Title: Poverty in India

Research Question: To what extent do the ideas in Jeffrey Sachs' poverty trap explain the high levels of poverty and low levels of living in Dharavi, India?

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http://www.economist.com/node/21561878
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http://dro.dur.ac.uk/5555/1/5555.pdf

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Introduction

Poverty is a pervasive issue which spans across many countries globally. Developing countries, in particular, suffer from widespread poverty and increasingly larger wealth disparities (Dabla-Norris, Kochhar, Ricka, Suphaphiphat, & Tsounta, 2015). India is a perfect example of where, despite exponential growth in GDP of around 7% (International Monetary Fund, 2017), poverty and widening wealth distribution are still key issues in India's economy. Dharavi in Mumbai, India, is one of the largest slums in the world, with approximately one million inhabitants, where it has been reported that up to 18,000 people live in one acre of land with a large percentage of these inhabitants living in poverty (Jacobson, 2007). Therefore, I will consider why people are being left behind in what is known as the poverty-trap.

Jeffrey Sachs' poverty trap is one of many economic theories attempting to describe how and why poverty exists. I will analyse Jeffrey Sachs' ideas and explore contrasting economic and geographical theories; Academic work on poverty within these disciplines suggests an interdisciplinary approach is required to reach a robust conclusion as to the possible determinates of high-levels of poverty and low-levels of living in Dharavi, India.

The meaning of poverty has evolved significantly over the centuries, with Adam Smith, the founder of modern economics, first stating that poverty is "the inability to purchase necessities required by nature or custom" (1776). Amartya Sen, a Nobel-prize winning development economist, later developed a definition incorporating absolute and relative poverty: "absolute deprivation in terms of a person's capabilities relates to relative deprivation in terms of commodities, incomes and resources" (1981). This definition is useful in the case of Dharavi, where the division between relative and absolute poverty may not be clear-cut.

Relative poverty is "poverty in relation to the economic status of other members of the society" (UNESCO, 2017). Whereas, absolute poverty is "poverty in relation to the amount of money necessary to meet basic needs such as food, clothing, and shelter" (UNESCO, 2017); This is classified by The World Bank as people "living on less than US\$1.90 per day" (2015) at purchasing power parity (PPP).

The topic of poverty is worthy of investigation as it is a significant global concern, with many governments addressing the macroeconomic objective of an equitable distribution in income. In 2015, world leaders at the UN summit adopted the United Nations Sustainable Development Goals, which calls for countries, both rich and poor, to "mobilize efforts to end all forms of poverty" (United Nations).

Research Question: To what extent do the ideas in Jeffrey Sachs' poverty trap explain the high levels of poverty and low levels of living in Dharavi, India?

Methodology

By reading 'The End of Poverty' (2005) by Jeffrey Sachs, I concluded that in order to investigate poverty in the world, focussing on one set location would provide room for a more detailed analysis. This also complemented the localised criteria of a World Studies Extended Essay. To identify the focus of my investigation, I researched developing countries that have seen significant growth over the past decades, yet still had high levels of people living in poverty. India is such a country, where from 1991-2011 GDP quadrupled and foreign exchange reserves increased by fifty times making it one of the fastest growing economies. Yet despite this, in 2011, one in five people (21.9% of the population) were still living in poverty (World Bank, 2011). Having read the book 'Behind the Beautiful Forevers' (2012) by Katherine Boo, and gained insightful knowledge into slums, I determined that a slum in India would be the focal point of my study and as a result selected the largest slum in India, Dharavi, supported by the fact that information regarding this slum was likely to be more available.

Research into economic poverty theories led me to also consider the geographical factors of polarisation in India. This is when an "area becomes divided: one half [of] a country might become richer, while the other half becomes poorer" (Greenfield, 2012).

As many factors contribute to poverty, an analysis of the development of the Dharavi slum will be examined and related to Sachs' (2005) poverty trap model. In order to reach a conclusion as to the relevance of Sachs' ideas, alternative geographical and economic theories will be evaluated and considered, which may support or contradict Sachs.

Jeffrey Sachs book, 'The End of Poverty' acts as the foundation of the resources used to conduct the analysis, accompanied by scholarly research papers. To substantiate data and claims made within these sources, research reports and statistics from global organisations will be assessed. Primary data will be generated through the processing of existing OECD and World Bank datasets.

