Relationship between Institutional Structure and Economic Growth in Nepal

Niroj Duwal

nirojduwal19@gmail.com

ABSTRACT

The macroeconomic performances of any countries are influenced by the with institutional structure. This study aims to estimate the effects of capital formation, labor force participation, and basically institutional index of economic freedom; size of government, legal system and property rights, freedom to trade internationally, sound money and regulation on economic performance using time series data from 2001 to 2020 using ARDL model. The results shows that the gross capital formation, the labor force participation rate have positive relation with GNI per capita whereas the legal system and property rights have negative relation with GNI per capita increases. In long run, only the annual growth of gross capital formation has significant relation with GNI per capita growth but rest of the variables are insignificant. It can be concluded that the institutions are less likely efficient. The bureaucratic quality is least effective, doing business is costly due to weak social structure. The existing institutions have not sufficient level of regulations legally. It can be claimed that there is not efficient set of institutional structure which is valid in every country as a good institution in Nepal.

Keywords: Institutions, GNI per Capita, Economic Growth.

1. Introduction

Institutions have a vital role in determining the economic performance of societies over a long period of time and the limitations imposed by institutions in developing countries frequently discourage productive endeavors (North, 1990). A set of formal and informal regulations that dictate human conduct

is referred to as an institution. In a similar way, Lin and Nugent (1995) state that a collection of deliberately created rules for human behavior govern and influence the way individuals interact with each other, partly by assisting them in forming expectations regarding the actions of others is institution.

The transaction costs affect macroeconomic performances through institutions by declining uncertainty, guiding economic activities to the production areas and by bonding trust and enhancing collaboration. Not only the formation of institutions but also the development and functioning of institutions vary significantly among countries. The economic maturity and expansion of markets rely on the presence of an institutional framework that ensures transaction costs. Various stakeholders, such as savers, investors, consumers, entrepreneurs, workers, and risk-takers, a require set of rules to guide their rational decision-making and optimization efforts relies on institutional framework. In addition, they need economic stability and predictability, which can only be achieved through effective governance and the development of sound economic policies (Thirlwall & Lopez, 2017). Institutional economics implies the third world countries face poverty trap due to institution lack to solve the problem of less efficiency. Developing countries normally have low institutional quality and fail to guard property rights and enhance productive investments. In such case, the society must reform institutions and standardized institutions so that to achieve economic development.

The main prerequisites of a sound institution for economic develop are; property rights and legally binding contracts, regulatory institutions, social insurance institutions, institutions for macroeconomic stability and institutions of conflict management (Thirlwall & Lopez, 2017). In developing economies, the chances in front of political and economic enterprises are complicated because of low quality of institutions. The institutions are mainly tending towards monopolies in place of competitive nature, a nature of rising restructuring activities rather than production activities, curtaining opportunities in lieu of developing them (Yildirim & Gokalp, 2016). Furthermore, these developing countries generally want sufficient movement in supporting productive funds and solving the inefficiency problem. Lawful principles victimize among individuals, least validated property rights, the elite have limitless economic and political supremacy, only fortunate citizens can advantage from the excellence education, have limited access to credit, bad institutions which function ill, affect unfavorably the growth and performance of these countries (Edison, 2003). Since the weak society's structure, the bureaucracy has lower quality. The immature official institution performance increases the cost of doing business and the government is unstable and adopts intense populist approaches.

In 1980, Nepal stood at 67th ranks with the economic freedom rating of 4.9 and in 2020 Nepal is ranked 103th with economic freedom rating of 6.54 in the third quartiles (Gwartney et al., 2022). The rationale of this study is that in the context of Nepal, all of the above major issues are not left behind, which hinders the economic growth

and economic development of the nation. It is indeed necessary to assess the role of institutions on the macroeconomic performance of Nepal. With the prior knowledge, this study add literature on behave of the contribution of institutions for the growth and development of the Nepalese economy.

