

# **Institutional Determinants of Growth**

*A Project report submitted to  
XIM University  
in the partial fulfillment of the requirements for the award of the degree  
of*

**BACHELOR OF SCIENCE (HON.) IN ECONOMICS**

Submitted by

**Sabyasachi Chiranjibi Panda**

Under the supervision of

**Prof. Bharatee Bhusana Dash**



**School of Economics**

XIM University

(Formerly Xavier University, Bhubaneswar )

Plot No:12(A), Nijigada, Kurki, Harirajpur, Odisha 752050, India

**April 16, 2022**

**School of Economics**  
**XIM University**  
(Formerly Xavier University, Bhubaneswar )  
Plot No:12(A), Nijigada, Kurki, Harirajpur, Odisha 752050, India

**CERTIFICATE**

I hereby certify that the Project Dissertation titled “**Institutional determinants of growth: A literature review**” which is submitted by **Sabyasachi Chiranjib Panda**, Roll No’s – **USE19010**, **School of Economics** ,XIM University, Bhubaneswar in partial fulfilment of the requirement for the award of the degree of Bachelor of Science (Hon.) in Economics, is a record of the project work carried out by the student under my supervision. To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

**ACADEMIC DEAN**

**SUPERVISOR**

**Prof Golaka C. Nath**

**Prof. Bharatee Bhusana Dash**

**School of Economics**  
XIM University  
(Formerly Xavier University, Bhubaneswar )  
Plot No:12(A), Nijigada, Kurki, Harirajpur, Odisha 752050, India

**CANDIDATE’S DECLARATION**

I, **Sabyasachi Chiranjibi Panda**, Roll No’s – **USE19010** a students of B.Sc. (Hon.) in Economics of (**School of Economics**), hereby declare that the project Dissertation titled “**Institutional determinants of growth: A literature review**” which is submitted by me to the **School of Economics**, XIM University, Bhubaneswar in partial fulfilment of the requirement for the award of degree of **Bachelor of Science (Hon.) in economics**, is original and not copied from any source without proper citation. This work has not previously formed the basis for the award of any Degree, Diploma Associateship, Fellowship or other similar title or recognition.

Place: Bhubaneswar

**CANDIDATE**

Date:

**Sabyasachi Chiranjibi Panda**

*Dedicated to my family and friends*

**School of Economics**  
**XIM University**  
(Formerly Xavier University, Bhubaneswar )  
Plot No:12(A), Nijigada, Kurki, Harirajpur, Odisha 752050, India

### **ACKNOWLEDGEMENT**

I wish to express my sincer gratitude to **Prof. Bharatee Bhusana Dash** and **Prof. Golaka C Nath** for their continuous guidance and mentorship that they provided me during the project. They showed me the path to achieve my targets by explaining all the tasks to be done and explained to me the importance of this project as well as its relevance. They was always ready to help and clear my doubts regarding any hurdles in this project. Without their constant support and motivation, this project would not have been successful.

Place: Bhubaneswar

**CANDIDATE**

Date:

**Sabyasachi Chiranjibi Panda**

## **Abstract**

Even if countries share same natural resources and institutional arrangements , what causes them to have different growth rates is still a controversial question that attracts attention of academicians and non-academicians round the globe.

Traditional economic theories list determinants like capital, technology and labor markets may affect economic growth, but recently many other ground-breaking theories have come forward that reveal the other determinants of economic growth. Some say that the National culture affect economic growth, while others put the entire burden on legal structures of the country. Some argue coordination-failures among agents in the economy causes distortions in economic processes while others blame the misuse of power given to the leaders and government officials that leads to corruption and delay in bureaucracy .

In the light of recent developments in growth literature, the purpose of my dissertation is to review the literature of different researchers finding possible ways to account of growth and prospects in a country.

# Contents

<b>Certificate</b>	<b>i</b>
<b>Declaration</b>	<b>ii</b>
<b>Dedication</b>	<b>iii</b>
<b>Acknowledgement</b>	<b>iv</b>
<b>Abstract</b>	<b>v</b>
<b>Content</b>	<b>vi</b>
<b>1 INTRODUCTION</b>	<b>1</b>
<b>2 Savings Investment Nexus</b>	<b>4</b>
<b>3 Shifts in Growth Paradigms</b>	<b>7</b>
3.0.1 The Coase Talk . . . . .	8
<b>4 Endowments and Economic growth</b>	<b>10</b>
4.0.1 Resource Abundance . . . . .	11
4.0.2 The Indian story . . . . .	12
<b>5 Culture Diversity and Economic Growth</b>	<b>15</b>
5.0.1 Social Choice and development traps . . . . .	16
5.0.2 Entrepreneurial Ability . . . . .	17
<b>6 Politics of incentivization</b>	<b>19</b>
6.0.1 Property Rights . . . . .	20
<b>7 CONCLUSION AND FUTURE SCOPE</b>	<b>21</b>

# Chapter 1

## INTRODUCTION

Economic growth is a path-dependent process. Interaction between Economic agents is the fundamental cause of Economic Development. These interactions among economic agents are facilitated using Economic Institutions. According to [North \(1971\)](#) "Economic institutions can be defined as Constraints that human beings device to shape human interactions in the society". But does this mean having superior cultural and political institutions guarantee higher per-capita income and hence better growth rates? Is it the only reason why the United States has a better per-capita growth rate than the third-world countries.