Introduction to the case study: Dharavi

Dharavi, a village situated on the outskirts of the city, is part of the central municipality of Mumbai. Dharavi grew as urban Mumbai attracted an influx of rural migrants searching for employment and improved standards of living. Dharavi offered cheap unregulated land where migrants could settle and offer their cheap labour. The increasing population density of Dharavi resulted in the area developing into a slum, and it is currently the second largest slum in Asia in terms of population size (BBC, 2017). Today, Dharavi continues to provide "a cheap and affordable option to those who move to Mumbai to earn their living" (Singh, 2014). To rent a room could cost as little as \$3USD per month (Goldberg, 2012). It is impossible to know the exact population, due to the constant flow of migrants into the city day after day however, it is widely reported as up to one million inhabitants (Jacobson, 2007). The majority of Dharavi has been neglected by the government with limited services and facilities resulting in poor sanitation and hygiene (Carr, 2015).

Dharavi is split into the residential part and industrial part with around 20,000 small-scale manufacturing units (Assainar, 2014), indicating its productive capacity plays a key role in the Indian economy. Dharavi thrives on the production of goods, home to leather, pottery, textiles and recycling industries with an estimated turnover of US\$1 billion, much of which is from the informal economy (The World Bank, 2017).

Theoretical Framework

Geographical theories relating to poverty

Global distribution of poverty

When the concept of poverty was first explained, there was a much clearer divide between the rich world and the poor world, yet with international trade and globalisation, it appears as though the two are merging (McCloskey, 2010). The modern phenomenon is an increasingly larger divide of wealth within countries, due to an uneven distribution of income. India is a developing lower-middle income country, growing at a rapid rate, yet a large proportion of the population is being left behind in poverty (Jacobson, 2007).

Middle-income countries seemingly have the biggest issue of poverty currently, due to the nationalisation of industries and deregulation of markets (Sumner, 2012). There has been a large increase in foreign investment into developing countries, which often only benefits the wealthy investors and the wealth is not being redistributed in the economy. This has left many people relatively poorer, with an exploitation of cheap labour and weaker safety regulations (Nair, 2016). The Liberal belief is that an economy in which a government imposes little regulation on trade will cultivate a society where individual's self-motivation drives economic activity. This can cause a disparity of wealth, as individuals in their pursuit to maximise profit can take advantage and exploit individuals who work for them (Ozimek, 2015). This is supported by research published by Andy Sumner, showing "70–80 percent of the world's poor people live in middle-income countries" (2012). India is a prime example of a developing country which suffers from widespread poverty and some would

argue that the situation of poverty was worsened by the economic liberalisation which accelerated in 1991.

As a large unregulated slum, I would expect that people within Dharavi are being exploited with low wages by the manufacturing industries in the area, which could be a factor explaining the high levels of poverty within Dharavi.

Lewis's 'culture of poverty'

Oscar Lewis proposed a form of poverty trap in 1966, arguing that once people are impoverished there is a 'sub-culture' formed, where people develop similar traits, values and ways of life. This causes them to become segregated from the rest of society and limits their participation in the opportunities available to the public. People living in poverty become immersed in the values around them and thus an almost homogenous way of living is shared across the poor. The culture of poverty "tends to perpetuate itself from generation to generation because of its effects on children" (Lewis, 1966) and becomes very hard to break out of. With the caste system in India, people are restricted from birth by what type of lifestyle and job role their caste allows them to live. Thus a 'sub-culture' is likely to be formed due to distinct differences in standards of living between castes. If this theory holds true in Dharavi, it will be found that families are predominantly from lower castes and have been living in the slum for generations.

Economic theories on poverty

Marxist theory

The Marxist theory supports the view that the major contributor to poverty is inequality and uneven distribution of wealth (Davis & Sanchez-Martinez, 2014).

India, with both its caste system and huge disparity of wealth, represents a hierarchical class system, resulting, according to Marxists, in there being no drive by society to solve poverty, as people in power have a vested interest in inequality remaining. Governments, through intervention, could, in the Marxist view, resolve poverty through nationalisation and containment of the free market, alongside introducing poverty eradication methods such as minimum wages (Davis & Sanchez-Martinez, 2014). Owners of firms may strive to maximise their capital by potentially exploiting workers with extremely low wages, which could result in the individual being forced into poverty as their income is not sufficient to even meet their basic needs. Thus, we would expect to see a disparity in the rates of wage growth across the income spectrum if this theory holds true in Dharavi, and prove that Jeffery Sachs poverty trap theory is not the only explanation, if at all.