As in the developing countries, property rights, legal systems, government subsidies, transfer payments, freedom of international trade, sound money and of course, capital formation and labor force weakly contributing economic growth and economic development in Nepal. This study aims to estimate the impact of capital formation, labor force participation, institutional index of economic freedom, basically, size of the government, legal systems and property rights, freedom to trade internationally, sound money and regulations in economic growth.

This study is organized in five sections. First section is the introduction. Second section covers the review of literature under three themes. Third, fourth, fifth and sixth sections are research methodology, empirical results and discussion, and conclusion respectively.

2. Review of Literature

Various literatures from books, reports, journal articles, conference papers, web pages and so on were reviewed to meet the aim of this study.

The active population who fulfills the society's requirements is engaged in the production of goods and services contributing ultimately to the economic growth of the nation. In most of the economies, labor force includes the people with ages from 16 years to 59 years. The knowledge, skills and abilities developed by the labor force enhance the growth in the national output which also contributes to the economic development of the nation. The economic growth is enhanced by the skilled labor (Duval et al., 2010) in industrial countries. Denton and Spencer (1997) employed the trend analysis technique to examine the relationship of labor force and economic growth in the long run. Interestingly, the analysis of PSLM (2004-2005) micro data using technique of logit and probit found the relation of female labor force with economic output of Pakistan (Mujahid & Zafar, 2012; Sarwar & Abbasi, 2013).

Gross fixed capital formation measures the net gross investment in the fixed capital by enterprises, households and government in the economy. Capital formation provides the information of economic growth and evolution in future. The employment rate and economic growth can be improved by capital formation. A positive long run relationship was established by (Chowdhury, 2016; Pasara & Garidzirai, 2020) between capital formation and economic growth. In addition, Soava et al. (2020) examined the influence of GDP per capita, participation of labor force and formation of gross fixed capital on European economic growth. These articles are the evidence to support growth theories such as Harrod (1939)-Domar (1947) model, Solow (1956)-Swan (1956) model, and so on.

A collection of regulations, guidelines, and ethical principles established to limit the actions of individuals with the goal of maximizing the prosperity or usefulness of those in positions of authority is institution (North, 1981). The constitutions are the best examples of institutions which can be called as electoral rules. The depth of institutions relies on the instruments for institution. The property rights trusted by individuals are also the instruments of institutional structure (Borrmann et al. 2006).

The size of government, sound money, freedom to trade internationally and regulations are also essential instruments to caliber institutional structure. The economic freedom is retarded if the government expenses, government-controlled enterprises, taxation rises government decision making is substituted for the choice of individuals which is instrumented for institutions. Similarly, sound money implies for economic freedom since the value of earned wages and savings eroded by inflation which makes difficult to plan for the investment. Freedom to trade internationally in the widest sense, purchasing, selling and contracts making is another fundamental of economic freedom. Furthermore, a number of tools used by the government to bound the exchange right, obtain credit, hire for whom you wish and business operation standing regulation is also another area of economic freedom. All of these areas size of the government, legal systems and property rights, sound money, regulations and freedom to trade internationally are the instruments to measure institutional structure of the economy (Gwartney et al, 2022).

All the economies whether developed like United States and developing like Bangladesh and Nepal, face major development issues and challenges which are confronted by establishing and strengthening the institutions (Glaeser et al., 2004). The approaches of democracy and government mechanisms have extensive intellectual pedigree. The importance of government constraint was stressed (Montesquieu, 1748; Smith, 1776) by the new institutional economists (Buchanan & Tullock, 1962; North & Thomas, 1973; North, 1981, 1990). Economic growth is closed to limited government as the political institutions for an intellectual consensus (Dollar & Kraay, 2003; Easterly & Levine, 2003) along with Acemoglu et al. (2001, 2002) in line with the work of (Hall & Jones, 1999). Institutional indicators used to build the proposition that growth is caused by institutions (Glaeser et al. 2004). Yildirim and Gokalp (2016) analyzed the relationship between institutions and macroeconomic performance in developing countries. Similarly, Shah et al. (2020) analyzed institutional impact on the economic growth of developing countries.

