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Economic Growth forecast of Different Countries and Regions across the Globe

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Abstra

There have been economic downturns in several countries across the world recently, causing the global economy to contract. Normalization of monetary policy in the developed world was brought about by China's tough lending rules and a closed financial system, which jeopardized and weakened global economic growth, especially in the second half of 2018. The World Economic Outlook (WEO) predicted that global economic growth would abruptly slow down by 2021 as a result of COVID 19 pandemic. With enormous short-term uncertainties and advanced economic growth rates heading towards their self-defeating long-term prospects, many countries face an extraordinarily hard predicament. Here, we use panel data analysis to project the economic growth of developed and rising countries and regions, as well as that of developed countries and regions both, over the next few years. The most urgent issues facing developing economies and regions are, of course, slower technological advancements, poor health systems, hunger and poverty, fast population growth, and inadequate education. Both established and developing economies need to address these shortcomings seriously if they hope to see better, more balanced global economic growth.

Key Words: Economic, Growth, forecast, Developing, Developed, Countries, regions.

Introduction

The world economy has been slowing down recently. From US-China trade tensions to a macroeconomic slowdown in Argentina and Turkey to distress in the auto sector in Germany. Tight credit policies in China and a tight financial system led to the normalization of monetary policy in the advanced economies, which endangered and weakened global economic growth. Especially in the second half of 2018. The *World Economic Outlook*

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(WEO) predicted an abrupt decline in growth for the global economy by 2021. The outlook for many countries is very difficult, with appreciable uncertainties in the short term, basically as advanced economic growth rates closed toward their self-effecting long-term prospective. We are depicting the recent scenario of the global economy from different angles in the following way:

i) The negative shocks to the global economy with a loosening of monetary policy around the globe and significant declines in global long-term interest rates are observed.

ii) The slowdown has so far significantly affected the manufacturing and trade sectors, which again strongly affected the consumption and service sectors.

iii) So far, consumer spending is seen to be holding up well, despite the slowdown in global trade and business investment growth. Disposable income growth remains high, unemployment risks are low, financing conditions are favorable, and consumer confidence remains above average (though declining).

In this article, we are trying to predict the economic growth of different developing countries and regions along with the developed countries and regions for the coming years using the following objectives:

1. The study focuses on the nature of economic growth in the future for developing and developed countries and regions.
2. The analysis concentrates on finding out the optimistic and pessimistic scenarios of the global economy.

The testing of hypotheses of the study are:

i) H₀ (Null Hypothesis): There is no significant difference in market efficiency, financial efficiency, gender parity index in school education, or innovation index between developing and developed countries and regions of the world in forecasting economic growth.

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H1 (alternative hypothesis): Developed countries and regions have greater market efficiency, financial efficiency, gender parity index in school education, and innovation index compared to developing countries and regions of the world in forecasting economic growth.

Data Source and Methodology:

Since our analysis proposes to find out the reasons for the variation of economic growth through a comparative study between developing countries and regions and developed ones, we have arranged the developing countries and regions in one group and the developed countries and regions in another group. Here, we are not going through the long-term growth prediction method (based on some particular growth rate of GDP) because of many uncertainties of socio-economic factors, like the greatest pandemic shock of COVID 19. Rather, with the help of our data set, we are trying to predict world economic growth using the moving average method. The panel data regression analysis is used to compare the factors affecting economic growth and their magnitude, which are responsible for the paradigm shift in different countries and regions around the world. We shall discuss the results one by one in the following manner.

Methodology:

Panel Data Analysis:

With the help of the data set, panel data in the same cross-sectional unit (say, different countries) is surveyed over time. In this approach, panel data has space as well as time dimensions. Here, in the analysis, we have used the model as follows:

$$\begin{aligned}
 GDP_{Econ.grow.5Yr.MV_{it}} = & \beta_1 + \\
 & \beta_2 \ln(Innov.Index5Yr.MV)_{it} + \beta_3 \ln(GPI.School\ edu\ Index5YrMV)_{it} + \\
 & \beta_4 \ln(Mkt.ef fi.Index5YrMV)_{it} + \beta_5 (Finan.ef fi.Index5YrMV)_{it} + u_{it} \\
 & \dots\dots\dots \dots\dots\dots
 \end{aligned}
 \tag{1}$$

Where, $Y_{Econ.growth.it}$ denotes the growth of the economy or the growth of the GDP of the countries in the time periods.