Let's look at the bigger picture. Since the industrial revolution, the average living standards in most countries have increased. Technology became accessible to them, which increased their Per-capita incomes. But countries also have diverged among themselves, so much so that the income disparities are huge. As of 2020s, income-per-capita (current \$) in the United States was \$63,500, whereas Lower middle-income countries like India lie around \$19000. In contrast, income is much lower in countries: Haiti at \$800 and Somalia as low as \$313.

	1990	2000	2010	2020
High Income	\$ 18,352.55	\$ 28,075.62	\$ 39,613.32	\$ 50,766.79
Lower-Middle Income	\$ 2,039.16	\$ 2,845.00	\$ 5,158.03	\$ 7,133.32
Middle Income	\$ 2,658.31	\$ 3,949.43	\$ 8,130.69	\$ 11,827.04
Upper-Middle Income	\$ 3,292.37	\$ 5,181.68	\$ 11,769.91	\$ 18,013.83
Low Income	\$ 784.75	\$ 985.79	\$ 1,576.11	\$ 2,048.99

Table 1.1: Pre-capita GDP across income groups (PPP terms)

The World Bank assigns world economies into four groups, namely low, lower-middle, upper-middle, and high-income countries. **Table 1** shows the per-capita GDP in PPP terms, current US\$ across different income groups. A brief look at the table shows that income in High-income



countries is 23 times richer than that of their lower-income counterparts in 1990 and by 2020 and the ratio has stayed around the same. But, astonishingly the upper-middle-income countries show that disparities are decreasing. In the 1990s the high-income countries were 5 times richer than their upper-middle counterparts but around the 2020's it reduced to 3. Also, the ratio between the lower-middle and the low-income countries is decreasing. In 1990 the lower-middle-income countries were 0.4 times richer than their lower counterparts but around 2020's it reduced to 0.2.

Does this show that with time, the per-capita income between countries is converging into two clubs, the upper-middle ones with the higher and the lower-middle with the lower ones? If so, then this means the upper-middle-income and high-income countries grow faster than the lower-middle and lower-income ones. [Quah \(1996\)](#) shows a similar kind of picture. He provides evidence in favor of the formation of convergence clubs and the cross-sectional distribution polarising into two peaks, the rich and the poor.

But why does this happen? Is it because of low savings and investment, high population growth rate, poor geographical conditions in low-income countries, the absence of institutions to protect private investment and entrepreneurship, or is it because of the inability to attract credit, diversify risk and have better financial structure? [Hibbs and Olsson \(2004\)](#) show evidences that geographical conditions affect Economic performance. Not only that, but they also show that this influence historical development of institutions. According to them the neolithic transition from nomadic hunter-gatherers to sedentary agriculture was a major event in human history and held responsible for the population explosion, the opportunity to have a section of non-food-producing specialists in the society and the accelerated technological progress that eventually led to the industrial revolution. Using a weighted average of the total no of plants and animals found in the regions for the last 1200 years as a measure of bio-geography, Per-capita GDP and ratings of the Private Risk Service Group's International Country Risk Guide of five political-institutional characteristics of each country as a measure of the quality of institutions, they model the growth of technological progress.

Similarly [Rodrik and Subramanian \(2004\)](#) study the accelerated growth pattern of the Indian economy in the 1980s. According to them, the doubling of India's growth rate took place a full

decade before the 1991 reforms. They list out factors like trade liberalization, tax reduction, and high government spending with an attitudinal shift in the behavior of the National Government towards a pro-business approach <sup>1</sup> were the major reason for high growth rates in the 1980s.

How did this shift in growth paradigms happen? When did we shift from savings rate, population growth rate, and capital accumulation as factors of growth to institutional structures and Institutional changes through time? To find that, I first turn to introduce the classical determinants and then proceed with our main objective of finding how the cultural, political and economic institutions affect economic growth in a country. I see that in India natural resource abundance shows a negative relationship with economic growth and development. institutions show a decreasing trends on entrepreneurship activity.

---

<sup>1</sup>A *Pro-Business* approach is one where governments concentrate on the profitability of an industry rather than establishing new ones. By easing restrictions on business expansions, and reducing corporate taxes and price controls, they favor producers. On the other hand *Pro-Market* approach is more consumer-oriented, increasing consumer welfare by letting new firms enter the market so that consumers buy at the best price possible.

## Chapter 2

### Savings Investment Nexus

Solow's neoclassical growth economics identifies savings rate and population growth rate as the major factors behind economic growth.<sup>1</sup> But this is rarely possible, with institutions and institutional changes coming into the picture. Social, economic and Political institutions affect economic growth to a great extent. So much so that a huge chunk of economic growth remains unexplained even after accounting for the factors identified by Solow. **Figure 1** shows a graph between the average Gross Domestic Savings and GDP per-capita Growth Rate of a list of countries for the last ten years(2010-20)<sup>2</sup>. I am focused on finding if the relationship between the savings rate and the GDP per-capita growth rate is linear or not. I have standardized the variables and plotted a unit slope line ( $Y = X$ ). This unit slope line helps us in comparing if the relationship between the variables in consideration is linear or not.