The above literatures are strongly evidenced that the institutional structure in addition with labor force and capital accumulation have positive relation with the economic growth and economic performance which ultimately enhance economic development. With the prior knowledge, such type of study on the relationship between the institutional structure and economic growth were not done before in case of Nepal. The study will contribute to the literature of economic growth in Nepal.

3. Research Methodology

The macroeconomic performance of society accelerates by the growth of capital formation and labor productivity. In addition, the role of institutions cannot be left behind to better macroeconomic performance. Therefore, this study is based on the post-positivists' view. The quantitative approach is used to estimate the relationship between the institutions and macroeconomic performance in the Nepalese economy.

Theoretical Framework

Following the aggregate production function of the growth model considered by Asomani, Bhasin and Aglobitse (2019), the aggregate production function of this study is expressed as:

$$Y_t = A_t L_t^{\beta 1} K_t^{\beta 2} \qquad (1)$$

Where, $Y_{(t)}$ is the aggregate output of the economy at time 't', $L_{(t)}$ and $K_{(t)}$ represents stock of labor and capital stock at the time 't'. $\beta 1$ and $\beta 1$ represent the coefficients of elasticity of labor and capital stocks and A_t represents the total factor productivity.

Scholars such as Robert Solow, Trevor Swan, Joseph Schumpeter, Paul Romer, and others have made significant contributions to the understanding of economic growth and the factors are capital inputs, labor inputs and the state of technology that drive economic growth. From the synthesis of economic theory and empirical findings, this study gathers major independent variables such as capital formation (K), labor force participation (L), size of the government (SG), legal systems and property rights (LS), sound money (SM), freedom to trade internationally (FT) and Regulations (R) and the dependent variable is GNI per capita growth. The mathematical model as Hall and Jones (1999) have used to evaluate the impact of institution on economic expansion which is represented as;

$$Y = f (K, L, SG, LS, SM, FT, R) \qquad (2)$$

Where, K is capital stock, L is labor unit, SG is size of the government, LS is legal system, SM is sound money, FT is freedom to trade and R is regulation.

The econometric model of the study is expressed as;

$$GNIP_t = \beta 0 + \beta 1 GCFG_t + \beta 2 LFPR_t + \beta 3 SG_t + \beta 4 LSPR_t + \beta 5 FTI_t$$
$$+ \beta 6 SM_t + \beta 7 R_t + \mu_t \qquad (3)$$

Where, GCFG is gross capital formation growth, LFPR is labor force participation rate, SG is size of government, LSPR is legal system and property rights, FTI is freedom to trade international, SM is sound money, R is regulation. All of these variables are independent variable and GNIP is dependent variable with $\beta 0$ as intercept and μ is error of the model.

Data Source

The study is based on secondary data which are extracted from World Development Indicators and Fraser Institutions for the period from 2001 to 2020. Fraser Institute publishes Economic Freedom of the World Index measuring the degree to that the institutions and policies of countries are supportive of economic freedom annually and it used to publish once in a five-year basis before. Therefore, this study is limited by considers the index published by Fraser Institute from 2001 to 2020. The data of gross national income per capital growth (GNIP), annual growth of gross fixed capital formation (GCFG) and labor force participation rate (LFPR) were extracted from World development indicators whereas, the data of size of government (SG), legal systems and property rights (LSPR), freedom to trade international (FTI), sound money (SM) and regulation (R) were compiled from Economic Freedom of the World prepared by (Fraser Institute, 2022).

GNIP is dependent variable, which is affected by GCFG, LFPR, LSPR, FTI, SM and R respectively and these variables are explanatory variables. The data of macro-economic variables are compiled by World Bank which are reliable whereas the data of institutional structures from Freedom House, Fraser Institute compile the data and publish indices annually from 2000 on the basis of expert feedback and are mostly prepared for informing international investors. Therefore, all of the data which are used in this study are reliable and validated along with these data which are used in this study will not impact the sensitivity of anyone.

Description of Variables

The table 1 as shown describes the nature of the data and their explanation.

