RMSEA) = .079; RMSEA values between 0.05 and 0.08 are acceptable (Fabrigar et all., 1999). In other words, the values over 0.9 means a good fit for model (Bentler, 1990). The last result, SRMR = .049 (<.10). The next Table 5 and Figure 3 display the CFA results of research.

Table 5

CFA results

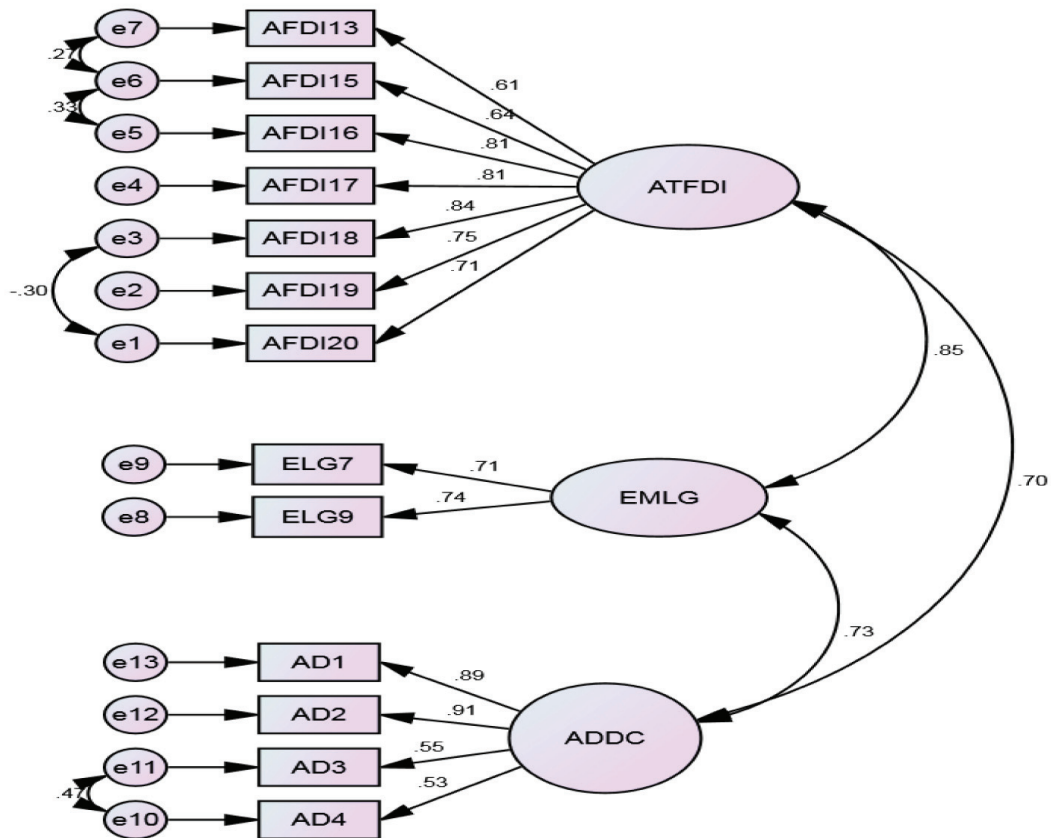| Model	CMIN/DF	GFI	NFI	IFI	TLI	CFI	RMSEA	SRMR
Suggested		>.90	>.90	>.90	>.90	>.90	<.08	<.10
Cut-off values	> 1							
CFA results	1.992	.905	.907	.952	.934	.951	.079	.049

Figure 3. **Results of confirmatory factor analysis**

Correlation analysis

Correlation analysis is valuable, while researchers are trying to verify if a relationship exists between two variables. It is necessary to regard that correlation is evidence that there is a relation linking two variables. However, it shows that one variable affects the other. The relationship connecting variables A and B could be a consequence of A causing B, or there could be another variable that generates both A and B (O'Brien and Sharkey Scott, 2012). A correlation value of +1.00 means an absolutely positive relationship, while an amount of -1.00 describes a distinct contradictory correlation, and a value of 0.00 symbolizes no direct connection in the X and Y variables or within two variables (Tabachnick, Fidell and Ullman, 2007).