Classical theory and neoclassical theory

The main argument of the classical theory is that the reason poverty exists is due to individual's poor choices and is the reflection of their productivity (Davis & Sanchez-Martinez, 2014). It is thought that poverty is passed down generations, potentially as a result of children growing up learning the dysfunctional ways of their parents and "the concept of 'sub-cultures of poverty" (Davis & Sanchez-Martinez, 2015), which chimes with the thesis of Lewis' arguments. Neoclassical theory shares many similarities to the classical approach as both emphasise monetary causes, as well as focussing on individuals rather than groups. However, it does not place as much importance on the lack of role-models causing poverty, instead suggesting exogenous factors. Individuals born into poverty are at a disadvantage from birth as their circumstances are seemingly harder to break out of. As a result, the exogenous

factors intensify the cyclical nature of poverty. This would suggest that the high levels of poverty within Dharavi will be persistent as a result of the ongoing cycle.

One of the main advocates of the neoclassical theory was Alfred Marshall, who suggested that the existence of poverty, other than exogenous factors, is due to the differences in genetic makeup of individuals and their initial starting point in terms of capital (Marshall, 1890). The neoclassical theory suggests the importance of incentives in determining how individuals behave, which partially determines who will find themselves below the poverty line. Ultimately, as a result of the differences in the labour force, individuals have different levels of productivity and in turn, this causes poverty (Davis & Sanchez-Martinez, 2015).

The poverty trap concept

The poverty trap is an alternative theory on poverty which has evolved as a result of decades of research conducted by the "world-renowned [...] leader in sustainable development [and] senior UN adviser", Jeffrey Sachs (2017). Jeffrey Sachs (2005), proposed a theory in which he explains how individuals may become trapped in poverty with frictions being considered as the contributing factors. A friction is something that stops a market working perfectly. However, one could argue that "no single friction is sufficient to trap individuals in poverty" (Ghatak, 2014). This means that for an individual to be forced into poverty a combination of negative factors must occur simultaneously. Examining Jeffrey Sachs' (2005) poverty trap model allows further explanation of how multiple frictions are needed to cause poverty.

Figure 1: The Basic Mechanics of Capital Accumulation

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Figure 1: (Sachs, 2005, p. 247)

Figure 1 proposes a model of capital accumulation, showing that in a typical household, part of their income is spent on consumption of goods and services, part contributes to public budget through tax payments, with any leftover real disposable income contributing to household savings. As a result of household savings and public investment, the capital per person would increase at a faster rate than the drag from population growth and depreciation. If year after year the capital per person increases, then economic growth takes place as the productive capacity of the economy rises. This chimes with neoclassical theories such as the Solow economic growth model which emphasises the importance of increased capital required for economic growth and higher levels of income (Cortright, 2001).

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Figure 2: The Poverty Trap (Sachs, 2005, p. 248)

Figure 2, however, illustrates that due to multiple frictions, capital accumulation is absent, resulting in the 'poverty trap'. This ongoing cycle is due to impoverished households having to spend all of their money on basic needs in order to survive, with no money available for household savings or tax payments. As a result, there is neither any public investment nor sufficient savings to finance the private investment required to increase capital per person. Yet population growth and depreciation are still occurring, diminishing the capital stock. Overall, this will cause a decline in capital per person, dragging on productivity and thus generating negative rates of economic growth. Negative economic growth leads to further impoverishment of households, as incomes and spending fall, and the vicious poverty trap continues. Unless the household has a large increase in income then it is unlikely they will break out of the poverty trap without external help.

However, the model fails to consider relative poverty, by only looking into the lack of income to provide for basic needs, as opposed to comparing individuals' lifestyle to the average living standards of an area and thus it is only useful when

looking into absolute poverty. Despite this, the stylised model does take many different variables into account which allows for the inspection into various aspects that may contribute to poverty being present in Dharavi.

Discussion & Analysis

Jeffrey Sachs' Poverty Trap in Relation to Dharavi

Formal statistics on households living in Dharavi are more limited than I first anticipated, mostly due to the nature of the informal economy (Tacoli, McGranahan, & Satterthwaite, 2014). It is, however, possible to look at the general trends of income, population and living standards observed in the slum through the analysis of research that has been carried out by several independent institutions.

