

# The Matthew Effect: What Post-Pandemic COVID-19 Readings?

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## Abstract

The Matthew effect is a theory created by sociologist Robert K. Merton (1968) to denote that initial benefits of various kinds accumulate over time. He describes the economic and social phenomenon whereby the riches tend to get richer and the powerful more powerful. The Matthew effect, as a concept, is used today to describe the general model of self-reinforcing inequalities linked to economic wealth, power, prestige, knowledge or any other rare or valued resource. In this research, we will use Merton's theory to analyze the transient inequalities generated following the COVID-19 pandemic which materialized the Matthew effect in all its glory by focusing more specifically on Morocco. We based our analysis on a review of the literature that dealt with indicators of fluctuating wealth. The indices raised during the pandemic showed that inequalities have been reinforced. The inequality gap is now deeper and deeper.

## Keywords

Matthew Effect, Cumulative Benefit, COVID-19 Pandemic, Inequalities, Morocco

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## 1. Introduction

According to the World Inequality Report (Chancel, 2022), the global top 10% owns 76% of total Household wealth and captures 52% of total income in 2021. The poorest half of the global population barely owns any wealth at all, possessing just 2% of the total. In contrast, the richest 10% of the global population owns 76% of all wealth. Because of these extreme inequalities, billions of people were already leading precarious lives when the pandemic of COVID-19 struck.

They had neither the resources nor the support to weather the social and economic storm that the pandemic unleashed. Hundreds of millions of people fall into poverty as many of the wealthiest businesses and individuals prosper. According to Oxfam (2021), following the 2008 financial crisis, it took five years for the wealth of billionaires to regain its pre-crisis level. Meanwhile, it took them only nine months to return to their pre-pandemic level of wealth. The poorest will need more than ten years to recover from the economic impacts of the coronavirus.

Oxfam's report entitled "*The Inequality Virus*" (Oxfam, 2021) shows that the COVID-19 pandemic has materialized the Matthew Effect in all its glory. Indeed, the COVID-19 pandemic has increased economic inequalities in almost all the countries of the world. The report reveals that the ten richest men in the world have seen their total fortunes increase by \$540 billion since March 2020, an amount that would be more than enough to finance the vaccine against the COVID-19 for all and prevent anyone from sinking into poverty because of the pandemic. The report also indicates that even during the pandemic there is a new billionaire every 26 hours and...160 million new poor. At the same time, the pandemic led to the most severe job crisis in more than 90 years, with hundreds of millions of people now unemployed or forced into precarious jobs. It is estimated that between 200 million and 500 million. According to Lakner et al. (2021), and Sumner et al. (2020) more people may have slipped into poverty in 2020 and it will probably take more than a decade before the poverty rate returns to its pre-crisis level.

According to Oxfam, the "whatever the cost" policy put in place by several governments has certainly protected the weakest, but has above all benefited the ultra-rich. The latter has in fact been able to make their money work in complete safety thanks to the guarantees provided by States and Central Banks. The stimulus measures have boosted their turnover and, by extension, stock market prices.

## 2. Problem Statement

To what extent has the COVID-19 pandemic reinforced the already significant inequalities between the haves and the poor? From a review of the literature, we proceed to the analysis of a range of indicators and statistics, which aim to monitor inequalities at the global level, particularly after the COVID-19 pandemic.

### 2.1. Conceptualization of "The Matthew Effect"

The American sociologist Robert Merton (1968) was inspired by the biblical parable "*For whoever has will be given, and he will have plenty, but from him who does not have even what he has will be taken away*" to construct his "Matthew effect" theory. The concept is used today to describe the self-reinforcing inequalities linked to economic wealth, political power, prestige, knowledge, or in fact any other rare or valued resource Rigney (2013). The Matthew effect re-

fers to the accumulated benefit; those who have more have the benefit of gaining more. The initial advantage leads to an additional advantage. Merton's arguments have important implications for our conceptions of equality and justice. The essential idea applies to the accumulation of benefits of any kind, cultural, economic, political or psychological.

Rigney (2013) considers the Matthew effect to be one of the least known but most important concepts in the social sciences. The latter was one of the pioneers to thoroughly assess Merton's theory by considering both the conditions that maintain the Matthew effect and the circumstances that cause it to fail. He explored whether growing inequality is beyond human control or whether disparity is socially constructed and subject to change. Some groups enjoy a less favorable position in society throughout their lives, regardless of the efforts made, while others accumulate benefits and privileges regardless of their efforts.