The table shows that the independent variable administrative decentralization is positively and sufficiently correlated with other variables. In other words, the independent variable administrative decentralization is positively correlated with the dependent variable attracting foreign direct investments (r = .652). Nevertheless, there is a correlation between administrative decentralization and empowering local governments (r = .562). Table 6 below shows the detailed correlation analysis results.

Correlations analysis

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
AD	1								
ELG	.562**	1							
AFDI	.652**	.645**	1						
Gender	-.110	-.097	-.136	1					
Age	-.099	-.102	-.167*	-.113	1				
Education	.033	.079	-.019	.131	.211**	1			
Responsibility	-.086	.019	-.033	.128	-.117	-.083	1		
Experience	-.108	-.064	-.129	-.194*	.501**	.209**	-.262**	1	
Region	.026	.125	.000	.055	.099	.202*	.052	.022	1

Notes: ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Regression analysis

Regression analysis is based on the opinion that the researcher needs first have some actual purposes for considering that there is a causal connection among two or more variables. In regression analysis, an imminent model must match both the data and the model. In addition, later, we can apply the effect to prognosticate the values of the dependent variable (DV) and the independent variables (IVs) (O'Brien and Sharkey Scott, 2012). In this part of the research, we conducted our regression analysis using IBM® IBM® SPSS® Amos version 21 to predict a relationship between variables called independent variable, mediating, and dependent variables of our study. The table below shows that independent variable – administrative decentralization is positively related to empowering local governments (significant P-value). However, administrative decentralization is not positively related to attracting foreign direct investments directly (P-value = .228; not significant). Therefore, our mediating variable – empowering local governments is positively related to attracting foreign direct investments (significant P-value). The last hypothesis of the study is also supported by regression analysis; that is, administrative decentralization is positively related to attracting foreign direct investments indirectly. As we can see in the regression table, the analysis mostly defined the variables significantly enough; P-value is less than 0.05. The more detail is provided in Table 7.

Regression analysis

Path			Unstandardized Estimate	Standardized Estimate	S.E.	C.R.	P
ELG	←	AD	.883	.730	.167	5.273	***
AFDI	←	AD	.188	.171	.155	1.206	.228
AFDI	←	ELG	.659	.729	.168	3.915	***

Structural equation model (SEM)

Structural equation modeling is a statistical methodology that exercises an affirmative (i.e., hypothesis testing) strategy to the examination of an architectural theory supporting some phenomenon. Typically, this assumption expresses "casual" manners that provide evidence for multiple variables (Bentler, 1988 cited by Byrne, 2013).

That is to say, the goal of SEM is to question a group of relationships within one or more intrinsic variables, independent variables, and one or more external variables – dependent variables (Malkanthie, 2015). IBM SPSS Amos performs the comprehensive strategy to data interpretation recognized as structural equation modeling (SEM), also comprehended as an examination of covariance compositions, or causal modeling.

This method covers, as exceptional cases, many well-known traditional procedures, including the generalized linear model and typical factor analysis (Arbuckle, 2011). Hence, the term structural equation modeling means two major aspects of the method:

a)   that the causal manners under research are described by a set of structural equating and

b)   that these structural relationships can be illustrated pictorially to facilitate a more explicit conceptualization of the assumption under investigation.

The hypothesized design can then be examined statistically in a concurrent study of the whole arrangement of variables to define the degree to which it is harmonious with the data.

If goodness-of-fit is satisfactory, the pattern presents for the probability of proposed connections among variables; if it is incompetent, the firmness of such associations is denied (Byrne, 2013).

