



NATIONAL HUMAN CAPITAL INDEX: A STUDY ON ASIAN COUNTRIES

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ABSTRACT

Development of Human Capital of nations will fetch multifaceted progressions in the economy. This study aims to discover the status of Human Capital in the Asian Countries. Twenty countries are selected according to availability of data and nine human related proven indicators are assessed from these countries to formulate an index i.e. National Human Capital Index (NHCI). This index ranks the countries according to their Human Capital scores and provides an inferential view about the existence of people related assets in the Asian nations. Then, a correlation study is done by taking scores of NHCI and Per Capita Income of the selected nations. The result of correlation study provides a high correlation result between the economic indicator and Human Capital. Eventually this study reiterates the importance of qualified residents of a nation for the all-encompassing development of a nation.

KEYWORDS: Human Capital, Asia, NHCI, GDP Per Capita.

INTRODUCTION :

Wealth Creation at the national level has become the utmost priority of every economy in the present-day world. The term "Wealth Creation" doesn't imply solely financial development instead it combines a high standard of living, increased health facilities, better education, a skilled workforce, transparency in the government, etc. (Domenech, 2000; Nelson & Phelps, 1966). There are many countries in the globe, still suffering the quandaries like extreme poverty, severe diseases, unsanitary environment, unemployed youth, inadequate food, lack of quality education, lack of skilled labor and a lot alike (López Ruiz, Alfaro Navarro, & Nevado Peña, 2011; Tsouli & Elabbadi, 2017). Moreover, to address these snags and exterminate them entirely from society, the policymakers must broaden their discernment ability (Bontis, 2004; Seleim & Bontis, 2013). Instead of only concentrating on tangible indicators, e.g. GDP, Per capita, etc they have to look out for the potential intangible factors which can provide grass rooted transformation in the society.

REVIEW OF LITERATURE

This study is an endeavor to exhibit such societal intangible assets in a nation which do exist, but implicitly. The theory of National Intellectual Capital (NIC) exclusively deals with the fundamentals of macro-level intangible assets which consist of four major aspects, e.g., Human Capital, Process Capital, Market Capital, and Renewal Capital (Labra & Sánchez, 2013; Phusavat, Comepa, Sitko-Lutek, & Ooi, 2012). However, the present study is a concentrated effort only on Human Capital perspective of national intangible capital. There is no requirement of any defense about the importance of Human Capital in a country (Bassanini & Scarpetta, 2001; Bergheim, 2005; Cohen & Soto, 2007; Domenech, 2000; Schuler & Willms, n.d.). The definition of Human Capital includes nothing but the knowledge, abilities, potentials, and capabilities of the residents in acknowledging national undertakings and objectives (Bontis, 2004). The intellectual abundance of the people is the core of Human capital for any nation (Malhotra, 2003). However,

it is quite difficult to measure the Human Capital of an extended terrestrial location. Again, the highly complex societies make it more challenging to access the reality of it. Still, proper care and theoretical backings allow the contemporary researchers to attempt for its exploration. The focus of the research is insolitary to discourse the importance of human-related intangible assets for the development of a nation. Firstly, the presence of human capital in Asian countries is depicted through a ranking technology which will enable the study to rank the countries in Asia according to their human capital availability. The NICI (National Intellectual Capital Index) methodology positions the states according to their intellectual capital performance by combining four significant factors, e.g. human capital index, Process capital index, Renewal capital index, and Market capital index (Bontis, 2004). Here, only the Human capital index (HCI) will be considered for this study.

DATA AND RESEARCH METHODOLOGY

The formulation of HCI of the Asian countries is neither a straightforward task nor a stringent method is available (Malhotra, 2003; Michalczuk & Fiedorczuk, 2018; Weziak, 2007). Also, to have a proper representation about the human capital status in Asia, the study has included 20 influential countries (countries not publishing data like North Korea, tiny countries and data unavailable countries are excluded). The 20 countries considered for the study are considered as the sample to depict the overall human capital of all the Asian states.

NATIONAL HUMAN CAPITAL INDEX

Numerous indicators combine to formulate Human Capital Index. Here, nine indicators (Bontis, 2004; Bounfour & Edvinsson, n.d.; Michalczuk & Fiedorczuk, 2018; Phusavat et al., 2012; Seleim & Bontis, 2013) are chosen from the existing works of literature to formulate the Index of Human Capital. Those indicators are, "Quality of Education, Life Expectancy, Local Availability of Specialised Research and Training Services, Organized Crime, Brain Drain, Internet Users, Internet Access in Schools, Extent of Staff Training and Tertiary Education Enrolment Rate". All the data are collected from authentic sources, e.g. the World Economic Forum database, World Bank database, Individual country-wise government sources. All these indicators come with different measures of value, so the McArthur & Sach data harmonization tool is used to homogenate the indicators. All values are converted to a scale of 1 to 7. Eventually, the NICI methodology provides the Human Capital rank of the Asian countries. The following table shows the National Human Capital Index of Asian countries.