Income

Income Analysis (per family per month)

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Figure 3: (Kamla Raheja Vidyanidhi Insitute for Architecture and Environmental Studies, 2010)

Statistics above, gathered by Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Studies (Mumbai), show that over 85% of households in Dharavi, that disclosed their income, live on less than 10000 rupees per month. To estimate daily living allowance per person we will assume all households earn the upper bound of each level of income. The sample size was



32,986 households (excluding the not mentioned category) which if we take the "average of 6.2 people per 'house'" (Jacobson, 2007), we can estimate that 204,513 individuals are represented in the data. The table below shows the calculations used to work out how much individuals in Dharavi are living on per day, in order to assess the number of individuals living in poverty. Indian Rupees have been converted to US Dollar using the PPP of 1 USD to 14.653 rupees in India (OECD, 2010). The PPP currency conversion reflects differences in the cost of living between India and the US.

Number of	Household	Income per	Income per	Income	Total	Indicative
Households	income per	person per	person per	per	number of	proportion of
	month	month	month	person	people	residents at
	(rupees)	(rupees)	(USD PPP)	per day	earning	each income
				(USD	income	level
				PPP)		
19432	0 – 5000	806.45	55.04	1.81	120,478	59.00%
8730	5000 – 10000	1612.90	110.07	3.62	54,126	26.60%
3565	1000 – 15000	2419.35	165.11	5.43	22,103	10.80%
1168	> 15000	>2419.35	>165.11	>5.43	7241	3.60%

Table 1: (Kamla Raheja Vidyanidhi Insitute for Architecture and Environmental Studies, 2010), (OECD, 2010) and own calculations.

Note: see Appendix 1 for calculation of the values shown in table.

It becomes apparent from Table 1 that most inhabitants of Dharavi would fall into the category of absolute poverty, as 59.00% of people are surviving on an income of less than US \$1.81 per day, which is lower than the \$1.90 per day poverty threshold (The World Bank, 2015). Despite the remaining 41% of inhabitants not

falling into the category of absolute poverty, at least 37.4% of this 41% earn less than \$5.43 per day and are therefore are still relatively poor when compared with the average daily wage rate in India being \$15.71 calculated using PPP and Indian wage data (Labour Bureau, Government of India, 2011). The magnitude of absolute poverty within Dharavi is significant, being 59.00%, compared to the national average of 21.9% poverty headcount (illustrated in figure 4), demonstrating absolute poverty is almost three times more prominent in Dharavi.

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Figure 4: Poverty Trends (The World Bank, 2011)

Linking back to Jeffrey Sachs' poverty trap, the data relating to incomes of Dharavi households would imply that over half of the slum dwellers spend all of their income on basic needs with no money available to make payments towards income tax or savings.

Length of time living in slum

Years Lived in Dharavi

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Figure 5: (Kamla Raheja Vidyanidhi Insitute for Architecture and Environmental Studies, 2010)

Dharavi slum is divided into five different sized sectors, with a mixture of residential tenements, commercial units and shops in each sector. Figure 5 indicates that the majority of people surveyed, who indicated the number of years, have lived in Dharavi for ten years or more, representing 30,066 out of 35,677 households (84.27%). This would suggest a degree of immobility with "some families [having] been [in Dharavi] for three or more generations" (Jacobson, 2007). This gives credence to Lewis's theory and the classical theory that a sub-culture is formed within Dharavi and passed down generations. Combined with income data above, it would be reasonable to suggest that such immobility is caused in some part by a lack of household earning power trapping individuals in their current surroundings.

Inequality in India

The income analysis shows that not all Dharavi inhabitants fall into the category of absolute poverty, but potentially fall into the category of relative poverty.

Share of wealth by class

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Figure 6: (Rukmini, 2014)

Figure 6 clearly displays the vast inequality in India by displaying the disproportionate share of wealth that the top 10% of India have: India's richest 10% holds 370 times the share of wealth that its poorest hold (Rukmini, 2014).

Wealth share of India's top 10%

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Figure 7: (Rukmini, 2014)

The graphs created by The Hindu Newspaper represents the data compiled by Credit Suisse in the research paper 'Global Wealth Databook 2014'. Figure 7 shows how the wealth share of India's top 10% of people grew rapidly from approximately 66.00% in 2002 to 73.50% in 2008. The disparity of wealth is particularly noticeable in Mumbai, which is ranked sixth in the world in terms of their billionaire population (Canal, 2016), yet in 2011 it was reported that 41.84% of its total population (Office of the Registrar General & Census Commissioner, India, 2011) resided in slums. This highlights the significant problem of people being left behind, which echoes the Marxist view that people in powerful positions are focussed on increasing their wealth share, whilst the situation of relative poverty potentially worsens in Dharavi. This increasing disparity may contribute to inhabitants of Dharavi being further cut off from society, as their wages are suppressed by a dominant entrepreneurial class.