As done in CFA analysis, the SEM data summary of public sector in terms of fit indices describes the following evidences (CMIN/DF, GFI, NFI, IFI, TLI, CFI and RMSEA): minimum discrepancy per degree of freedom (CMIN/DF) = 2.101 >1, which means that it is acceptable. Goodness-of-fit index (GFI) = .900. The GFI range between 0 and 1, with a value of more than .9 generally meaning passable model fit. Normed fit index (NFI) = .901 (>.90), Incremental Fit Index (IFI) = .945 (>.90), Tucker-Lewis Index (TLI) = .927 (>.90), Comparative fit index (CFI) = .944, and root mean square error of approximation (RMSEA) = .084. It is suggested that the values over 0.9 mean a good fit for a model (Bentler, 1990). The last result, SRMR = .050 (<.10). The next table 8 and figure 4 show the SEM results of the analysis.

Table 8

SEM results

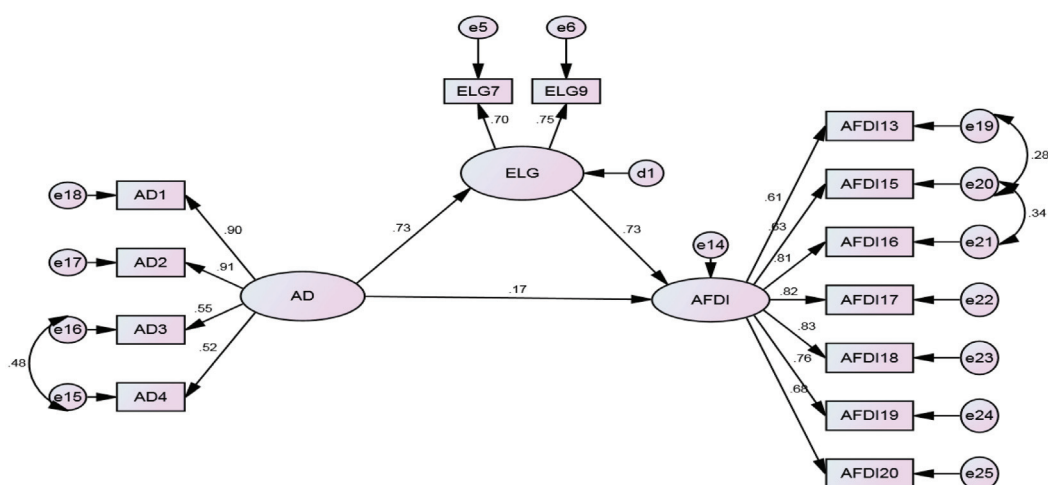| Model	CMIN/DF	GFI	NFI	IFI	TLI	CFI	RMSEA	SRMR
Suggested		>.90	>.90	>.90	>.90	>.90	<.08	<.10
Cut-off values	> 1							
SEM Results	2.101	.900	.901	.945	.927	.944	.084	.050

Figure 4. **Structural equation model**

Variable definitions: a = regression coefficient for the reciprocal relationship within the independent variable and the mediator; b = regression coefficient for the reciprocal relationship within the mediator and the outcome variable; SE_a = standard error of the for the reciprocal relationship of the predictor variable and the mediator; SE_b = standard error of the reciprocal relationship of the mediator variable and the outcome variable.

Mediation analysis

In mediation analysis, mediation is a third-variable impact that demonstrates how or why two variables associate. By planning, mediation analysis suggests a causal manner that relates two variables (Fairchild and McDaniel, 2017). The mediation figure analyzes the effect of a mediating variable, which is placed to convey the importance of an independent variable, X – administrative decentralization, onto a dependent variable Y – attracting foreign direct investments. Preferably, rather than a straightforward causal connection among the independent variable and the dependent variable, a mediation model aims that the independent variable impacts the mediator variable that affects the dependent variable.

Therefore, the mediator variable assists in clarifying the characteristics of the correlation within the independent and the dependent variables (MacKinnon, 2008). One of the methods of mediation analysis is bootstrapping. Bootstrapping can be used to create an estimate of the sampling arrangement to get assurance intervals that are more reliable than confidence intervals applying conventional methods while making no opinions whatsoever about the form of the sampling arrangement. Bootstrapping does not restrain the researcher from making many of the distributional hypotheses necessary for parametric modes (Hayes and Preacher, 2010).