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$I_{innov.}$ Index_{it} denotes the innovation index of different countries and regions in the time period.

Which Includes,

H_{export} it, denotes High-technology exports to different countries and regions in time.
 $Govt.R\&D$ it denotes Govt. Exp. on Research and development per capita of different countries and regions in the time period.

IP_{it} denotes, Intellectual property rights or patents of the countries and regions for the time period.

$GPI_{Sch.Edu.it}$ denotes the gender parity index in school education of different countries and regions in the time period.

$M_{kt.Eff.}$ Index_{it} denotes the market efficiency index of different countries and regions for a time period. Which includes

K_{it} denotes the stock of capital of the countries and regions in the time periods.

L_{fit} it, denotes the labor force participation of the countries and regions at the time.

$GDP_{employ.it}$ denotes GDP employed per person as a proxy of employment in the labor market for countries and regions for t time period.

$F_{man.Eff.}$ Index_{it} denotes Financial efficiency Index

Which includes,

I_{nfr} it, denotes the rate of interest of the countries and regions for the time period.

FDI_{it} denotes the foreign direct investment of the countries and regions for t time periods.

β_i denotes coefficient of respective factors.

u_{it} is random error term.

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$t = 1, 2, 3, \dots, 22$ (from 1996 to 2017), and $i = 1, 2, 3, 4, \dots, 19$ for developing countries and regions, and $i = 1, 2, 3, 4, \dots, 32$ for developed countries and regions (a total of 51 countries and regions, among which 19 are developing and 32 are developed).

where i stands for the i -th cross-sectional unit and t for the t -th time period. We shall consider regression results with only the fixed effect approach and the random effect approach. The Geometric Mean (GM) method has been applied to form the above indices.

Fixed Effects approach:

One way to take into account the “individuality” of each country or each cross-sectional unit is to allow the intercept to vary for each country while still imagining that the slope coefficients are constant across countries. To see this, we write the model as:

$$\begin{aligned} GDP_{Econ.grow.5Yr.MV_{it}} = & \beta_{1i} + \\ & \beta_2 \ln(Innov.Index5Yr.MV)_{it} + \beta_3 \ln(GPI.School\ edu\ Index5YrMV)_{it} + \\ & \beta_4 \ln(Mkt.ef fi.Index5YrMV)_{it} + \beta_5 (Finan.ef fi.Index5YrMV)_{it} + u_{it} \\ & \dots \quad \dots \quad \dots \end{aligned} \quad (2)$$

Here, we have put the subscript i on the intercept term to propose that the intercepts of the 51 countries may be different; the differences may be possible for the special features of each country. In the literature, this model is known as the fixed effects (regression) model (FEM). The term “fixed effects” is due to the fact that, although the intercept may differ across countries (here are the 51 countries), each country’s intercept does not vary over time. That is, it is time-invariant. An important fact is that if we were to write the intercept as β_{1i} , it would take the intercept of each country is time variant.

Now to get the fixed effects, we also used the dummy variable approach to get country-wise GDP growth, from which we draw graphs. Thus, our equation in this case is,

$$\begin{aligned} GDP_{Econ.grow.5Yr.MV_{it}} = & \alpha_1 + \alpha_2 D_{11} + \\ & \alpha_3 D_{21} + \alpha_4 D_{31} + \dots + \alpha_{52} D_{51} + \beta_2 \ln(Innov.Index5Yr.MV)_{it} + \\ & \beta_3 \ln(GPI.School\ edu\ Index5YrMV)_{it} + \beta_4 \ln(Mkt.ef fi.Index5YrMV)_{it} + \end{aligned}$$

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$$\beta_5(\text{Finan. effi. Index5YrMV})_{it} + u_{it} \quad \dots \quad \dots \quad \dots \quad (3)$$

where $D_{1i} = 1$ if the observation belongs to a particular country (say Argentina), 0 otherwise, and so on for all 51 countries.

Random Effects approach:

This is precisely the approach suggested by the profinder of the so-called error components model (ECM) or random effects model (REM). The main basic idea is to start with the model considering the above factors affecting GDP Growth is:

$$\begin{aligned} & \text{GDP}_{\text{Econ.grow.5Yr.MV}_{it}} \\ &= \beta_{1i} + \beta_2 \ln(\text{Innov. Index5Yr.MV})_{it} + \beta_3 \ln(\text{GPI.School edu Index5YrMV})_{it} \\ &+ \beta_4 \ln(\text{Mkt. effi. Index5YrMV})_{it} + \beta_5(\text{Finan. effi. Index5YrMV})_{it} + u_{it} \\ & \dots \dots \dots (4) \end{aligned}$$

Instead of treating β_{1i} as fixed, we assume that it is a random variable with a mean value of β_1 (no subscript i here because β is not varying with time). The intercept value for an individual country can be expressed as:

$$\beta_{1i} = \beta_1 + \varepsilon_{ii} \dots \dots \dots (5)$$

Where 1, 2,...,19 are for developing countries and 32 other developed countries and regions.