The lack of regulations in Dharavi has allowed businesses to be set up exploiting the inhabitants for cheap labour and production costs. This illegal and informal economy in Dharavi could result in a possible lack of tax payments, leading to little or no public investment, which is a friction that is relevant to Sachs' poverty trap.

Population and Depreciation

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Figure 8: (The World Bank Group, 2017)

Population growth in lower-middle income countries, such as India is often much larger than in higher income countries: As shown in figure 8, India had a

population growth rate of 1.148% compared to 0.6% in higher income countries in 2015 (The World Bank, 2016). There are no specific growth figures for Dharavi, but it is one of the most densely populated areas of the world, up to eleven times more densely populated than the city it lies within (Windle, 2009) and the population has doubled in Mumbai from 1985 to 2017 which has reportedly "elevated the growth of its largest slum, Dharavi" (World Population Review, 2017).

On top of population growth, depreciation in India is also occurring at an expected rate of 3-4% annually (Anand, 2016). The depreciation and population growth are both negative factors which are likely to exacerbate the situation of poverty, as according to Jeffrey Sachs's model this leads to a decline in capital per person.

Caste System in India

79.8% of India's population is Hindu (Office of the Registrar General & Census Commissioner, India, 2011). These people are split into four hierarchical groups under the caste system. The caste system regulates much of how Hindus live in India, dictated by heritage at birth, with rigid rules governing interaction between castes and fundamental divisions between their allowed occupations (BBC, 2016). Dharavi's population consists of people from many geographical areas of India, where a little over half belong to India's poorest groups (Economist, 2007), known as Shudra or Dalits. Thus, the people of Dharavi are in the main, limited to jobs which earn very low salaries and are considered dirty. The urban divide seen between Dharavi slum and the wealthy in Mumbai is of stark contrast and is a clear division, separating people of different social statuses, reflecting "injustice and a symptom of systematic dysfunction" (UN-HABITAT, 2010). Therefore, I argue that the situation of

poverty within Dharavi is partly due to exogenous factors determined before birth.
This suggests the ideas within the neoclassical theory of poverty have some
prominence.

Conclusion

Jeffrey Sachs' poverty trap model supports the theory that it takes more than one friction to cause poverty. The simultaneous frictions of population growth in Mumbai, which has doubled in the last thirty-two years (World Population Review, 2017), resulting in an increase in the number of inhabitants in Dharavi and depreciation occurring at 3-4% per annum (Anand, 2016) have both undoubtedly resulted in pressure in an already overpopulated area. 59% of the survey population used in the analysis have been shown to be living in absolute poverty, so extrapolating this data into the wider Dharavi community, it could be assumed that a significant proportion of households are impoverished, likely to the point of being able to afford only the very basics. Governmental neglect has been evident for many years, creating an informal economy with a lack of regulations within Dharavi, where almost 10,000 illegal factories are situated (Lancaster, 2007); It could be surmised that the tax base within Dharavi is very low due to the workers earning extremely low incomes, however I have found no factual information to support this. Sachs' poverty trap model helps to explain that the frictions and low levels of income in Dharavi contribute to the declining capital per person, resulting in large numbers of people being trapped in poverty. Therefore, I would argue that to a reasonable extent Jeffrey Sachs' poverty trap helps to explain the high levels of poverty and low levels of living in Dharavi.

Jeffrey Sachs' poverty trap alone is not, however, a sufficient explanation. As without concrete information in all areas, it is impossible to conclude that Sachs' model fully explains the situation. Sachs' model is a universal model which is applicable to most situations, however, nuances within a country are not examined. Additional factors such as the religious culture of the country, the integrated nature of

society and the cultural ways of living could also be used to create a more robust poverty model. Cultural factors play a significant role in the high levels of poverty and low levels of living in Dharavi, particularly the structural complexity of the caste system and the resultant inequality. This is arguably one of the main factors limiting the population of Dharavi from raising living standards. Furthermore, my research has suggested Lewis's 'sub-culture of poverty' is prevalent and best explains why an extremely large percentage of families have lived in Dharavi for over ten years. As children grow up immersed in the values of their parents, the cyclical nature of the poverty trap has been exacerbated.

Sachs' model also fails to consider relative poverty; the situation of absolute poverty in Dharavi is likely improving due to the booming economy in Mumbai, whilst the situation of relative poverty is possibly becoming more extreme due to the uneven distribution of wealth. I urge further research into this area as I have not been able to give it full attention within the confines of this investigation.