Accordingly, this research uses the Sobel test, which means it is a method of experimenting to define the significance of a mediation impact. It is merely an alternative method to bootstrapping. The study is based on the articles

of Michael E. Sobel (Sobel, 1982; Sobel, 1986). In this case, a variable may be recognized as a mediator to the degree to which it leads the impact of a presented independent variable (IV) to an assigned dependent variable (DV). Usually, mediation can be supposed to happen when (1) the IV significantly influences the mediator, (2) the IV significantly touches the DV in the deficiency of the mediator, (3) the mediator has a notable uncommon result on the DV, and (4) the outcome of the IV on the DV narrows upon the extension of the mediator to the pattern (Preacher and Leonardelli, 2001). The below test describes that Sobel test statistics of our AD, ELG, AFDI variables, namely independent, mediating, and dependent variables, respectively. Sobel test statistics is equal to 3.15033580, and the reported one-tailed probability p-value = 0.028, and two-tailed probability p-value = 0.001, which are significant, and support our hypothesis positively (Table 9). In this mediation, the influence within the independent and the dependent variables are encouraged to be a direct effect that occurs based on the impact of a third variable – ELG (empowering local governments) – the mediator.

Table 9

Sobel test results for SEM

Hypothesis	Sobel test	P value	Result
One-tailed probability	3.15033580	0.000	Significant
Two-tailed probability		0.001	Significant

Hypotheses testing

As required at the beginning of the study, we set the research hypotheses, and hypothesis testing is used to acquire the result of a hypothesis performed on questionnaire data from a sample population. For the study, SEM, Sobel test, and regression analysis demonstrated results whether the proposed hypotheses were supported or vice versa. The following table shows that all our hypotheses, except one, are supported (Table 10).

Table 10

Results of hypothesis testing

Hypotheses No.	Relationship	Direction	Result
1.	Administrative decentralization is positively related to empowering local governments.	+	*Supported*
2.	Administrative decentralization is positively related to attracting foreign direct investments directly.	–	Not Supported
3.	Administrative decentralization is positively related to attracting foreign direct investments indirectly.	+	*Supported*
4.	Empowering local governments is positively related to attracting foreign direct investments.	+	*Supported*

1. Independent variable – administrative decentralization is positively related to empowering local governments (significant P-value);
2. Administrative decentralization is not positively related to attracting foreign direct investments directly (P-value = .228; not significant).
3. Administrative decentralization is positively associated with attracting foreign direct investments indirectly, which means that empowering local governments play a mediating role between independent and dependent variables (significant P-value).
4. The last hypothesis of the study is also supported by regression analysis; that is, empowering local governments is positively related to attracting foreign direct investments (significant P-value).

Conclusion/recommendations

The study analysis revealed the relationships, and we found high values of the empirical findings concerning the theoretical framework. The examined data showed that our goal is supported and tested with the quantitative analysis. Finally, in an effort to define the relationships of variables between the independent, mediating, and dependent variables, an answer to the research question is provided. The analysis showed that administrative decentralization is positively related to empowering local governments, and the study also supported by regression analysis that administrative decentralization is positively related to attracting foreign direct investments indirectly. With a few exceptions, however, our results show administrative decentralization did not affect attracting foreign direct investments directly.