The intensification of wealth and income inequalities too often results from a multitude of political choices on issues such as taxation, public spending, corporate responsibility or even work and wages, which serve the interests of a powerful and wealthy minority. Advantage tends to lead to more advantages and disadvantage to other disadvantages, not only in the economic and political spheres, but also in other spheres, including the fields of education and culture. Inequalities can be magnified throughout life, as people accumulate different advantages and disadvantages over time. Those who are advantaged initially are more likely to receive a good education, leading to better health, leading to higher savings and better income from retirement benefits. Likewise, those who are initially disadvantaged are less likely to receive a good education, leading to poor jobs, poor health, and poorer pension coverage, leading to reduced retirement benefits. According to Bask & Bask (2015), the Matthew mechanism is a process that leads to an increase in inequalities. This process is continuous and therefore dynamic. Merton argued that such a dynamic process can lead to an infinite increase in inequality.

According to Rigney (2013), the accumulation of benefits works in a similar way to the accumulation of compound interest in a bank account. If the interest on principal is continually returned to the principal, the interest earns interest and the account grows faster and faster. What we have done is create a positive feedback loop in which the output of the account is amplified and sent back to the account as a new input. This basic feedback process is evident in many other areas of life as well.

## **2.2. The Matthew Effect and COVID-19 "Inequality Virus": The Issue of Social Protection**

The pandemic has highlighted the extreme fragility of social protection systems. According to the United Nations Economic and Social Commission for Western Asia (2020), in most lower-middle-income countries the average value of social pensions is around 15% of GDP per capita. However, the value of protective measures in the face of the crisis was less than 3% of GDP in the majority of

these countries, and none reached 15%. In the Middle East and North Africa, only 11% of stimulus packages involved health and social protection measures.

According to the World Bank, an additional 501 million people will still live on less than \$5.50 a day in 2030 if governments allow inequalities to increase by just two percentage points a year, and the total number of people living in the poverty is expected to be higher than that recorded before the pandemic. Conversely, if governments decide to intervene to reduce inequalities by two percentage points per year, it would be possible to return to pre-crisis poverty levels within three years, and this would allow count 860 million fewer poor people by 2030 compared to a scenario in which inequalities would increase.

Concerning the field of health, the coronavirus has exposed the worst face of ill-equipped and underfunded public health systems, as well as the failure of private health systems based on the ability of patients to pay in the face of a crisis of such magnitude. The likelihood of dying from COVID-19 is significantly greater for poor people. For example, when the pandemic hit South Sudan, the country had more vice presidents (five) than ventilators (four) and 10 African countries did not have a ventilator.

For education, in 2020, more than 180 countries temporarily closed their schools, depriving nearly 1.7 billion students of school at the height of the crisis. The children for whom education is most important, as it is a lever out of poverty, are precisely those who are most at risk of being left behind. Efforts to mitigate the impacts of this growing fracture in education risk being undermined by budget cuts in the education sector. Before the pandemic, the annual budget deficit in education was estimated at \$148 billion. If no urgent corrective action is taken, this deficit could increase by an additional \$30 billion to \$40 billion. According to Gavrielatos (2020), the pandemic has allowed large companies to grow their profits from the lucrative education technology market, estimated at \$6.3 trillion.

According to the International Labor Organization (2020), the pandemic has destroyed hundreds of millions of jobs. The Commitment to Reducing Inequalities Index (CRI) developed by Oxfam and Development Finance International certifies that 103 countries have faced the pandemic while a third of their working population had no protection or other rights work such as sick leave. Despite a doubling of the world's gross domestic product (GDP) since 1990, in low- and lower-middle-income countries, more than half of working people still live in poverty. For a long time, public spending has been gradually cut because of regimes that apply ever lower taxes on the fortunes of wealthy individuals and large prosperous companies. Between 1985 and 2019, the average statutory corporate tax rate worldwide fell from 49% to 23%, and the average maximum rate of personal income tax in the United States almost fell by half since 1980, going from 70% to 37%.

### **2.3. The Case of Morocco: The Pandemic Has Reinforced the Gap of Inequalities**

Morocco is one of the countries in the MENA region that, together with

Sub-Saharan Africa, has higher levels of inequality globally. These inequalities were exacerbated during the COVID-19 pandemic. The Human Development Index (HDI) established by the UNDP (2020) in its latest report for 2020, ranks Morocco 121st among 189 countries and territories. The coronavirus (COVID-19) pandemic is a tragic manifestation of the state and the disastrous consequences of social inequalities in Morocco and how they have led the poorest to great despair.