The main limitation of my investigation was the lack of qualitative data available and the inherent weaknesses to using only one source of data within parts of the analysis. However, all the factors considered within the analysis cumulatively triangulate to the same conclusion that there is vast relative poverty within Dharavi and even absolute poverty. With added time and resources at my disposal, I would like to experience first-hand the situation of poverty within Dharavi, to enable more primary research and to gain an in-depth knowledge surrounding the slum. In addition, I would like to interview Jeffrey Sachs and gain his viewpoint on the application of his poverty trap relative to the situation within Dharavi.

Bibliography

- Anand, K. (2016, Dec 29). Rupee could depreciate 3-4% in next twelve months: V

 Srivatsa. Retrieved June 3, 2017, from The Economic Times:

 http://economictimes.indiatimes.com/markets/expert-view/rupee-could-depreciate-3-4-in-next-12-months/articleshow/56232359.cms
- Assainar, R. (2014, November 25th). At the heart of Dharavi are 20,000 minifactories. Retrieved August 23rd, 2017, from The Guardian:

 https://www.theguardian.com/cities/2014/nov/25/dharavi-mumbai-minifactories-slum
- BBC. (2016, Febuary 25). What is India's caste system? Retrieved June 3, 2017, from BBC News: http://www.bbc.com/news/world-asia-india-35650616
- BBC. (2017). *Life in a slum*. Retrieved October 5th, 2017, from http://news.bbc.co.uk/1/shared/spl/hi/world/06/dharavi_slum/html/dharavi_slum_intro.stmv
- Boo, K. (2012). Behind the beautiful forevers. Bolinda Publishing Pty Ltd.
- Bruenig, M. (2015, April 30). Who Are The Officially Poor (1987-2013)? Retrieved May 25, 2017, from Demos: http://www.demos.org/blog/4/30/15/who-are-officially-poor-1987-2013
- Canal, E. (2016, March 9th). *The Cities With The Most Billionaires*. Retrieved

 September 3rd, 2017, from Forbes:

 https://www.forbes.com/sites/emilycanal/2016/03/09/the-cities-with-the-most-billionaires/#1102573d7619
- Carr, C. (2015, Febuary 18th). *The best idea to redevelop Dharavi slum? Scrap the plans and start again*. Retrieved October 2017, 2017, from The Guardian:

- https://www.theguardian.com/cities/2015/feb/18/best-ideas-redevelop-dharavi-slum-developers-india
- Cortright, J. (2001). New Growth Theory, Technology and Learning: A Practitioner's Guide. Impresa, Inc.
- Dabla-Norris, E., Kochhar, K., Ricka, F., Suphaphiphat, N., & Tsounta, E. (2015).

 Causes and Consequences of Income Inequality: A Global Perspective.

 INTERNATIONAL MONETARY FUND. Siddharh Tiwari.
- Davis, E., & Sanchez-Martinez, M. (2014, August 20). A review of the economic theories of poverty. Retrieved May 25, 2017, from National Institute of Economic and Social Research: http://www.niesr.ac.uk/sites/default/files/publications/dp435_0.pdf
- Davis, E., & Sanchez-Martinez, M. (2015, June 4). *Economic theories of poverty*.

 Retrieved May 26, 2017, from JRF Joesph Rowntree Foundation:

 https://www.jrf.org.uk/report/economic-theories-poverty
- Deshpande, M. S. (2010). HISTORY OF THE INDIAN CASTE SYSTEM AND ITS IMPACT ON INDIA TODAY.
- Economist. (2007, Dec 19th). Urban povert in India- A flourishing slum. Economist.
- Exchange Rates. (2010, September 30th). What was the US Dollar to Indian Rupee historical exchange rate on 30 September 2010? Retrieved October 8th, 2017, from Exchange Rates: https://www.exchangerates.org.uk/USD-INR-30 09 2010-exchange-rate-history.html
- Ghatak, M. (2014). Theories of Poverty Traps and Anti-Poverty Policies. London School of Economics.
- Goldberg, D. (2012, April 12). *A Look Inside Dharavi The Biggest Slum in the World (Mumbai)*. Retrieved July 17, 2017, from Hungry Partier:

i [

- https://hungrypartier.com/a-look-inside-dharavi-the-biggest-slum-in-the-world-mumbai/
- Greenfield, D. (2012, May 22). *Origin of disparities*. Retrieved May 24, 2017, from greenfield geography:
 - http://greenfieldgeography.wikispaces.com/Origin+of+disparities
- International Monetary Fund. (2017). For India, Strong Growth Persists Despite New Challenges . International Monetary Fund.
- Jacobson, M. (2007, May). *Dharavi, Mumbai's Shadow City*. Retrieved May 24, 2017, from National Geographic:

 http://ngm.nationalgeographic.com/2007/05/dharavi-mumbai-slum/jacobsontext
- Jeffrey Sachs.org. (2017). *Full Bio*. Retrieved August 24th, 2017, from Jeffrey Sachs: http://jeffsachs.org/about/
- Kamla Raheja Vidyanidhi Insitute for Architecture and Environmental Studies, M. (. (2010, january 01). Reinventing Dharavi Residential Data, 2009. Retrieved may 24, 2017, from knoema:
 https://knoema.com/RINVDRVRD2014/reinventing-dharavi-residential-data-2009
- Labour Bureau, Government of India. (2011). *India Average Daily Wage Rate*.

 Retrieved October 17th, 2017, from Trading Economics:

 https://tradingeconomics.com/india/wages
- Lancaster, J. (2007, March). *Next Stop, Squalor*. Retrieved Oct 17th, 2017, from Smithsonian.com: https://www.smithsonianmag.com/travel/next-stop-squalor-148390665/
- Lewis, O. (1966). The Culture of Poverty.

- Marshall, A. (1890). Principles of Economics. London: Macmillan and Company.
- McCloskey, D. N. (2010). Bourgeois Dignity: Why Economics Can't Explain the Modern World. University of Chicago Press.
- Mellinger, A., Sachs, J., & Gallup, J. (2001). *The Geography of Poverty and Wealth.*Scientific American.
- Nair, C. (2016, June 20th). The Developed World Is Missing the Point About Modern

 Slavery. Retrieved August 30th, 2017, from TIME:

 http://time.com/4374377/slavery-developed-developing-world-index-slave-labor/
- Numbeo. (2017, September 2nd). Cost of Living Calculator. Retrieved September 2nd, 2017, from Numbeo: https://www.numbeo.com/cost-of-living/calculator.jsp?sourceCityId=4040&name_sourceCityId=&destCityId=651 2&name_destCityId=&money=1&displayCurrency=USD
- OECD. (2010). *Purchasing power parities (PPP)*. Retrieved October 8th, 2017, from OECD: https://data.oecd.org/conversion/purchasing-power-parities-ppp.htm
- Office of the Registrar General & Census Commissioner, India. (2011). *Mumbai*(Greater Mumbai) City Census 2011 data. Retrieved September 3rd, 2017,

 from Census 2011: http://www.census2011.co.in/census/city/365mumbai.html
- Office of the Registrar General & Census Commissioner, India. (2011). *Religion Census 2011*. Retrieved September 3rd, 2017, from Census 2011: http://www.census2011.co.in/religion.php
- Ozimek, A. (2015, July 26). What Liberals Get Right About Poverty. Retrieved May 25, 2017, from Forbes:

- https://www.forbes.com/sites/modeledbehavior/2015/07/26/liberals-poverty/#67eddf6a7e1f
- Rapoza, K. (2015, oct 4th). *Not Only Are The Rich Getting Richer, So Are The Poor*.

 Retrieved may 23rd, 2017, from Forbes:

 https://www.forbes.com/sites/kenrapoza/2015/10/04/not-only-are-the-rich-getting-richer-so-are-the-poor/#77d3b99e77d3
- Rukmini, S. (2014, Decemeber 08). *India's staggering wealth gap in five charts*.

 Retrieved May 26, 2017, from The Hindu:

 http://www.thehindu.com/data/indias-staggering-wealth-gap-in-five-charts/article6672115.ece
- Sachs, J. (2005). The End of Poverty. London, England: penguin group.
- Sen, A. (1981). Poverty and Famines. Clarendon Press Oxford.
- Singh, N. (2014). Legal Rights of the Poor: Foundations of Inclusive and Sustainable

 Prosperity . AuthorHouse.
- Smith, A. (1776). The Wealth of Nations. W. Strahan and T. Cadell, London.
- Sumner, A. (2012). From Deprivation to Distribution: Is Global Poverty Becoming A

 Matter of National Inequality? Institute of Development Studies. Institute of

 Development Studies.
- Tacoli, C., McGranahan, G., & Satterthwaite, D. (2014). WORLD MIGRATION
 REPORT 2015 Migrants and Cities: New Partnerships to Manage Mobility.
 Human Settlements Group International Institute for Environment and
 Development London.
- The World Bank. (2011). *Poverty and Equity*. Retrieved September 3rd, 2017, from The World Bank: http://povertydata.worldbank.org/poverty/country/IND