The graph shows something to ponder upon. A brief look will say that most of the points though are not on the  $Y = X$  line, but they are clustered around that, but I will focus on the other points. It can be easily seen that some countries, though have the same savings rate but show different growth rates. This is astonishing. The solow model predicts something very different. According to him if the growth rate of technological progress and rate of depreciation of capital are exogenously given, and if it is same for the economies then growth rates are also the same.<sup>3</sup> But evidence shows that this doesn't happen at all. Now, what is the reason behind

---

<sup>1</sup>Mathematically according to solow  $k(t) = sY(t) - (n + g + \delta)k(t)$  where  $sY(t)$  is the savings per capita ( $s$  being the propensity to save out of income) , $n$  being the growth rate of labour and  $g$  the growth rate of technological progress.

<sup>2</sup>The amount saved by households (and also the public sector) needs to be invested to show its effect on Economic growth. So savings in period  $t$  can only affect economic growth in period  $t + 1$ . With this in mind, our graph might look faulty but remember that I have used averages of the GDP Growth rate and Gross Domestic Savings rate for the last ten years. This solves the time-lag problem to some extent.

<sup>3</sup>Neoclassical Economics assumes that there is a perfect transfer of technology. According to Solow, rich countries are the once that invent better technology and the poorer ones just borrow them, they don't have to

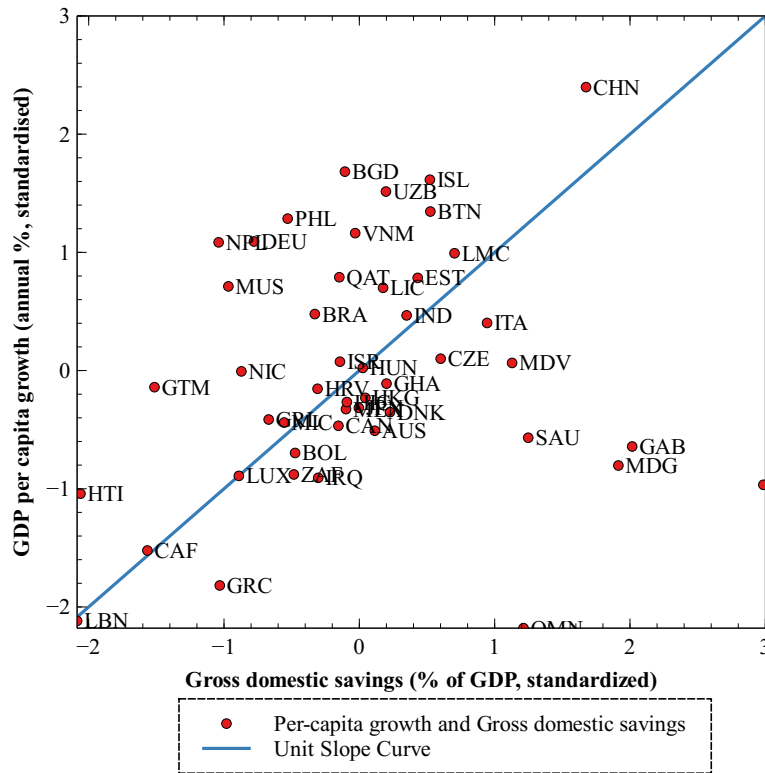


Figure 2.1: Per-capita growth and Gross domestic savings  
**Source:** World Development Indicator

this, can we again throw all this into the problem of institutions?

Not entirely. Economic development is not just dependent on per-capita income only, it encompasses various other factors like health services which help in boosting life expectancy, the Literacy rate in terms of how knowledgeable the residents of the country are and how easily they can invent new ideas, and standard of living that comprises of things like voting rights and right to be protected from people both inside the country. These are measured through global indicators that measure Life satisfaction ('happiness' indicators), trust, confidence, well-being and perceived security.

Though we count these to be the indicators that help us identify levels of development among countries these do affect economic growth too. Health services that help in boosting life expectancy obviously affect the economic growth of the country. With efficient public expenditure systems that provide better healthcare to all, I can provide a greater life expectancy

spare their own resources on research. That's why he agrees that poorer countries grow faster than their richer counterparts.

that boosts the labour force's productivity.<sup>4</sup>

According to **Romer** exogenous technological progress can sustain long-run economic growth through better human capital. As better human brains find out new and cheaper procedures to produce things, the marginal productivity of capital increases. With time the set of specialised skills and efficiency increases which boosts the production process. This flow of ideas will happen when governments provide better educational facilities through expenditure on human capital. We call this process human capital accumulation.

Similarly, voting rights and the right to be protected from people both inside the country and outside are important tool for economic growth. A stable environment accompanies a constant growth of productivity which is the exogenous technological progress.

---

<sup>4</sup>Even if I assume the retirement age of a person to be 55 (say) then I can write that the person who is getting health problems with age less than 55 and can't work or work under extreme health issues can easily be provided with better healthcare and this way I can increase the productivity of labour as well as the amount of labour force.

## Chapter 3

### Shifts in Growth Paradigms

The study of economic growth has been a defining concept of understanding economic development. As one of the initial economic growth models, [Harrod \(1960\)](#) and [Domar \(1946\)](#) independently show that savings rate, capital-output ratio and the Depreciation rate of capital are the determinants of economic growth. A higher savings rate directly leads to higher investment and higher output. Along with that Higher capital-output ratio shows that if one person can produce more output then the rate of growth of per-capita income increases.<sup>1</sup>

However [Solow \(1956\)](#) and [Swan \(1956\)](#) independently developed the Neoclassical growth model in which they say that economic growth can be achievable by having a higher savings rate, but unlike Harrod-Domar model we can't ignore the fact that returns to capital are diminishing<sup>2</sup>. So even if a higher savings rate instigates a higher economic growth, the growth is short-lived. That is the increase in savings rate only causes an increase in *long-run levels* of output and capital. This means economic policy doesn't affect long-run growth, rather it's achieved by having *Exogenous Technological Progress*<sup>3</sup>.