Where ε_i is a random error term with a mean value of zero and variance of σ^2 .

What we are essentially saying is that the 51 countries included in our sample are drawn from a much larger number of countries and that they have a common mean value for the intercept ($= \beta_1$), and the individual differences in the intercept values of each country are reflected in the error term ε_i .

Substituting 5 into 4, we obtain:

$$\text{GDP}_{\text{Econ.grow.5Yr.MV}_{it}}$$

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$$= \beta_1 + \beta_2 \ln(\text{Innov.Index5Yr.MV})_{it} + \beta_3 \ln(\text{GPI.School edu Index5YrMV})_{it} \\ + \beta_4 \ln(\text{Mkt. effi. Index5YrMV})_{it} + \beta_5 (\text{Finan. effi. Index5YrMV})_{it} + w_{it} \quad \dots \quad \dots \quad \dots \quad (6)$$

Where $w_{it} = \varepsilon_i + u_{it} \quad \dots \quad \dots \quad \dots \quad (7)$

The composite error term w_{it} consists of two components: ε_i , which is the cross-section, or individual-specific, error component, and u_{it} , which is the combined time series and cross-section error component. The term error component model derives its name because the composite error term consists of two error components. The usual assumptions made by ECM are that,

$$\varepsilon_i \sim N(0, \sigma_\varepsilon^2), u_{it} \sim N(0, \sigma_u^2) \quad \dots \quad \dots \quad \dots \quad (8)$$

$$E(\varepsilon_i u_{it}) = 0, E(\varepsilon_i \varepsilon_j) = 0 \text{ (when } i = j \text{)}$$

$E(u_{it} u_{is}) = E(u_{it} u_{jt}) = E(u_{it} u_{js}) = 0$ (when $i = j, t = s$), that is, the individual error components are not correlated with each other and are not auto-correlated across both cross-section and time series units. As a result, the assumptions stated in equation 8 follow that,

$$E(w_{it}) = 0 \quad \dots \quad \dots \quad \dots \quad (9)$$

$$\text{var}(w_{it}) = \sigma_\varepsilon^2 + \sigma_u^2 \quad \dots \quad \dots \quad (10)$$

Durbin-Wu-Hausman test or **Hausman specification test**:

The test helps to evaluate the consistency of an estimator when compared to an alternative, a less efficient estimator that is already known to be a consistent estimator. It helps one evaluate if a statistical model corresponds to the appropriate data. We consider the linear model.

$$GDP_{\text{Econ.grow.5Yr.MV}it} = \beta_1 + \beta_2 \ln(\text{Innov.Index5Yr.MV})_{it} + \beta_3 \ln(\text{GPI.School edu Index5YrMV})_{it} + \beta_4 \ln(\text{Mkt. effi. Index5YrMV})_{it} + \beta_5 (\text{Finan. effi. Index5YrMV})_{it} + u_{it} \quad \dots \quad \dots \quad (11)$$

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in a compact form,

$$GDP_{Econ.grow.it} = bx + e$$

Growth is the dependent variable, X is the vector of repressors, b is the vector of coefficients, and e is the error term. We consider two estimators for b : b_0 and b_1 . Under the null hypothesis, both of these estimators are consistent, but b_1 is more efficient (it has the smallest asymptotic variance), at least in the class of estimators containing b_0 . Under the alternative hypothesis, b_0 is consistent, whereas b_1 isn't.

Then the Wu–Hausman statistic is:

$$H = (b_1 - b_0)' ((Var(b_0) - Var(b_1))^\dagger (b_0 - b_1)) \dots \quad (12)$$

where † denotes the Moore-Penrose pseudo-inverse. Under the null hypothesis, this statistic has asymptotically a chi-squared distribution with the number of degrees of freedom equal to the rank of the matrix $Var(b_0) - Var(b_1)$. Now, if we reject the null hypothesis, it means that b_1 is inconsistent. This test can also be applied to check for the endogeneity of a variable (by comparing instrumental variable (IV) estimates to ordinary least squares (OLS) estimates). The test can be used to check the validity of extra instruments by comparing IV estimates using a full set of instruments (Z) to IV estimates that put forth a proper subset of Z . Note that in order to test the work in the latter case, we must be sure about the validity of the subset of Z , and that subset must have sufficient instruments to identify the parameters of the equation.