Table 1: Description of the Variables

Variables	Explanation
GNIP	Gross National Income per Capita growth based on base year 2010 U.S. dollars. It is gross national income divided by mid-year population.
GCFG	Annual growth rate of gross capital formation based on base year 2010 U.S. dollars
LFPR	Labor force participation rate, total (% of total population ages 15+) (modeled ILO estimate)
SG	Size of the government consisting government consumption, transfers, subsidies, government investment and so on scaling from 0 to 10
LSPR	Legal System and Property Rights consisting judicial independence, protection of property rights, and soon which is a scale from 0 to 10
FTI	Freedom to Trade Internationally consisting tariffs, regulatory trade barriers, and so on which is a scale from 0 to 10

SM	Sound Money consisting money growth, inflation and so on scaling from 0 to 10
R	Regulation consisting credit market regulations, labor market regulations business regulations and so on scaling from 0 to 10

Note: Author's own.

4. Empirical Results and Interpretations

a. Unit root test

Before going into the model specification, first the unit root test (ADF test) is carried out for the variables selected for the model. As shown in Table 2, GNIP, GCFG, LSPR, FTI, SM and R are I(1) and LFPR and SG are I(0) variables.

Table 2: Results of Augmented Dickey Fuller (ADF) Test

Variable	Level			First Difference			Remarks
	Intercept	Intercept and Trend	Without Intercept and Trend	Intercept	Intercept and Trend	Without Intercept and Trend	
GNIP	–4.59***	–2.78***	0.22	–4.09***	–5.52**	–4.96***	I(1)
	(0.0031)	(0.2226)	(0.7384)	(0.0088)	(0.0027)	(0.0001)	
GCFG	–4.00***	–3.61*	–3.33***	–3.9***	–3.88**	–4.24***	I(1)
	(0.008)	0.0593	(0.0022)	(0.0091)	(0.0389)	(0.0003)	
LFPR	–1.61	–4.47**	–3.82***	–4.39***	–3.43*	–1.48	I(0)
	(0.456)	(0.014)	(0.0009)	(0.0045)	(0.0846)	(0.1245)	
SG	–3.17**	–3.59**	–0.02	–4.57***	–4.40**	–5.92***	I(0)
	(0.0378)	(0.0575)	(0.6622)	(0.0026)	(0.0147)	(0.0000)	
LSPR	–2.03	–2.99	–0.16	–5.36***	–5.19***	–5.49***	I(1)
	(0.2721)	(0.1588)	(0.6126)	(0.0005)	(0.0032)	(0.0000)	
FTI	–2.38	–2.36	–0.26	–3.98***	–4.00**	–4.15***	I(1)
	(0.1575)	(0.3842)	(0.5777)	(0.0077)	(0.0284)	(0.0003)	
SM	–2.02	–1.67	–0.47	–3.76**	–3.88**	–3.86***	I(1)
	(0.2758)	(0.7228)	(0.4974)	(0.0121)	(0.0355)	(0.0006)	
R	–0.51	–2.18	0.75	–3.84**	–3.89**	–3.82***	I(1)
	(0.8681)	(0.4700)	(0.8691)	(0.0103)	(0.0346)	(0.0007)	

Note: Author's Calculation. * Significant at the 10%, ** significant at the 5% and *** significant at the 1%. Lag length based on SIC. The probability based on Mackinnon (1996) one-sided p-values.

From the table 2, it is clearly expressed that the Null hypothesis of the variables GDPG, GCFG, LFPR, SG, LSPR, FTI, SM and R, are rejecting at the significance levels. All of

the variables are stationary at the first difference. On the basis of the obtained ADF test results, the econometric model for the study is ARDL model at least one variable should be stationary at the level and other at first difference.

b. ARDL Model

For the analysis of the institutions and macroeconomic performance, ARDL model is specified. For the deriving model AIC suggests the selecting proper lag structure in the model. The specification of the ARDL model based on the maximum dependent lag is 1, maximum fixed regressors are also 1. Lag structure of each model are 1, 1, 1, 0, 1, 1, 0, 1 for the series of GNIP, GCFG, LFPR, SG, LSPR, FTI, SM, R with the help of eviews9. So, the specification of the model is as follows;