- The World Bank. (2015, September 30). *FAQs: Global Poverty Line*. Retrieved May 26, 2017, from The World Bank:
 - http://www.worldbank.org/en/topic/poverty/brief/global-poverty-line-faq
- The World Bank. (2015, October 2nd). *Poverty*. Retrieved September 3rd, 2017, from The World Bank: http://www.worldbank.org/en/topic/poverty/overview
- The World Bank. (2016). *Population growth (annual %)*. Retrieved August 30th, 2017, from The World Bank Data:

 https://data.worldbank.org/indicator/SP.POP.GROW
- The World Bank. (2017, Febuary 28th). *In Mumbai World Bank CEO Travels by*Local Train and Visits Dharavi. Retrieved October 5th, 2017, from The World

 Bank: http://www.worldbank.org/en/news/feature/2017/02/28/in-mumbai-world-bank-ceo-travels-by-local-train-and-visits-dharavi
- The World Bank Group. (2017). *Population growth (annual %)*. Retrieved March 4th, 2018, from The World Bank:
 - https://data.worldbank.org/indicator/SP.POP.GROW?locations=IN-XD
- UNESCO. (2017). *Poverty.* Retrieved May 22nd, 2017, from Unesco: http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/poverty/
- UN-HABITAT. (2010). State of the World's Cities 2010/2011- Cities for All: Bridging the Urban Divide. UN-HABITAT.
- United Nations. (2015). *The Sustainable Development Agenda*. Retrieved from United Nations: http://www.un.org/sustainabledevelopment/development-agenda/

- United Nations. (n.d.). Goal 1: End poverty in all its forms everywhere. Retrieved

 May 25, 2017, from United Nations Sustainable Development Goals:

 http://www.un.org/sustainabledevelopment/poverty/
- Windle, A. (2009, April 6th). *Mumbai: The Redevelopment of Dharavi*. Retrieved September 4th, 2017, from Skala: http://www.skala-apc.com/files/WFTGU-Mumbai.pdf
- World Bank. (2011). *India*. Retrieved August 20th, 2017, from The World Bank Data: http://data.worldbank.org/country/india
- World Population Review. (2017). *Mumbai Population 2017*. Retrieved September 4th, 2017, from World Population Review:

 http://worldpopulationreview.com/world-cities/mumbai-population/
- XE. (2017, September 2nd). XE Currency Converter. Retrieved September 2nd, 2017, from XE:

http://www.xe.com/currencyconverter/convert/?Amount=1&From=INR&To=US

10

Appendix

			Winning data			
Number of	Honsehold	Income per person	Income per person per month Income per person per day	Income per person per day	Total number of	Indicative proportion of
households.	income per	per month (rupees).	(USD PPP).	(USD PPP).	people earning	residents at each income
Shown in	month	Upper bound of	Income per person per month	Income per person per month	income.	level.
Figure 3.	(rupees).	household income	(rupee) converted to USD	(USD) multiplied by number of	Number of	Total number of people
	Shown in	multiplied by	using PPP conversion rate of	month in a year (12) divided	households	earning income divided by
	Figure 3.	average number of	1 USD to 14.653 rupees in	by number of days in a year	multiplied by average	total number of people in
		people per	India.	(365).	number of people	survey, multiplied by 100.
		household (6.2).			per household.	
19432	0 – 2000	5000/6.2	806.45/14.653	(55.04x12)/365	19432x6.2	(120,478/204,513) x100
		=806.45	=55.04	=1.81	=120,478	=59.00%
8730	- 2000	10000/6.2	1612.90/14.653	(110.07x12)/365	8730x6.2	(54,126/204,513) ×100
	10000	=1612.90	=110.07	=3.62	=54,126	=26.60%
3565	1000 -	15000/6.2	2419.35/14.653	(165.11x12)/365	3565x6.2	(22,103/204,513) x100
	15000	=2419.35	=165.11	=5.43	=22,103	=10.80%
1168	> 15000	15000/6.2	2419.35/14.653	(165.11x12)/365	1168x6.2	(7214/204,513) x100
		=>2419.35	=>165.11	=>5.43	=7241	=3.60%

Appendix 1: Calculations used to work out values shown in Table 1. (Kamla Raheja Vidyanidhi Insitute for Architecture and Environmental

Studies, 2010), (OECD, 2010) and own calculations.