The Hausman test also showed that the covariance between an efficient estimator and the difference between an efficient and inefficient estimator is zero. The test can also be used to differentiate between a fixed effects model and a random effects model in panel data. In this case, random effects (RE) are more preferred under the null hypothesis for their higher efficiency, while under the alternative, fixed effects (FE) are at least as consistent and thus selected and preferred. The standard hypotheses can be written in the following way:

	H_0 is true	H_1 is true
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b_1 (RE estimator)	Consistent Efficient	Inconsistent
b_0 (FE estimator)	Consistent Inefficient	Consistent

To get the future economic growth of the world and the variation in economic growth between developing countries and regions compared to developed ones, we are using the panel data regression analysis as proposed earlier.

Here, our main aim is to find out the economic growth forecast for developing countries and regions compared to developed ones. For that aspiration, we have taken economic growth (GDP growth) as the dependent variable, and capital stock, labor force participation, government expenditures on research and development, high technology exports and inflation, the gender parity index in school education, GDP employed per person, and patent application by residents are the independent variables affecting the economic growth of the countries and regions. These variables are arranged in index form, and the estimated results are in logarithmic form, except for the financial efficiency index.

The nature of Economic growth in near future for Developing and Developed countries and regions:

Table 1 Fixed effect & GLS Random Effect for developing and Developed Countries taking Economic Growth as Dependent variable

Dependent Variable: LnGDP_{it} (5Yr Mov. Avg.)								
	Country Effect							
Sample Size	413				699			
No. of Countries	19				32			
Factors Affecting Economic Growth	Developing Countries and Regions				Developed Countries and Regions			
	Coefficients	t-statistics	Coefficients	z-statistics	Coefficients	t-statistics	Coefficients	z-statistics

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		(p-statistics)	nts	(p-statistics)		(p-tatistics)	ts	(p-statistics)
Methodol ogy	Fixed effect	Fixed effect	GLS Rand.	Random effect	Fixed effect	Fixed effect	GLS Rand.	Random Effect
Ln(Innov. Index) 5Yr.MV	0.0129	2.05 (0.041)	-.001	-0.12 (0.906)	0.022	3.64 (0.000)	0.108	12.10 (0.000)
Ln(GPI Index) 5Yr.MV	-0.0393	-4.59 (0.000)	-.018	-1.46 (0.144)	0.105	5.61 (0.000)	0.0973	3.04 (0.002)
Ln(Marke t Efficiency Index) 5Yr.MV	0.6266	38.75 (0.000)	0.607	24.27 (0.000)	0.859	27.70 (0.000)	0.134	3.63 (0.000)
Financial Efficiency Index 5Yr.MV	3.9	3.89 (0.000)	5.47	3.77 (0.000)	-6.50	-1.90 (.058)	-1.52	-2.60 (0.009)
R ²	overall-0.3494 Within-0.9458 b/w-0.311		Overall-0.3491 Within-0.9444 b/w-0.3045		Overall-0.5619 Within-0.8901 b/w-0.829		Overall-0.5885 Within-0.804 b/w-0.7844	
Level of significanc e	1% &5%				1%&5%			
Hausman Effect Random vs.Fixed	$\chi^2=0.000$ Prob. $\chi^2=(.)$ Not positive definite H ₀ is rejected				$\chi^2=0.000$ Prob. $\chi^2=(.)$ Not positive definite H ₀ is rejected			

Source: Author's own calculation from World Bank Data&UNICEF(1996-2017)

In table 1, we shall consider the coefficient values of the indexed variables on the basis of their significant p values and t values, where we have taken the 5-year moving average to predict the probable forecasted values up to the year 2022. From Table 1, based on the Hausmann effect, it is seen that the results of linear regression of the fixed effect and GLS random effect panel data estimation show that the GLS random effect is significant both for the developing world and for the developed world. Now, in the random effect result, we observe that all the regressed values are significant for both the developing world and the developed world, except the gender parity index and innovation index for the developing world with 5 years ahead of them.