Taking solow seriously, [Mankiw et al. \(1992\)](#) tried to divide the capital accumulation into two parts, Physical capital accumulation which measures the capital accumulation and Human capital which measures the increase in productivity of labour. They held the Human capital

---

<sup>1</sup>Harrold and Domar assume that the capital-output ratio and the depreciation rate of capital are constant and exogenous in nature. Economic growth is affected only by the savings rate.

<sup>2</sup>The production function satisfies INADA Conditions. Mathematically for a production function of the form  $Y=F(K)$ ,

$$\frac{\partial F(K)}{\partial K} > 0; \frac{\partial^2 F(K)}{\partial K^2} < 0;$$

This means that as we constantly supply the capital to a fixed amount of labour, there is extra capital per labour that lies around and this extra capital reduces the productivity of capital

<sup>3</sup>Solow assumes Exogenous Technological progress to be Hick Neutral, that is, it is both labour and capital saving in nature. It follows a mathematical notation that  $Y = A(t)F(K, L)$ . However the model also turns out to be true with labor-saving technological progress  $Y = F(K(t), A(t)L(t))$

accumulation responsible for technological progress.

But with time it was seen that we needed better explanations for the long-run economic growth. To analyse economic policies we need to endogenize productivity growth. [Romer \(1986\)](#) tried to combine both the human and physical capital to denote it *intellectual capital* just to put out the *diminishing marginal productivity* of any factor. According to him, when the physical capital starts to enter the diminishing marginal productivity phase, there is Human capital accumulation that causes technological progress. Many other models tried to endogenize technological progress, [Romer \(1990\)](#) brings in the idea that innovation causes productivity growth by creating new varieties of products.

The major transition in growth paradigms came with Ronald Coase's paper [Coase \(1960\)](#) in which he argues that Neoclassical Economic Models and Economic analysis are restrictive in nature. According to him Neo-classical synthesis assumes Zero Transnational costs, but for positive transnational costs, institutions do matter. Economic growth can be rarely modelled as a function of "*how people procreate*" and "*how much they save*".

### 3.0.1 The Coase Talk

While discussing income disparities at the beginning of the first chapter, we saw that there were huge disparities in per-capita incomes between economies. According to Coase these disparities are not because of barriers to technology spillovers, but because of transaction costs. Transaction costs are those costs that help us in facilitating exchange, not always monetary but sometimes they do. They can be too low if individuals indulge in repeated dealings or have a piece of better personal knowledge and features of each other. If interactions are repetitive in nature, then there is a chance that the players will know the behaviour of other players, from the past information. So the chance of getting a better and more efficient equilibrium in the exchange process increase.

But this kind of continuous exchange usually happens when productivity is low due to less specialisation<sup>4</sup>. According to Adam Smith, with an increase in dealings of these kinds, a greater degree of specialization and division of labor is required. This kind of specialization decreases

---

<sup>4</sup>If a person exchanges goods and services from one person repeatedly, then the chances of both the parties using unfair means decreases

the efficiency of the equilibrium by introducing externality like cheating, shirking and opportunism, and more.

To make sure the agents get into a better and Pareto-efficient equilibrium we need to somehow reduce the effects of externalities. There are many ways to do so such as by taxing the agents and exchanging rights. However, these methods increase transaction costs. What felt challenging was how to measure them.

Sometimes these can be modelled by using an introspective cardinalist approach. In these approaches we move from one person to another asking about their preferences. These questions involve opportunity costs<sup>5</sup> of doing the job, be it standing in a queue or bribing officials to get the job done. If they prefer not to stand in the queue and are ready to spare some pennies to get the work done then the monetary value of this bribe is the transaction cost. This situation happens when the person under consideration finds his time more important than standing in a queue, while at the same time for anyone else standing in the queue is justified and he/she is not ready to spare the transactional cost.

[North \(1989\)](#) studies the historical perspectives of transactional costs and how it causes economic growth.

---

<sup>5</sup>Opportunity costs of the next best alternative forgone. Under the assumption that all market participants are homo-economicus Opportunity cost theory says that an individual will weigh both the situations given and do the one that gives him more benefits at a lesser cost



## Chapter 4

### Endowments and Economic growth

Men of fat and fertile soil are most commonly effeminate and cowards; whereas contrariwise a barren country makes men temperate by necessity, and by consequence carefully, vigilant and industrious.

**Jean Bodin (1956, reprint 1962)**

The study behind Economics of Developing Countries is interesting. Look at any developing country and we see widespread inadequacies in a range of indicators. Nutrition levels are low. Life expectancy at birth and other health indicators are too worse. Living standards are not that great and citizens of the county can even access better sanitation facilities. Other indicators like Education both primary and secondary are also not better, better than some other developed countries.