According to High Commission for Planning of Morocco (2021), the Gini index, which summarizes inequalities in living standards, fell from 38.5% before the crisis, to 44.4% during the first quarter of 2020. The incidence of absolute poverty was multiplied by seven in 2020, from 1.7% to 11.7%, 5 times in rural areas, respectively from 3.9% to 19.8%, and 14 times in urban areas, respectively from 0.5% to 7.1%. Likewise, the vulnerability rate has more than doubled, from 7.3% before containment to 16.7% during containment. By area of residence, these proportions are respectively 4.5% and 14.6% in urban areas and 11.9% and 20.2% in rural areas. Under these conditions, social inequalities deteriorated and exceeded the socially intolerable threshold (42%). The national survey on Sources of Income (ENSR) carried out in 2019 by the HCP, the standard of living per capita, in 2019, shows the persistence of high levels of social inequalities, since the wealthiest half of Moroccans achieves 75.1% of the total mass of expenditure, against only 24.9% for the most modest half.

According to the same High Commission for Planning of Morocco note, public aid reduced the incidence of poverty by 9 percentage points, vulnerability by 8 points and inequality by 6 points. Public aid through the Special Anti-COVID-19 Fund has significantly attenuated the effects of sanitary confinement on household living standards. Indeed, the absolute poverty rate has been reduced by 9 points at the national level, going from 11.7% before the transfer of public aid to 2.5% after the transfer, respectively from 7.1% to 1.4% in urban areas and from 19.8% to 4.5% in rural areas.

According to a study carried out by the Department of Studies and Financial Forecasts DEPF (2020) State aid measures have been able to prevent more than 860 thousand people from falling into poverty and nearly 1.2 million people from falling into poverty below the vulnerability threshold. The COVID-19 Special Fund would have saved between 554,000 and 835,000 people above the national poverty line and between 700,000 and 1.1 million people above the vulnerability threshold.

### Indicators for Measuring Inequalities

#### 1) The index (GINI) synthetic measure of social inequalities

Despite the encouraging progress recorded by Morocco, it has not been possible to significantly stem social inequalities, which continue to show downward resistance as evidenced by the stagnation of the GINI coefficient, which continues to show a downward trend dreadfully stable level with a score of 39.5 in 1998 and 40 two decades later. The latest statistics indicated it at 0.371 in 2017 and

38,5% in 2019. As shown in **Figure 1**, on the maintenance of inequalities in Morocco in comparison with neighboring countries as evidenced by the GINI coefficient which is located in Morocco at 39.5% in 2014, against 27.6 in Algeria and 0.309 in Tunisia and 32.8% in Egypt.

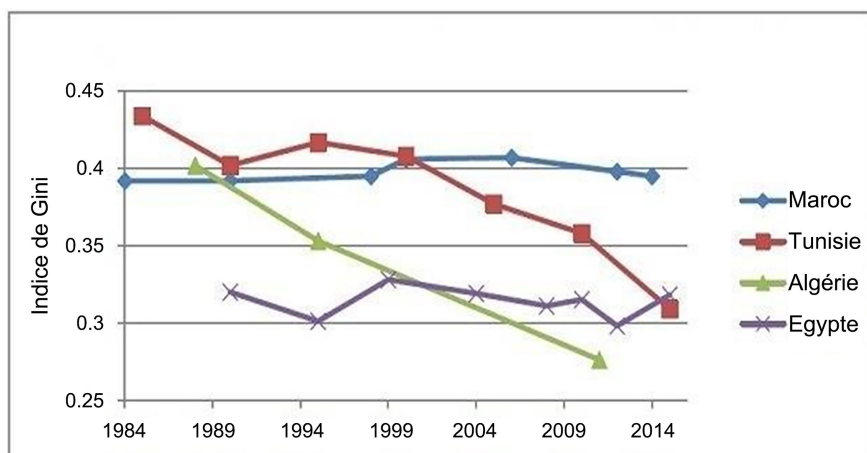
By area of residence, inequalities are more intense in urban areas, with a Gini index of 0.388 against 0.317 in rural areas in 2014. On a regional scale, inequalities are more pronounced in the country's large metropolises, including in particular Rabat-Salé-Kenitra (0.442) and Casablanca-Settat (0.396).

The inter-decile ratio, which measures the share of the total mass of resources held by the richest 10% compared to the poorest 10%, it continued its downward trend, which had started in 2011 after a period of increase between 2001 and 2007, to stand at 11.2 in 2014 at the national level, almost the same level recorded in 1998 (11.1) (Department of Studies and Financial Forecasts, Ministry of Finance, 2020).

According to the Royal Institute of Strategic Studies (2020) report, at the level of the social progress index, Morocco occupied the 91st position in 2013 and the 82nd place in 2020. The same report indicates that at the level of the world index of mobility social, "the social elevator in Morocco has broken down". Morocco is one of the last countries in the ranking for this index. Atkinson index which reflects the dislike of the population for the inequality equal to 34.1%.