In the case of the developing world, it is seen that financial index and market efficiency index values will significantly and positively affect future economic growth, but innovation index and gender parity index will have a significant negative effect on their future economic growth. However, in the developed world, the market efficiency index, innovation index, and gender parity index in school education will play a positive role in economic growth in the next 5 years, but only the financial index will have a negative effect on economic development.

Nevertheless, the value of the market efficiency index and financial index of the regression coefficient for the developing world is very much higher compared to the less negative effects of the innovation index and gender parity index of school education. In the developed world, although the innovation index, gender parity school education index, and market efficiency index play a positive role, they are not so strong. So, with the help of market efficiency and the financial market, there is an ultimate chance for higher economic growth in the developing world compared to the developed world in the coming 5 years. Research results from the IMF, the World Bank, and other world economic organizations also declare similar results.

Findings from Hypothesis Test:

Considering random effects as significant results, table 1 justifies that the significant value of the market efficiency index (coefficient value 24.27) for developing countries and regions is greater than the value of the market efficiency index (coefficient value 3.63) for developed countries and regions. Besides, the significant value of the financial efficiency index (coefficient value 3.77) for developing economies is higher than the financial efficiency index (coefficient value -2.60) for developed economies. Therefore, in the case of the market efficiency index and the financial efficiency index, the null hypothesis (H_0) is rejected both at the 1% and 5% level of significance.

On the other hand, the innovation index (coefficient value -0.12) for developing countries and regions is insignificant; however, the innovation index (coefficient value 12.1) for developed countries and regions is significant. Hence, the null hypothesis is not rejected in this case. With respect to the gender parity index in school education, the coefficient index for developing and developed countries and regions is insignificant. Thus, the null

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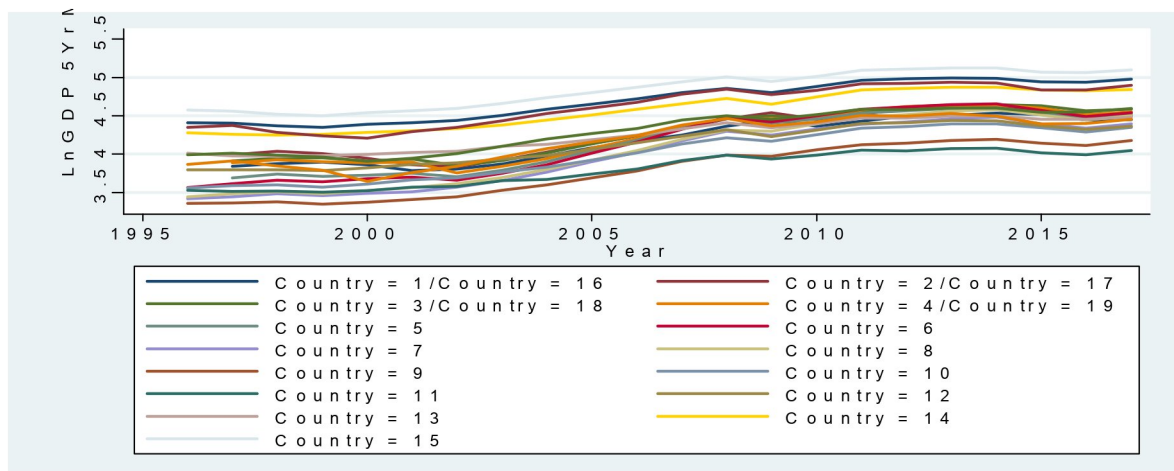
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hypothesis (H_0) is not rejected for the gender parity index in school education at 1% and 5% levels of significance.

Forecasted GDP of the Countries and Regions in the Near Future:

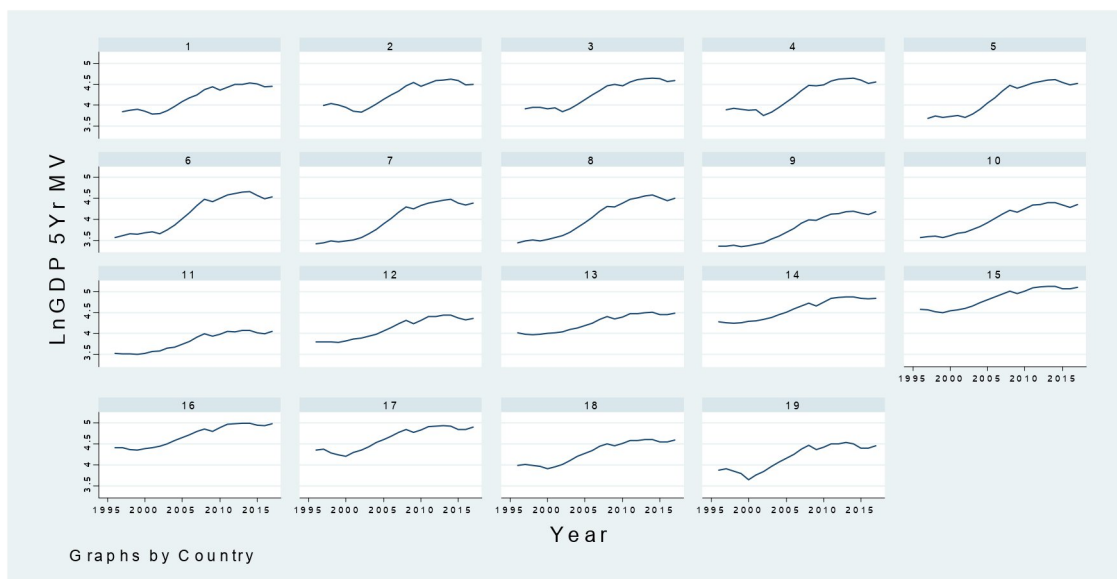
Now, we shall provide the forecasted graphs of GDP by countries and regions jointly and by countries and regions individually considered in our analysis.

Diagram 1: Projected World GDP of Developing Countries& regions jointly



Source: Author's own calculation from World Bank Data & UNICEF(1996-2017)

Diagram 2: Projected World GDP of Developing Countries & regions individually



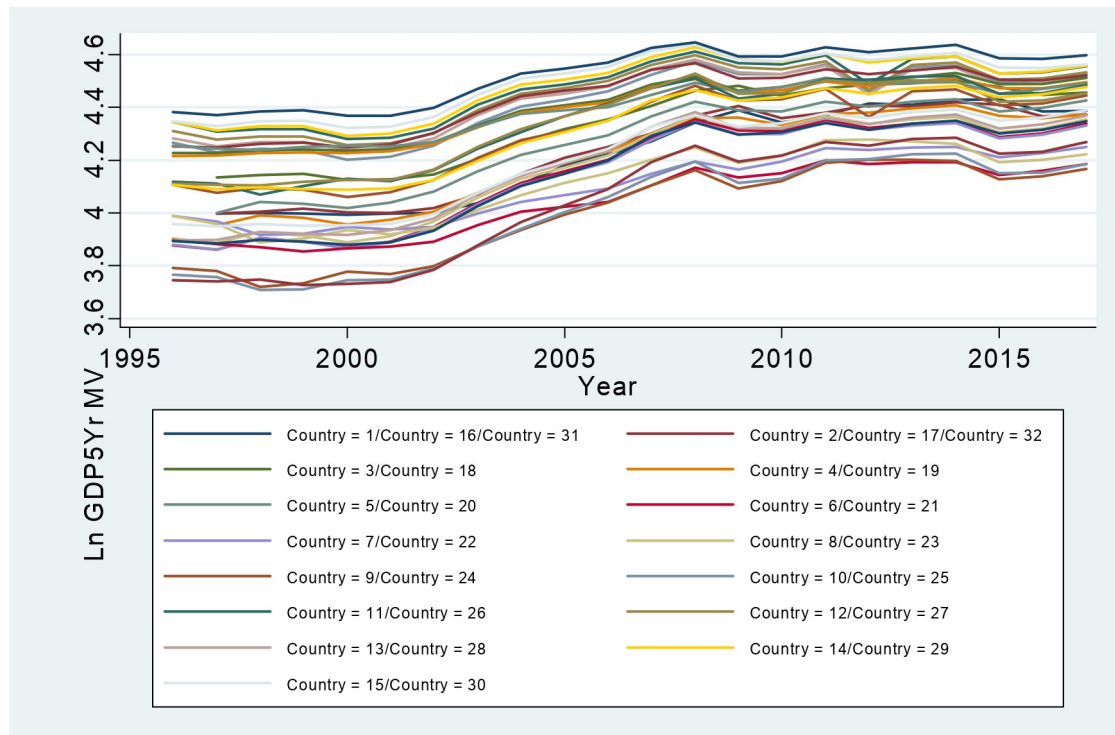
Source: Author's own calculation from World Bank Data & UNICEF(1996-2017)