Low Life expectancy at birth, expected years of schooling, and Mean years of schooling are obviously defining features of an under-developed country but are they the only identifiers of economic development. Does it guarantee that a better score under these identifiers makes a country develop? Not exactly though, not all developed countries have a better life expectancy at birth. Many families in developed countries like to have more and better of-springs<sup>1</sup>, so they pro-create more often and this fact decreases the fertility rates and further the life expectancy at birth. Similarly, the mere existence of higher capital per capita is not the only requirement necessary to have better growth rates in the economy. The capital should also be used efficiently for economic welfare. These factors however act as explanations, to make things clear, if a country is developed or not. We cannot make a list of all these features and put them as a

---

<sup>1</sup>For Example in south-Asian economies male child dominance does exist because they are considered to act as security when parents get older. So they procreate until their child comes out to be a male. This kind of behavior produces *Unwanted Daughters* and this effect is called the ‘**son meta-preference syndrome**’

definition of under-development. High level and/or quality of capital and better healthcare systems are not the only reasons that ensure economic development. Even if they do so, we cant brand them as causes of underdevelopment.

But that doesn't stop Economists from offering such explanations. Many influential studies have regressed growth rates on per-capita income, savings rate, and the population growth rate, and no doubt these affect economic growth, but are these the identifiers of economic development too? Doesn't the set of cultural, political and economic institutions affect economic growth?<sup>2</sup>.

#### 4.0.1 Resource Abundance

There's a general perception that resource abundance in a country does affect economic growth and development. Logically abundance of natural resources increases the pace of Industrialisation, creates more employment opportunities, and fosters economic growth. Not only that, but it also attracts investment and widens economic opportunity, and increases the prospects of economic welfare and development. [Behera and Mishra \(2012\)](#)'s study shows a detail analysis of resource curse hypothesis in Indian context.

It's true to some extent, but it's not always. The seminal work of [Sachs and Warner \(1995\)](#) on the inverse relationship between natural resource abundance and economic development encouraged a number of researchers across disciplines to examine the validity of the resource curse hypothesis both theoretically as well as empirically in different countries across the world. Resource abundant countries like Nigeria, Zambia, Saudi Arabia, and Venezuela have poorer statistics than Asian Economies like Japan, Hong-kong, Korea, and India. [Venables \(2016\)](#) shows an interesting study on how resource abundance becomes a curse.

From this perspective, the objective of the current chapter is to understand the resource abundance and Economic growth prospects in India. Many states (or Countries) which initially had a huge stock of resources have worse economic development and uneven growth. [Sachs and Warner \(1995\)](#) (**Sach and Warner,1995**) uses "*Exports as a percentage of GDP*" as the

---

<sup>2</sup>Finding a theory of Economic growth on social, cultural, and political institutions doesn't end here. We have to find out if a particular kind of cultural and political factor causes economic growth or if it is the other way round, economic growth brings in better incomes and living standards which increases expenditure and initiates a series of behavioral changes in the society.

measure of Resource abundance in their paper, assuming a strong positive correlation between *Natural Resource Abundance* and *Natural Resource Exports* but this is not always true.

Economies do have fewer endowments available to them and can have lower growth rates, but the simple correlation of these two events doesn't imply a causation among both variables. If we consider the paths of Developing Economies, it can be understood this way: Developing and under-developed Economies mainly export primary goods( Natural Resources like Minerals, Oils, and also human capital in form of labor migration) but at the same time developed nations provide services and production methodology to the under-developed and developing nations. So developing economies have a better export mix and get better growth rates than the underdeveloped<sup>3</sup>. Also, developed economies provide Foreign Direct Investment for the extraction and production of commodities from the minerals available. And generally, investments of these kinds are made by entrepreneurs and Governments to gain better returns and capture gains in trade. So the developed economies those who have better growth rates have so in the cost of the under-developed and developing ones. So there is no reason to assume that the countries having better resource abundance have better growth rates.

#### 4.0.2 The Indian story

**Table 2** shows us the Average Share of Mining and Quarrying in Net State Domestic Product and their respective Average growth rates in the Indian states for the years 2016-17 to 2019-20 (in crores). It can be seen that chhattisgarh odisha and Maharashtra have huge endowments<sup>4</sup> but at the same time show, low growth rates compared to the non-endowed ones, Mizoram, Tripura and Telangana. But close look suggests there are exceptions. Gujarat and Odisha are both endowed with plenty of Mineral resources but at the same time show high enough growth rates. But this is astonishing. How can these states maintain high enough growth rates that the other states cant.

---

<sup>3</sup>Less-developed countries are agricultural and mineral extracting economies, so they export cash crops (like wheat, rice, lentils) and minerals (like coal, iron ore, bauxite, and other minerals). Markets for such goods are highly competitive and have price volatility is huge, so returns from these goods are low and lead the procurers to losses. Whereas developing economies export services and other production procedures. These kinds of goods have stable prices and keep things good going to the consumers.

<sup>4</sup>Both minerals and groundwater. As there is less agricultural land we assume the majority of the population is engaged in mining and Quarrying activities.

State/Union Territory	Shares of Mining and Quarrying	Growth rates
Maharastra	66082.5	5.5
Rajasthan	43832.5	3.75
Gujurat	36887.75	7.75
Odisha	36387.25	8.5
Assam	23155.25	4.5
Chhattisgar	21252.25	5.25
Uttar Pradesh	20731	5
Andhra Pradesh	17205.25	7.25
Telangana	15502.5	8.5
Tripura	3449.5	9.5
Mizoram	88.75	9.75
Puducherry	420.5	4.25
Madhya Pradesh	12869.25	7

Table 4.1: Share of Mining and Quarrying and their growth rates (Average, 2016-2020)

**Source:** Economic and Political Weekly Research Foundation

Maybe this is because the abundance of natural resources like minerals and oils doesn't affect economic growth directly, rather it also depends on various indirect processes like government spending on education that caters to the Industrial needs, health and sanitation, and pro-investment policies.