GNIP = C(1)*GNIP(-1) + C(2)*GCFG + C(3)*GCFG(-1) + C(4)*LFPR + C(5)*LF-PR(-1) + C(6)*SG + C(7)*LSPR + C(8)*LSPR(-1) + C(9)*FTI + C(10)*FTI(-1) + C(11)*SM + C(12)*R + C(13)*R(-1) + C(14)   ….. (4)

The equation (I) shows the ARDL model specification. After running the models with the help of eviews9, following coefficients are founded, which are substituted in the equation (I);

GNIP = - 0.032*GNIP(-1) + 0.133*GCFG + 0.040*GCFG(-1) + 8.704*LFPR - 7.383*LFPR(-1) - 0.0479*SG + 2.207*LSPR + 3.234*LSPR(-1) + 0.346*FTI + 2.533*FTI(-1) - 2.287*SM - 3.009*R + 5.665*R(-1) - 100.725   ……. (5)

Table 3: Bound Test for Co-integration Analysis

Test Statistic	Value	Significance Level	I (0)	I (1)
F - statistics	5.6029	10%	2.03	3.13
k	7	5%	2.32	3.5
		1%	2. 96	4.26

Note: Author's own calculation

The table 3 shows the bound test for co-integration analysis for whether the long run association among the variables exist or not for the specified ARDL model of the study. The F – statistics value is 5.6029 and all corresponding lower bound critical values and upper bound critical values are smaller than the F – statistics value at 1 percent, 5 percent and 10 percent levels of significance. Hence, the null hypothesis is rejected and states that there exists long run cointegration among the variables.

c. Long Run Equilibrium of the Models

The estimated long run coefficients of institutions are shown as in table 3. The corresponding coefficients are not statistically significant at 1 percent level of significant apart from GCFG and LSPR. Though, the estimated long run relationship between

institutions and macroeconomic performance is as follows;

GNIP = -97.57 + 0.167GCFG + 1.28LFPR – 0.05SG + 5.27LSPR +2.79FTI – 2.22SM + 2.57R   ……….   (6)

Table 4: Estimated Long-run Coefficients of the institutions
Dependent Variable: GNIP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GCFG	0.167549	0.030022	5.580946	0.0025
LFPR	1.279631	1.483023	0.862853	0.4277
SG	-0.046471	1.181522	-0.039331	0.9701
LSPR	5.270200	1.438321	3.664133	0.0145
FTI	2.790714	1.965461	1.419877	0.2149
SM	-2.216359	1.352344	-1.638902	0.1622
R	2.572897	1.384295	1.858633	0.1222
C	-97.572206	74.466749	-1.310279	0.2471

Note: Author's own calculation.

Equation (6) explains that if Gross capital formation growth one percent, GNI per capita growth increased by 0.167 and the index of legal system and property rights increase by one degree, GNI per capita growth increased by 5.27 times.

d. Short Run Equilibrium of the Model

In short run, the explanatory variables have statistically significant coefficients except freedom to trade internationally. If D(GCFG) and D(LFPR) increases by one percent, the GNI per capita growth rate increase by 0.13 and 8.7 percent, whereas, D(LSPR) increases by one degree of index the GNI per capita growth rate by 0.34 but if D(R) increases by one degree of index the GNI per capita growth rate decreases by three percent. The error correction regression is shown as in table 5.

Table 5: Error Correction Regression
Dependent Variable: D(GNIP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GCFG)	0.132622	0.005676	23.36588	0.0000
D(LFPR)	8.704185	1.023654	8.503058	0.0004
D(LSPR)	2.206516	0.426235	5.176762	0.0035
D(FTI)	0.346951	0.506606	0.684854	0.5239
D(R)	-3.009137	0.675672	-4.453545	0.0067
CointEq(-1)*	-1.032319	0.080231	-12.86678	0.0001
R2 =0.984	R2 adj = 0.977	AIC =1.88	S.E. = 0.547	D. W. = 3.41