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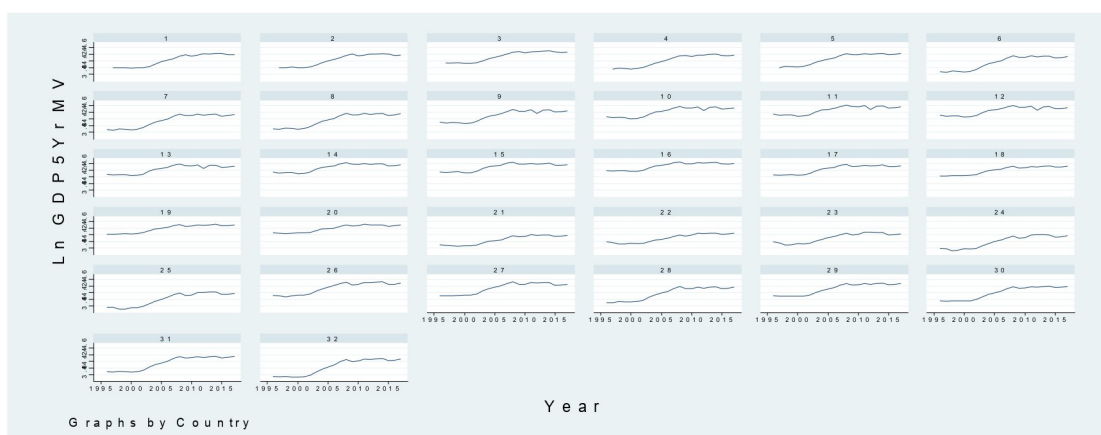
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Diagram 3: Projected World GDP of Developed Countries & regions jointly



Source: Author's own calculation from World Bank Data & UNICEF(1996-2017)

Diagram 4: Projected World GDP of Developed Countries & regions individually



Source: Author's own calculation from World Bank Data & UNICEF(1996-2017)

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A comparative study in figures 1 and 3 shows that the developing world has a great tendency to increase its GDP growth rate compared to the developed world in the coming years, which is a very good sign of world economic growth. It is expected that the less developed countries and regions may smile a while rather than reflect on their gloomy past. Diagrams 2 and 4 show the economic growth prospects of developing countries and regions and developed countries and regions individually.

Projected Scenario of the World's Top 10 Economies by 2050:

Now the forecasted growth of GDP by countries and regions in our analysis can be extended further to observe the world's top economic scenario by 2050 with the help of World Bank data. We can find the scenario of the world's top 10 economies. GDP (PPP) by 2050 can be seen, as shown in Table 2. From table 2, it is seen that the world's great economies (G7) in 2016 will be lagged behind in 2050 with respect to the share of GDP (PPP), and emerging economies (E7) will get better off in 2050. As a result, developing economies have a good chance of taking over global economic leadership by 2050.

Table 2: Emerging markets will dominate the world's 10 economies in 2050 (GDP at PPPs)

Countries	2016	2050	Countries
China(E7)	1	1	China(E7)
US(G7)	2	2	India(E7)
India(E7)	3	3	US(G7)
Japan(G7)	4	4	Indonesia(E7)
Germany(G7)	5	5	Brazil(E7)
Russia(E7)	6	6	Russia(E7)
Brazil(E7)	7	7	Mexico(E7)
Indonesia(E7)	8	8	Japan(G7)
UK(G7)	9	9	Germany(G7)
France(G7)	10	10	UK(G7)

Source:World Bank(2019)