The Palma index, which measures the share of the richest 10% of the population in relation to the poorest 40% in national income, is a good indicator of the real effect of countries development policies to assess whether the Growth Benefiting the Richest or the Poorest is 1.96 in Morocco, which indicates a higher concentration of income at the top.

Education, health, employment and access to technology are the causes that undermine equal opportunities and maintain inequalities in Morocco. They affect the starting conditions for individuals and hence their ability to succeed in their social mobility.



**Figure 1.** Evolution of the Gini indices of Morocco and neighboring countries (Source: Oxfam).

With a GINI index of 0.55 in education (the most recent), the Moroccan school is not playing its role in social mobility. According to the Department of Studies and Financial Forecasts DEPF, 29% of people enrolled in secondary and higher education come from 20% of wealthy households. The social background of the pupil continues to strongly determine his or her ability to take up social assistance. Social heritage constitutes 80% and the “Establishment” effect only 20%.

In the area of health, the report from the Royal Institute for Strategic Studies indicates that Moroccan households still bear more than half of total health expenditure (54% of overall health expenditure). The financing of health expenditure in Morocco remains dominated by direct payments of households (50.7% of total health expenditure in 2013).

## 2) The tax system reinforces the Matthew effect

The *Economic, Social and Environmental Council (2019)* in its opinion expressed following the avis n° 39-2019, in accordance with article 6 of organic law n° 128-12, relating to its organization and its attributions. “The limits of the current (fiscal) system” highlight “transversal and institutional constraints characterized by structural deficiencies, namely: the predominance of the rent economy and the frequent recourse to advantages and privileges for the development of economic activities, promoting inefficiency, low added value and contributing to the persistence of social and territorial inequalities”.

In its report, “Fair tax monitor: Analysis of the Moroccan tax system”, Oxfam reveals that tax revenues, which represent nearly 85% of state budget revenues on average between 2000 and 2018, weigh heavily and unfairly. On a tiny category of the company as is the case of the income tax (IR) which makes a higher tax pressure is unfairly exerted on the employees:

- 75% of employees contribute total IR in Morocco. That is to say only 25% of contribution at the same time for professional, land, agricultural and capital income.
- The pressure from IR is borne mainly by middle income.
- Almost 3 quarters of IR in Morocco is in fact paid by 47% of employees.
- In 2018, 56% of the wealth created by the economy was attributed to the remuneration of capital compared to 30% for the remuneration of labor.

The COVID-19 pandemic has exposed the dependence on the tax system for state funding, causing revenues to drop significantly due to restrictions on economic activity linked to the epidemiological situation. Thus, tax revenues posted a decrease of -4% in April 2020 and -7.9% in May 2020. To ensure an economic recovery in the post-COVID period, Morocco must absolutely put its tax system at the service of the reduce inequalities and acquire the necessary means to finance more fair, ambitious and redistributive public policies. Economic recovery must be based on a broader base and progressive taxation. Indeed, taxation on wealth is one of these means that has been recommended since the Assises de la Fiscalité 2013 and confirmed in 2019. According to Oxfam estimates, if a solidarity tax on wealth had been adopted at 5%, the income generated (based on



2019 data) could have been sufficient to almost double Morocco's spending for its response to the coronavirus. On the business side, Morocco still occupies (53 place) according to the World Bank's Doing Business 2020 (World Bank, 2020). This ranking provides an overview of the Matthew effect in the business sphere in Morocco and the barriers to entry made to new entrants in the market due to corruption and nepotism.

### 3. Conclusion

The coronavirus pandemic has exposed and exacerbated existing inequalities, while feeding on them. This crisis has exposed the problems inherent in the current global economic system and other forms of structural oppression, which fail the principle of prosperity for all. The Matthew Effect which indicates that a minority thrives while poor people everywhere struggle for survival needs to be further studied to try to find solutions to the deep inequalities that plague the well-being of populations. One of the avenues to seek solutions beyond simple social protection is to dig deeper into the root of the evil aiming to act on the inequalities at their genesis either on mechanisms of redistribution to correct the inadequacies of the national wealth sharing system. In our opinion, the problem is first of all moral before it is economic. The Matthew effect first of all refers to a great gap in the moralization of the economic sphere. Without this moralization, it is very difficult to make significant changes in terms of inequalities. The great advances made such as the abolition of slavery, progressive taxation, social safety nets such as social security and health insurance, and civil rights legislation had a philosophical and moral foundation.

To this end, a better understanding of the dynamics of the Matthew effect can help to find effective and fair solutions to inequalities. It is a concept to be taken very seriously because of all the upheavals that will be operated by the negative externalities of climate change, the robotization of production, artificial intelligence, transhumanism, the hubris of corporations and their institutionalization with a power unprecedented in history, etc. All these phenomena affect the already existing inequalities and induce spectacular consequences.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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