Therefore, it is found that empowering local governments are positively related to attracting foreign direct investments. Indeed, in the national perspectives, the administrative decentralization reforms became a crucial factor in terms of the institutional context of each country, respectively. In sum, empowering local governments play mediating role between administrative decentralization and attracting FDI. The findings confirm that local authorities recognize not only the concerns of the local population strictly, but also, they can be closer to foreign investors in the needs of their local-based enterprises. The results extend our knowledge of empowering local governments in attracting FDI in the scope of decision-making at the local level is responsive to the needs of foreign investors for whom services are provided. The benefits of this responsiveness can promote efficiency, especially if services are also decentralized. Remarkably, eliminating unnecessary levels of jurisdiction with the reduction of cost and highlighting time-consuming in central-local relations can intensify the incentives of investors in choosing regions for capital investments. The most striking advantage of this new policy could be increased cross-jurisdictional competition and innovation. Similarly, the ideal decentralized system secures the level and succession of public services following the preferences of users while creating incentives for the adequate provision of government services. As such, the implementation and designing of this policy demand the administrative, organizational, and managerial transformation.

As part of the research on what our findings mean, we need to draw out the policy implications that depend on the outcomes. We attempt to place conclusions in the context of future policy forms in the table below (Table 11). Contextualizing the findings within the table helps researchers catch the significance of this study – how our policy implications build upon and contribute to the administrative policy of the country. As we proposed, the central government provides less extensive opportunities for local executive governments to participate in the promotion of foreign direct investment.

Table 11

Policy recommendations

Set up government task force

1. Provide transparency for the users (foreign investors) of public service.
2. Identify the quantity and quality of service provided.
3. Cost and benefit analysis of the new policy.
4. HRD issues in administrative decentralization.
5. Design propitious institutional infrastructure that will increase foreign direct investment incentives.
6. Create a knowledge-sharing strategy between local governments

Creating service-oriented local government

1. Facilitate competition between regions as an incentive in case of central reduction control in attracting FDI.
2. Use project management as one-side control to improve efficiency.
3. Establish indicators of economic development as a control mechanism in case of a reduction of the authority of the central government.
4. Use ICT factor to facilitate the communication between the local government and foreign investors and in increasing efficiency and building trust.
5. Use Key Performance Indicator (KPI) in the contracts as a control mechanism in case of a reduction of central authority

Establishment of desired legal environment in regions

1. Make less regulation process an essential mechanism in encouraging new business growth in the local area.
2. Promote the simple service delivery as legal policy.
3. Create favorable microclimate in the local area for foreign businesses supported by law to encourage investment attractiveness.
4. Make flexible contractual forms available to foreign investors to reduce the transaction cost of investing.
5. Create the presence of detailed procedures and mechanisms in attracting foreign direct investments to remove organizational barriers.
6. Decrease the approval processes to attract more foreign direct investment

REFERENCES

1. Arbuckle, J.L. (2011) 'IBM SPSS Amos 20 user's guide', *Amos Development Corporation*, SPSS Inc.

2. Baumgartner, H. and Homburg, C. (1996) 'Applications of structural equation modeling in marketing and consumer research: A review', *International journal of Research in Marketing,* 13(2), pp. 139–161.

3. Bentler, P.M. (1988) 'Causal modeling via structural equation systems', in: *Handbook of multivariate experimental psychology*. Springer, Boston, MA., pp. 317–335.

4. Bentler, P.M. (1990) 'Comparative fit indexes in structural models', *Psychological bulletin*, 107(2), p. 238.

5. Bureau of Economic and Business Affairs of U.S. Department of State (2021) *Investment Climate Statements: Uzbekistan.* Available at: https://www.state.gov/reports/2021-investment-climate-statements/uzbekistan (accessed 20 April 2022).

6. Byrne, B.M. (2013) *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.

7. Canfei, H.E. (2006) 'Regional decentralisation and location of foreign direct investment in China', *Post-communist economies*, 18(1), pp. 33–50.

8. Démurger, S. (2001) 'Infrastructure development and economic growth: An explanation for regional disparities in China?' *Journal of Comparative economics*, 29(1), pp. 95–117.

9. Deng, J., Zhang, N., Ahmad, F. and Draz, M.U. (2019) 'Local government competition, environmental regulation intensity and regional innovation performance: An empirical investigation of Chinese provinces', *International journal of environmental research and public health*, 16(12), p. 2130.