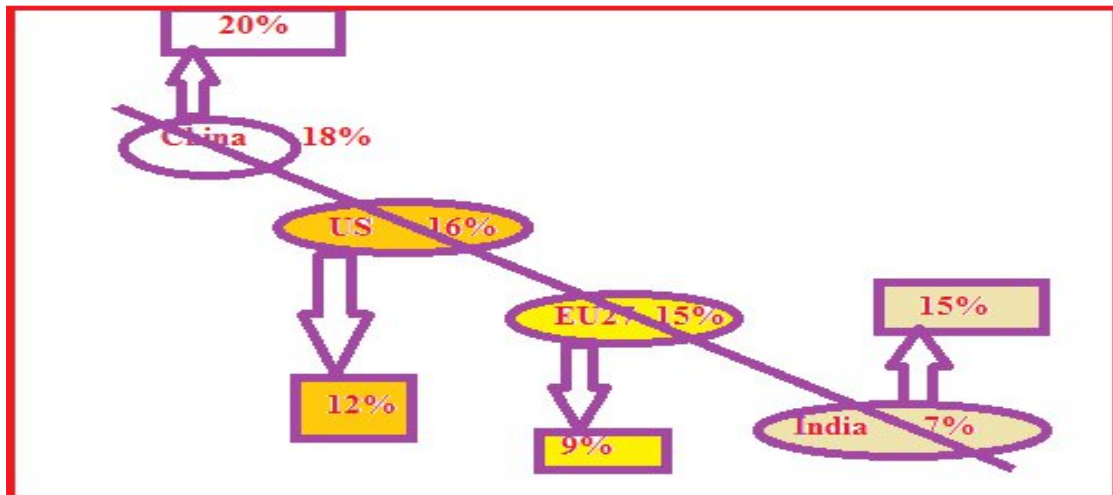
Again, the IMF forecasted that the percentage share of GDP will most significantly rise for China and India by 20% and 15%, respectively, while the share of GDP for the US and EU27 will fall by 12% and 9%, respectively, in 2050, as shown in diagram 5.

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Diagram 5 :The US and Europe will steadily loose ground to China and IndiaShare of World GDP (PPPs) from 2016 to 2050



Source: IMF 2016, PwC analysis for GDP projections to 2050

Pessimistic and Optimistic Scenario of Global Economic Growth:

Pessimistic Scenario	Optimistic Scenario
Declining business and consumer confidence combine with rising global trade tensions and it cause worse economic slowdown especially for developed countries in the next half of the decade.	Consumer and business confidence increase and the some trade agreements among different countries, eliminating most of the current tariffs may help to prosper global growth.
GDP growth declined to nerally2% in 2020	GDP growth may improve after 2022.
Economic growth of Developed countries and regions may fall down in the coming 5 years but there is a great chance it will improve again which may increase economic inequality.	Economic growth of developing countries and regions will grow faster in coming 5 years than the Developed countries and regions.

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Conclusion:

The continuous rise in trade tensions and the economic slowdown, especially in EMDE's, invite a further decrease in business confidence. Manufacturing and trade growth, which ultimately leads to market slowdowns and global risk. Weaker export demand from developing economies, net capital outflows, lower commodity prices, weak investment growth, and, in some cases, natural disasters, military conflicts, and adverse weather effects on agricultural output exercised downward pressure on growth this year. Lower commodity prices (particularly oil) have reduced the import bills of resource-importing LDCs and bestowed lower inflation, although in some countries the gains have been moderately offset by depreciating exchange rates.

The major problems in developed countries and regions are inequality, pollution, and unemployment. The burning issues in developing economies and regions are poor health systems, high population growth rates, hunger and poverty, poor education, and, of course, less technological advancement. These shortcomings must be tackled seriously, both by developed and developing economies, for better, more balanced economic growth in the world. In Mahatma Gandhi's words, "*The difference between what we do and what we are capable of doing would suffice to solve most of the world's problems.*"

References:

Books and Journals:

1. Barik,R,H. (2022): "*Variation of Economic Growth across Countries: An Investigation Over the period 1996-2017*", Vidyasagar University, Shodhganga. <http://hdl.handle.net/10603/512825>
2. Gopinath,G. (2019): "*World Economic Slowdown*", Precarious Recovery, IMF <https://r.search.yahoo.com>
3. Hasworth,J, & Chan,D. (2015): "*The World in 2050*", PWC. <https://r.search.yahoo.com>

Scotopia: A multidisciplinary biannual peer-reviewed e-journal

ISSN: 2455-5975

Website: <https://scotopia.in/>

4. Malpass,D.(2019): “*Global Econpomic Prospects, High tended Tensions, Subdued Investment*”, World Bank Group. <https://r.search.yahoo.com>
- 5.Navaityle,A.,Baksajev,A.,Solomon,D.,Stalenis,G.,&Aciene,M.(2019): “*Global Economic Forecasts:Q4 2019*”, Euro monitor International. <https://r.search.yahoo.com>
6. UNO Report (2016): “*World Economic Situation Prospects*”, UNO. <https://r.search.yahoo.com>

Web Links:

1. Overviewed of Economic Forecasting (Accessed on 6/12/2019): “*Wikipedia*”, Free Encyclopedia.
2. Panel Data (Accessed on 6/12/2019): “*Wikipedia*”, Free Encyclopedia.