Resource abundance should also accompany by a better and more efficient production process to boost output generation in the economy. And to do so we need to provide better educational facilities to all the residents of the country. But see, in the end, educational attainment matters. Many economies make huge investments in Universal education programs but are unable to take value out of it. Developing countries are more prone to corruption and other associated illegal activities which limit the welfare distribution. According to [Hibbs and Olson \(2004\)](#), the neolithic transition from hunter-gatherer to sedentary agriculture is major technological progress in the human race and similar kinds of transformations do happen timely. Agricultural economies industrialize themselves and in this process the amount of land under cultivation decreases. Also, the percentage of the labor force engaged in agriculture decreases as laborers move to formal jobs which can provide better wage rates and better job security. So the decrease in agriculture shows a sign of technological progress.

But most states that are into mining and quarrying are involved in corruption and dislocation of revenues like low spending on education and bad governance. These states do not follow the

*Hartwick-rule*<sup>5</sup>. If done this way then the state governments would keep a cautious eye on renewable resource depletion of a state and also on invest the returns from this on Human and Physical capital. Distribution is also an issue here. So resource abundance is not a necessary condition for better growth rates and better per-capita income

---

<sup>5</sup>Hartwick Rule offers what Solow (1986) termed a ‘rule of thumb’ for sustainability in exhaustible resource economies – a maximal constant level of consumption can be sustained if the value of investment equals the value of rents on extracted resources at each point in time

## Chapter 5

### Culture Diversity and Economic Growth

In Adam Smith's "The theory of wealth of nations", he writes that the volume of the annual production of goods and services depends on the skill-set, adroitness, and decision-making power. Citizens of a country having these skills, combine labor with the available resources, both natural and human, to produce output. So everyone in the economic exchanges goods to get something they need, an example of a pure commercial economy.

Since then economists have focused on exchange economies and determined the role of investment and technology on growth and have somewhere left the role of Culture and diversity on Economic growth and development. Countries that have huge diversity, not only in income but also in religion, beliefs, and traditions have tendencies of political instability. This kind of picture is seen in developing economies like India.

The Indian cast system is divided into four catagories: Brahmins, Kshatriyas, Vaishyas, and the Shudras. And this rigidity does affect economic development. In the end, in developing countries in India, caste, religion, and region do affect in which school you study, what college you attend, and sometimes what you do or your living and whom you marry. The list does not stops here, even the public policies are aimed to be so. Indian independence, brought one of the largest affirmative action policies, where huge investments were made for the deprived cast to provide them with better education, healthcare, and employment facility. This way, even if we see that inequalities are reducing between members of the same caste, between the caste, inequalities are huge.

But the ultimate aim of a hindu is not only *Moksha* but also *Artha* or materialistic freedom. Today's generation has come a long way. Today's generation not only demands materialistic freedom but also self-expression and quality of life. They are outward-looking and confident.

They also possess a clear parallel between self-assurance and religious thought. American social scientist Ronald Inglehart in his book "The Silent Revolution: Changing Values and Political Styles Among Western Public (1977)" names this behavior to be *post-materialistic* in nature.

But remember this is not always the case for India. **Mauryan Empire** under *chandragupta* and *Ashoka* were the best example of sectoral social welfare in India. With all the diversities in hand, they maintained a vibrant position in the silk route. Not only that but it also experienced export-led growth, significant economic prosperity, socio-political stability, and a self-poised and self-structured charity. It can be said that mauryan empire was a pinnacle of *vedanta*, a principle that holds that all reality is a single principle.

### **5.0.1 Social Choice and development traps**

The thing to look for is the way society takes choices, choices on minimum educational attainment, fertility rates, and many more factors. These factors also influence economic growth.

If the community decides to procreate more then there will be more labor force in the future, but remember that the economy should also provide necessary requirements for sustenance. There are many developing economies where child labor is pretty common. Countries like Somalia, the Central African Republic, Haiti, and Yemen practice child labor to a large extent, but with this there is also widespread malnutrition. Low nutritional quality of food and sometimes even no food, difficulty in accessing medical aid, unavailability of life-saving drugs, and many other factors cause malnutrition among children and decrease life expectancy at birth.

Similarly, educational attainment is also an issue, if countries do-not focus on their education policy and still use a traditional way of education then they will be missing out much. The residents should understand that with the changing requirements of the world they need to change and adapt. They need to focus on professional courses which equip them with the required skills. But this is not always what happens. The job market is very competitive, people in a country who are in search of jobs focus on newer ways to earn their income, and learn newer skills, and this way we find newer ways to approach education. But what about a country where there is no motivation to work, maybe because there is always unrest and war situation's

going on.

Many developing countries suffer from a trap. In order to keep the population growth rate high, they procreate more but the resources are not adequate, so they fall into a development trap. We start focusing on educational attainment but in some way or the other, the motivation to study and get better jobs decreases.

## 5.0.2 Entrepreneurial Ability

Granato et al. (1996) in their paper consider *Achievement motivation* and *Post-materialism* as the characteristic features that affect culture and growth and test whether Cultural attitudes toward achievement and thrift have a positive effect on economic growth or not. In their study, they find cultural attitudes concerning post-materialism have a negative effect on economic growth. According to them in pre-industrial societies, the value system takes the form of religion and changes very slowly but in industrialized nations accompanied by the process of modernization, the worldview tends to be more secular rational, and open to change. A similar kind of picture can be seen in Indian states, where the villages are seen to have more Hindu practices that affect efficiency and equity in rural areas compared to the urban dwellers. Massive riots happen due to these issues and lead to disruptions in lifestyles and the destruction of public property.