10. Fabrigar, L.R., Wegener, D.T., MacCallum, R.C. and Strahan, E.J. (1999) 'Evaluating the use of exploratory factor analysis in psychological research', *Psychological methods*, 4(3), p. 272.

11. Fairchild, A.J. and McDaniel, H.L. (2017) 'Best (but oft-forgotten) practices: Mediation analysis', *The American journal of clinical nutrition,* 105(6), pp. 1259–1271.

12. Fan, C.S. (1998) 'Why China has been successful in attracting foreign direct investment: a transaction cost approach', *Journal of Contemporary China*, 7(17), pp. 21–32.

13. Fan, Y., Wu, Y., Wu, A.M. and Wang, W. (2018) 'Decentralised governance and empowerment of county governments in China: betting on the weak or the strong?', *Local Government Studies*, 44(5), pp. 670–696.

14. Filippetti, A. and Sacchi, A. (2016) 'Decentralization and economic growth reconsidered: The role of regional authority', *Environment and Planning C: Government and Policy,* 34(8), pp. 1793–1824.

15. Firman, T. (2009) 'Decentralization reform and local-government proliferation in Indonesia: Towards a fragmentation of regional development', in: Review of urban and regional development studies. *Journal of the Applied Regional Science Conference,* 21(2-3), pp. 143–157. Melbourne, Australia: Blackwell Publishing Asia.

16. Gliem, J.A. and Gliem, R.R. (2003) 'Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales', *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.*

17. Grindle, M.S. (2007) 'Good enough governance revisited', *Development policy review*, 25(5), pp. 533–574.

18. Hayes, A.F. and Preacher, K.J. (2010) 'Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear', *Multivariate behavioral research*, 45(4), pp. 627–660.

19. Hutchcroft, P.D. (2001) 'Centralization and decentralization in administration and politics: Assessing territorial dimensions of power and authority', Governance: *An International Journal of Policy and Administration*, 14: 23–53.

20. Kessing, S. G., Konrad, K. A. and Kotsogiannis, C. (2007) 'Foreign direct investment and the dark side of decentralization', *Economic Policy*, 22(49), pp. 6–70.

21. Kline (1998) *Kline RB. Principles and practice of structural equation modeling.* NY: Guilford Press.

22. Kokkinou, A. and Psycharis, I. (2004) *Foreign direct investments, regional incentives and regional attractiveness in Greece*. Discussion paper n. 10. Department of Planning and Regional Development, University of Thessaly.

23. MacKinnon, D.P. (2008) *Longitudinal mediation analysis. Introduction to statistical mediation analysis*. New York: Lawrence Erlbaum.

24. Malkanthie, A. (2015) *Structural equation modeling with AMOS*. DOI:10.13140/ RG.2.1.1960.4647.

25. Mallery, P. and George, D. (2003) *SPSS for windows step by step: A simple guide and reference*. Allyn, Bacon, Boston.

26. Middleton, F. (2022) *Reliability vs validity in research. Differences, types and examples*. Available at: https://www.scribbr.com/methodology/reliability-vs-validity/ (accessed 18 April 2022).

27. Nazari, K., Pihie, Z.A.L., Idris, K. and Basri, R. (2014) 'Exploring lecturers' perception on learning organization dimensions and demographic variables in technical and vocational colleges', *Journal of Social Sciences and Humanities,* 119.

28. Netemeyer, R.G., Bearden, W.O. and Sharma, S. (2003) *Scaling procedures: Issues and applications*. Sage Publications.

29. O'brien, D. and Scott, P.S. (2012) 'Correlation and regression', in: Chen, H. (ed.) *Approaches to quantitative research – a guide for dissertation students*. Oak Tree Press: Dublin.

30. Preacher, K. J. and Leonardelli, G. J. (2001) 'Calculation for the Sobel test', *Retrieved January,* 20, p. 2009.

31. Rinnert, D. (2015) 'The politics of civil service and administrative reforms in development – explaining within-country variation of reform outcomes in Georgia after the Rose Revolution', *Public administration and development*, 35, pp. 19–33.