Note: Author's own calculation

e. Diagnostic Test
Diagnostic tests of the residuals are essential otherwise spurious results might be provided and the properties and assumptions could not be fulfilled. The normality test is shown in the as in the figure 1, where the result depicts that the model is normally distributed. The Jarque-Bera value is 0.769 at the probability value of 0.68.
Figure 1: Normality Test

Note: Author's own calculation
The model was also run heteroskedasticity test under Breusch-Pagan-Godfrey where Prob. F(13.5) = 0.44 with Prob. Chi-Square value 0.3449 states that there is no heteroskedasticity problem. While, there is no serial correlation at up to 2 lags conducting serial correlation LM test. Similarly, there was no multicollinearity among the variables.

f. Stability Test
Figure 2 and Figure 3 presents CUSUM and CUSUM Square of recursive residuals to examine the stability properties of the model. According to Pesaran and Shin (1998), if the plot of CUSUM remains within the critical bounds at five percent level of significance, the null hypothesis that all the coefficients and the error correction model are stable cannot be rejected. Since both CUSUM and CUSUM Square are within initial bounds at five percent level of significance, the above model is considered stable.
Figure 2: Cumulative Sum of Recursive Residuals of the Model

Note: Author's own calculation
Figure 3: Cumulative Sum of Squares of Recursive Residuals of the Model

Note: Author's own calculation

Furthermore, Ramsey Reset Test also shows that there is no misspecification of the variables in the model since the probability of t-statistics is 0.98.

5. Conclusion

As a result of investigation on the institutional structure of Nepal, it is concluded that the institutions have basically lack sufficient effectiveness. The quality of bureaucracy is poor, doing business is costly due to weak social structure. The existing institutions have not sufficient level of regulations legally. The applicability and reliability of contract is limited. Economic freedom has been yet narrow and regulations on credit and labor market persisted deficient. It can be claimed that there is not efficient set of institutional structure which is valid in every country as a good institution in Nepal. The good institutions are meant as factors such as growing, enhancing the economy and rising competitiveness. In the future, there is need of further study on the contribution of institutional structure in economic performance with large set of data with other necessary influencing variables.

References

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review,* 91(5), 1369-1401. https://doi.org/10.1257/aer.91.5.1369

Acemoglu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of fortune: Geography and development in the making of the modern world income distribution. *The Quarterly Journal of Economics,* 117(14), 1231-1294. http://www.jstor.org/stable/4132478

Akerlof, G. (1970). The market for lemons: Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics,* 84(3), 488-500.

Nyarko-Asomani, A., Bhasin, V. K., & Aglobitse, P. B. (2019). Government capital expenditure, recurrent expenditure, and economic growth in Ghana. *Ghanaian Journal of Economics*, 7, 44-70.

Borrmann, A., Buse, M., & Neuhaus, S. (2006). Institutional quality and the gains from trade. *Kyklos*, 59(3). https://doi.org/10.2139/ssrn.895242

Buchanan, J., M., & Tullock, G. (1962). *The Calculus of Consent: Logical Foundations of Constitutional Democracy.* Liberty Fund.

Chowdhury, M. (2016). Financial development, remittances and economic growth: Evidence using dynamic panel estimation. *The Journal of Applied Economic Research,* 10(1), 35–54. https://doi.org/10.1177/0973801015612666

Denton, F., T., & Spencer, B. G. (1997). *Population, labour force and long-term economic growth.* Research Institute for Quantitative Studies in Economics and Population. http://socserv2.mcmaster.ca/~iesop/

Dollar, D., & Kraay, A. (2003). Institutions, trade and growth. *Journal of Monetary Economics,* 50(1), 165-176.

Domar, E. (1947). Expansion and employment. *American Economic Review,* 37(1), 34-55. http://www.jstor.org/stable/1802857

Duval, R. A., Eris, M., & Furceri, D. (2010). Labour force participation hysteresis in industrial countries: Evidence and causes. *OECD Economics Department.* https://doi.org/10.13140/RG.2.2.16051.55841.