Year	Opportunities	Capabilities	Fear of failure rate	Intentions	Total Activity (TEA)
2001	30.9	39.9	33.2		10.8
2002	42.4	41.9	26.6	30	16
2006	52.1	62.3	24.4	31.3	10.1
2007	71	73	50.2	49.7	8.5
2008	58.5	58	45.6	32.9	11.5
2013	41.4	55.8	38.9	22.8	9.9
2014	38.9	36.7	37.7	7.7	6.6
2015	37.8	37.8	44	9.2	10.8
2016	44.3	44	37.5	14.9	10.6
2017	44.9	42.1	39.6	10.3	9.3
2018	49.8	52.2	50.1	20.6	11.4
2019	83.1	85.2	62.4	33.3	15
2020	82.5	81.7	56.8	20.3	5.3

Table 5.1: Measures

**Source:**The global entrepreneurship Monitor

The table given above shows the factors that determine entrepreneurial activity in the coun-



try of India. The survey is done by "The global entrepreneurship Monitor" on the population between the age group of 18-64. The question on the opportunities to start a firm in the area they live (*opportunity*), the percentage of the population who believe they have the required skills and knowledge to start a business (*capability*), the percentage of the population who agree that they see good opportunities but would not start a business for fear it might fail (*Fear of failure*), percentage of the population (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years (*Intentions*) and percentage of the population who are either a nascent entrepreneur or owner-manager of a new business (*Total Activity*).

A brief look at the table shows that continuous efforts by the government in providing easy and flexible loans, efficient markets that help producers get the best buck for their product, and an efficient transport system increased the opportunities available to start a firm are increasing. The motivation coefficient is also high, that is the government was successful in increasing the reach of these programs and boosting entrepreneurship activity in the country.

Astonishing is the *Fear of failure rate* index. The fear of failure rate index follows an increasing trend. Since 2007 the rates are increasing.<sup>1</sup> Risks are always present but what is necessary is systematic planning and sticking to the strategic goals. Events of this sort usually happen and bring fear to entrepreneurs. With all the positive points with us, still, the *Total activity* quotient is low. This shows something unique to the country. Even if the *opportunities* and *capabilities* are high enough the *Fear of failure* decreases the chance of choosing entrepreneurship as a career choice. Indians are risk-averse people. They clearly avoid risk and choose jobs that pay well as well as have high job security. But being risked adverse is an issue. Maybe yes, if people weigh their returns with the associated risk and take decisions then it can affect economic growth.

---

<sup>1</sup>2007-08 was the period of **Global Financial Crisis**. The crisis though didn't affect India much but it is distinct that it shook the consumer confidence as well as the ability to take risks.

## Chapter 6

### Politics of incentivization

Economists consider political instability to be a vital cause for economic performance. According to Exogenous growth models, if knowledge transfers don't incur transaction costs then economic growth, in the long run, is always positive, but it's not. Political instability is likely to decrease policymakers' time horizons, resulting in inefficient macroeconomic decisions in the short run. Also periodic shift of policies can negatively affect economic growth.

Police are not made for the short term, they show their results in the long run so till the policy has not given its time to work out, we cant blame the policy to be faulty. [Aisen and Veiga \(2013\)](#) use *cabinete changes* as the measure of political instability and find economic growth (namely total factor productivity and human resource development) to be significantly low in countries where there is frequent government collapse. Using a data-set of 193 countries for a period of 1960-2004 they find that political instability (a new premier is named and/or 50 percent of cabinet posts are occupied by new ministers) reduces economic growth by 2.39 percentage points.

But only political instability not always means a shift of power but also riots, mass protests, and any kind of distortion of the law and order. Once any of these incidents happen, then there are huge expenditures to be made, an army needs to be set up, policemen need to be paid, and the property is also destroyed to control the mass unrest. However, competing through conflicts like this also provides politicians with autonomy in case they win: that is, they are not accountable to voters. However, politicians in a democracy are accountable to voters, and for opportunistic politicians, this is a cost: they get away with fewer votes than if they were not constrained by voters.

### 6.0.1 Property Rights

There has been a huge confusion between **Contract Enforcement** and **protection**. Traditionally economists use a mix of both of these types of institutions to explain economic growth, but there lies a difference between both these institutions. Property right protection provide a legal framework to facilitate economic transactions in private contracts, whereas, in contract enforcement, the legal institution transfers resources from one group to another. [Acemoglu and Johnson \(2005\)](#) attempt to unbundle this broad cluster of institutions and find out the relative importance of both of them in economic growth.

[Bardhan \(2005\)](#) give another perspective to Institutions as determinants of economic growth. [Acemoglu et al. \(2001\)](#) uses mortality rates of colonial settlers as an instrument for institutional quality but bardhan thinks this is not the only thing that affects institutional quality. So they use *State antiquity* along with mortality rates as the determinants of institutional quality. Particularly in countries like India which have a long history of state structure and bureaucratic culture, borrow many institutional residues left by their colonizers. So the state antiquity variable will measure how much did the colonized colonies continue to use the older structure. India being colonized by Europe has a better score under this variable. Another thing to note here is that the institutional quality of a country is not the same for always, it changes with different levels of political instability and the thought the current government supports.