32. Rochlitz, M., Kulpina, V., Remington, T. and Yakovlev, A. (2015) 'Performance incentives and economic growth: Regional officials in Russia and China', *Eurasian Geography and Economics*, 56(4), pp. 421–445.

33. Schneider, A. (2003) 'Decentralization: Conceptualization and measurement', *Studies in comparative international development*, 38(3), pp. 32–56.

34. Scott, Z. (2011) *Evaluation of public sector governance reforms 2001–2011. Literature Review*. OPM: Oxford.

35. Simion, K. (2016) *Qualitative and quantitative approaches to rule of law research*. Available at: SSRN 2817565.

36. Sobel, M.E. (1982) 'Asymptotic confidence intervals for indirect effects in structural equation models', *Sociological methodology*, 13, pp. 290–312.

37. Sobel, M.E. (1986) 'Some new results on indirect effects and their standard errors in covariance structure models', *Sociological methodology*, 16, pp. 159–186.

38. Suhr, D.D. (2006) *Exploratory or confirmatory factor analysis?* Proceedings of the Thirty-first Annual SAS® Users Group International Conference. Cary, NC: *SAS Institute Inc.*

39. Tabachnick, B.G., Fidell, L.S. and Ullman, J.B. (2007) *Using multivariate statistics*. Vol. 5. Boston, MA: Pearson.

40. Taherdoost, H., Sahibuddin, S. and Jalaliyoon, N. (2014) *Exploratory factor analysis; concepts and theory*. Advances in Applied and Pure Mathematics, 375382.

41. UNDP (1999) 'Decentralization: A sampling of definitions', in: *Joint UNDP-Government of Germany Evaluation Working Paper of the UNDP Role in Decentralization and Local Governance.* Available at: http://web.undp.org/evaluation/documents/decentralization_working_report.pdf (accessed 16 April 2022).

42. Wang, Chunfei (2010) *Research on the structure of the regional government assessment system*. Dissertation, Northwest University, Xi'an

43. Wu, X., Ramesh, M. and Yu, J. (2017) 'Autonomy and performance: Decentralization reforms in Zhejiang Province, China', *Public Administration and Development*, 37, pp. 94–109.

44. Xu, C. (2011) 'The fundamental institutions of China's reforms and development', *Journal of Economic Literature,* 49(4), pp. 1076–1151.

OFICIAL DOCUMENTS

1. Decree of the President of the Republic of Uzbekistan (2017) The Strategy of action on five priority areas of development of the Republic of Uzbekistan in 2017–2021. Retrieved from the National legislative database of the Republic of Uzbekistan: http://lex.uz/docs/3107042 (accessed 17 April 2022).

2. Decree of the President of the Republic of Uzbekistan. (2017). The Conception of Administrative Reform. Retrieved from the National legislative database of the Republic of Uzbekistan: http://www.lex.uz/acts/3331176 (accessed 17 April 2022).

3. Law on Local Public Administration (1993). Retrieved from the National legislative database of the Republic of Uzbekistan: https://lex.uz/docs/112168 (accessed 17 April 2022).

4. OECD (1999) Development Centre Studies. Policy Competition for Foreign Direct. Investment. A Study of Competition among Governments to Attract FDI. Available at: https://www.oecd.org/mena/competitiveness/35275189.pdf (accessed 20 April 2022).

5. OECD (2021). Investment Promotion and Facilitation Strategies. Middle East and North Africa Investment Policy Perspectives, OECD Publishing, Paris. Available at: https://www.oecd-ilibrary.org/sites/884d5324-en/index.html?itemId=/content/component/884d5324-en (accessed 20 April 2022).

6. World Bank Group (2001). Decentralization and Subnational Regional Economics. Available at: http://www1.worldbank.org/publicsector/decentralization/what.htm (accessed 15 April 2022).