Table-1

Countries	NHCI of Asian Countries	Rank
Singapore	5.810	1
Hong Kong SAR	5.483	2
Taiwan, China	5.449	3
Korea, Rep.	5.355	4
Japan	5.252	5
Malaysia	4.632	6
China	4.311	7
Azerbaijan	4.299	8
Kazakhstan	4.249	9
Kuwait	4.019	10
Thailand	3.974	11
India	3.813	12
Viet Nam	3.778	13
Bhutan	3.689	14
Sri Lanka	3.608	15
Mongolia	3.560	16
Nepal	3.082	17
Bangladesh	2.946	18
Pakistan	2.901	19
Yemen	2.041	20

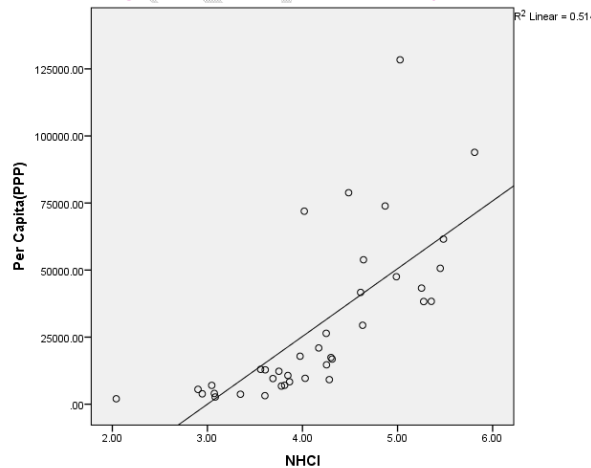
(Original output of the analysis) (NHCI- National Human Capital Index of Asia)

The above ranking table showing the Human Capital standings of Asian countries rank wise. Without any doubt the developed countries like Singapore, Hong Kong, Japan Korea, Taiwan, etc. are scoring high in Human Capital and Singapore is looming in the top of the table of National Human Capital Index of Asia. And the economically weaker countries like Yemen, Pakistan, Bangladesh, Nepal, Bhutan, etc. can be seen at the end of the table are having low HC scores. Above situation is telling the fundamental story about the pre-requisite of a nation to be economically sound. More the people of a country are developed, more the country will attain gradual constructive prosperity (Barro, 1999; Cohen & Soto, 2007; Domenech, 2000; Nelson & Phelps, 1966). From the above table, it is undoubtedly visible that, most of the developed countries are tending to have high HC score while the emerging countries tend to have the low score. The position of India is not quite satisfactory because India is having highest demographic dividend in the world and considered as one of the finest talent producer country in the globe. But in the assessment of Intellectual capital of nations India is falling behind the countries like Thailand, Kazakhstan and Azerbaijan (the combined population of the three countries is approximately 10 crores which is not even 8% of Indian population). So, India, the second highest populated country in the world has to do a lot of work related to human development to use its human resources properly. Moreover, to prove the fundamental concept (Wealth follows Intellect), let's have a comparative analysis of the Human capital score with Per Capita income of the countries. This will enable the study to discover whether there is any relationship exists between National Human Capital and GDP PPP Per capita of the Asian countries.

Correlation Analysis

Gross Domestic Product per Capital (adjusted PPP) can be considered as the economic performance indicator of a country. This study strives to portray the connection between the Human Capital score and GDP per capita of the Asian countries. GDP per capita of all the 20 countries are collected from the World Bank database, and the correlation test is performed to check whether the Human Capital Index has any relation with GDP per capital or not. Before doing the correlation test, linear relationship between the two variables should be investigated.

Figure 1: (Correlation Scatterplot)



Sufficient amount linear relationship between NHCI and GDP per capital can be seen in the scatter plot. The 0.514 value of R² represents having a moderately positive effect of human capital on GDP per capita income of the Asian countries. Hence, the scatterplot makes these two variables qualified to be tested for a correlation.

Table 2: Pearson Correlation between NHCI and Per Capita Income (PPP)

	NHCI	Per Capita (PPP)
NHCI	-	
Per Capita(PPP)	.717**	-

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

The test of correlation qualifies the study to support the vague surmise, that the internal qualities of the natives multifacetedly affect the economic condition of the country. The correlation test result is depicting a highly positive correlation among the two variables Human Capital and Per Capita Income (0.717), and a 99% confidence level makes it more empowered. So, it is logically proved that change in Human Capital will lead to a parallel shift in Per Capita income of the people of a country.

CONCLUSION

Eventually, the two methodology NHCI (National Human Capital Index) and Correlation between Per Capita and NHCI are vibrantly exposing the relevance of Human related factor with the economic condition of a nation. The national policymakers should pay proper attention to identify and strengthen the various Human Capital indicators where their country is underperforming. The improvement of Human in a country will bring multifaceted growth to its people. At the it can be said; Human Capital is evidently proved to be the predictor of economic development. It may not be the only sole reason for socio-economic development but certainly a dominant one.

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