But Another important aspect is about maintaining law and order handling property rights issues depends on how efficiently legal and political institutions function. Legal institutions should ensure that these cultural failures do not affect economic prosperity. North's general impression on these issues is that if one can get the rule of law rightly implemented and ensure everyone abides them, then the market will take care of the rest. So efficient property rights will keep Achievement motivation high and will incentivize researchers and entrepreneurs to come up with better and innovative ideas. Political instability might affect this as instability brings misutilization of power and reduces the capabilities of the bureaucracy to maintain property rights intact.

## **Chapter 7**

### **CONCLUSION AND FUTURE SCOPE**

Economists round the world have been focusing on cross-national variations in economic growth rates and have found out that these short term fluctuations in economic growth rates are due to technological shocks and unforeseen circumstances that lead to periods of stagnation and recession in business cycles. On the other hand Institutional changes in culture is very slow. But a societies economic performance does depend on culture and political institutions. In modern economies efficient institutions do affect the capture of gains in trade and efficient utilisation of resources. Not only cultural and political but economic institution also affect economic growth prospects of the country. They influence investments in physical and human capital and technology and the organisation of production processes. So much so that economic institutions also determine distribution of income as well as resources in future.

There are many underwritten taboos customs and traditions that are considered to be the formal institutions and some rules of the game those are informal institutions. It is difficult to measure the formal constraints because these things are deep rooted in the system and finding variables that can measure this is difficult. These institutions are endogenous in nature, that is they include collective choices of the society and how that shape decision in the country. There is no assurance that the individual and society will choose same set of institutions and this gives rise to conflicts among different sections of the society. These conflicts also affect economic growth by creating political instability and situations where law and order cannot be maintained.

But simply ignoring the role of institutions just because we cant measure it is not justified. Each country faces conflicts, some serious some minor, but both of them affect economic growth and development in some or other ways. If a country has a war, strike or riots going through

then it cant spare investments on long-term production of general goods, it needs to make its citizens safe, and for that it has to bear its opportunity cost.

Thus better performing institutions may increase growth, but at the end volume of investment matters, not only physical capital investment but also human capital investment. Limited variables on the measurement of institutions are definitely problems faced by researchers in measuring economic growth. So the complex era of institutional changes is outside the scope of the present paper. Even if the governments try to ensure proper protection of property rights, better conflict redressing systems and enough power to the judiciary, sill who is behind to ensure if governments don't misuse their Powers. Developing economies are known for levels of corruption present in the society and these issues cause distortions.

Such profound changes in moral behaviour is not easy to get. This needs time and determination to do the job. Citizens, governments and other third-party agencies should act equally responsible of their behaviour so that a country is ensured to prosper in long run.

## Bibliography

- Acemoglu, D. and Johnson, S. (2005). Unbundling institutions. *Journal of political Economy*, 113(5):949–995.
- Acemoglu, D., Johnson, S., and Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5):1369–1401.
- Aisen, A. and Veiga, F. J. (2013). How does political instability affect economic growth? *European Journal of Political Economy*, 29:151–167.
- Bardhan, P. (2005). Institutions matter, but which ones? *Economics of transition*, 13(3):499–532.
- Behera, B. and Mishra, P. (2012). Natural resource abundance in the indian states: Curse or boon? *Review of Development and Change*, 17(1):53–73.
- Coase, R. H. (1960). The Problem of Social Cost. *The Journal of Law and Economics*, 3:1–44.
- Domar, E. D. (1946). Capital expansion, rate of growth, and employment. *Econometrica, Journal of the Econometric Society*, pages 137–147.
- Granato, J., Inglehart, R., and Leblang, D. (1996). The effect of cultural values on economic development: theory, hypotheses, and some empirical tests. *American journal of political science*, pages 607–631.
- Harrod, R. F. (1960). Second essay in dynamic theory. *The Economic Journal*, pages 277–293.
- Hibbs, D. A. and Olsson, O. (2004). Geography, biogeography, and why some countries are rich and others are poor. *Proceedings of the national Academy of sciences*, 101(10):3715–3720.
- Mankiw, N. G., Romer, D., and Weil, D. N. (1992). A contribution to the empirics of economic growth. *The quarterly journal of economics*, 107(2):407–437.
- North, D. C. (1971). Institutional change and economic growth. *The Journal of Economic History*, 31(1):118–125.
- North, D. C. (1989). Institutions and economic growth: An historical introduction. *World development*, 17(9):1319–1332.
- Quah, D. T. (1996). Twin peaks: growth and convergence in models of distribution dynamics. *The economic journal*, 106(437):1045–1055.
- Rodrik, D. and Subramanian, A. (2004). From” hindu growth” to productivity surge: the mystery of the indian growth transition.

- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of political economy*, 94(5):1002–1037.
- Romer, P. M. (1990). Endogenous technological change. *Journal of political Economy*, 98(5, Part 2):S71–S102.
- Sachs, J. D. and Warner, A. (1995). Natural resource abundance and economic growth.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The quarterly journal of economics*, 70(1):65–94.
- Solow, R. M. (1986). On the intergenerational allocation of natural resources. *The Scandinavian Journal of Economics*, pages 141–149.
- Swan, T. W. (1956). Economic growth and capital accumulation. *Economic record*, 32(2):334–361.
- Venables, A. J. (2016). Using natural resources for development: why has it proven so difficult? *Journal of Economic Perspectives*, 30(1):161–84.