Easterly, W., & Levine, R. (2003). Tropics, germs, and crops: How endowments influence economic development. *Journal of Monetary Economics,* 50(1), 3-39. https://doi.org/10.1016/S0304-3932(02)00200-3

Edison, H. J. (2003). Testing the links: How strong are the links between institutional quality and economic performance? *Finance and Development,* 40(2), 35-37.

Fraser Institute. (2022). Economic Freedom [Data set]. https://fraserinstitute.org/economic-freedom/dataset?geozone= world & year = 2020&page=data-set&min-year=2&max-year=0&filter=0

Glaeser, E., L., Porta, R., L., De-Silanes, F., L., & shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth,* 9, 271-303.

Gwartney, J., Lawson, R., hall, J., Murphy, R., Djankov, S., & McMahon, F. (2022). Economic freedom of the World 2022 annual report. Fraser Institute. Retrieved from https://www.fraserinstitute.org/sites/default/files/economic-freedom-of-the-world-2022.pdf

Hall, R., E., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *The Quarterly Journal of Economics,* 114(1), 83-116. http://www.jstor.org/stable/2586948

Harrod, R. F. (1939). An essay in dynamic theory. *The Economic Journal,* 49(193), 14-33. http://www.jstor.org/stable/2225181

Lin, J. V., & Nugent, J. B. (1995). *Handbook of Development Economics.* Elsevier.

Montesquieu, C., S. (1748). *The Spirit of the Laws.* Paris.

Mujahid, N., & uz Zafar, N. (2012). Economic growth-female labour force participation nexus: Empirical evidence for Pakistan. *The Pakistan Development Review,* 51(4), 565-586.

North, D. C. (1981). *Structure and Change in Economic History.* Norton and Co.

North, D. C. (1990). *Institutions, Institutional Change, and Economic Performance.* Cambridge University Press.

North, D. C., & Thomas, R., P. (1973). *The Rise of the Western World: A new economic history.* Cambridge University Press.

Pasara, M.T., & Garidzirai, R. (2020). Causality effects among gross capital formation, unemployment and economic growth in South Africa. *Economies,* 8(2), 1-12.

Pesaran, M. H., & Shin, Y. (2010). Bound testing approaches to analysis of level of relationships. *The Journal of Applied Econometrics,* 16(3), 289-326. https://doi.org/10.1002/jae.616

Sarwar, F., & Abbasi, A. S. (2013). An in-depth analysis of women's labor force partic-ipation in Pakistan. *Middle East Journal of Scientific Research,* 15(2), 208-215. https://doi.org/10.5829/idosi.mejsr.2013.15.2.2367

Shah, Q., Zubair, S., & Hussain, S. (2020). The impact of institutions on economic growth in selected developing countries: An analysis based on Bayesian pan-el estimation. *Journal of Applied Economics and Business Studies,* 4(4), 251-272. http://doi.org/10.34260/jaebs.4412

Smith, A. (1776). An Inquiry into the nature and causes of wealth of nations (Edwin Canaan) (Ed.). *University of Chicago Press.*

Soava, G., Mehedintu, A., Sterpu, M., & Raduteanu, M. (2020). Impact of employed labor force, investment, and remittances on economic growth in EU countries. *Sustainability,* 12(3). https://doi.org/10.3390/su122310141

Solow, R., M. (1956). A contribution to the theory of economic growth. *The Quarter-ly Journal of Economics,* 70(1), 65-94. Retrived from http://www.jstor.org/sta-ble/1884513

Swan, T. W. (1956). Economic growth and capital accumulation. *Economic Record,* 32(2), 334-361. Retrived from http://doi.org/10.1111/j.1475-4932.1956.tb00434.x

The World Bank. (2022). World Development Indicators [Data set]. https://databank.worldbank.org/reports.aspx?source=2&country=NPL#

Thirlwall, A. P., & Lopez, P. P., (2017). *Economics of Development:* Theory and evidence (10th ed.). Bloomsbury Academic.

Yildirim, A., & Gokalp, M. F. (2016). Institutions and economic performance: A review on the developing countries. *Procedia Economics and Finance,* 38, 347-359. Re-trieved from https://doi.org/10.1016/S2212-5671(16)30207-6