# Insights From Behavioral Economics for Improving Policies That Aim To Mitigate the Consequences of Unemployment in Rwanda

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**Abstract**

Unemployment has far-reaching consequences on the people affected by it and despite government interventions, unemployment continues to impact Rwandans significantly. This research paper dives into specific government policies implemented in Rwanda to reduce unemployment. By utilizing the lens of behavioral economics, it provides specific suggestions that policymakers could consider in order to refine current policies. In particular, this essay documents the impact of framing, loss aversion, status quo, and anchoring biases on unemployment in Rwanda. Finally, this paper stresses the need to acknowledge and mitigate these biases through the implementation of nudges to empower individuals to make better, more efficient, and more informed decisions.

## 1 Introduction

According to the state of Maine in the United States of America (USA), the unemployment rate is the most followed and cited statistic in the USA [oLnd]. This is because unemployment is a major economic issue that directly affects the population. Therefore, countries make considerable efforts to address it. Unemployment is a condition where willing and capable individuals are unable to find jobs [Eng01]. Policymakers all around the globe formulate and implement various labor market policies to curb this phenomenon. In Rwanda, the government has put in place several policies to mitigate unemployment. Efforts are also made to implement and monitor the execution of those policies. This paper dives deeper into three Rwandan policies to address unemployment: public works, education and job training, and job search services [Bab12]. However, these policies are rooted in traditional economic models that solely focus on incentives, and portray individuals navigating the labor market as purely rational

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actors, and often fail to consider the complexities of their human behavior in the labor market [Ake80].

Behavioral economics emerges as a crucial tool for policymakers; it helps expose the fact that cognitive biases significantly impact choices made by people. These cognitive biases arise from heuristics, which are mental shortcuts people use to make quick and efficient decisions [Kah13]. Recognizing the existence of these biases is essential for crafting effective policies to mitigate unemployment, particularly in the context of developing countries like Rwanda. Behavioral economics provides an understanding of how irrational biases can influence outcomes related to employability. Acknowledgement of these biases assists policymakers in moving beyond traditional economic models focused on incentives. The concept of "nudges" – subtle interventions that influence behavior without restricting options – offers a powerful tool for policy design [Tha09]. For instance, transparent communication of salary ranges during job searches can clear the anchoring bias (explained later) that unemployed individuals face.

This research paper delves deeper into framing bias which triggers the loss aversion, status quo, and anchoring biases in turn. Specifically, framing bias describes how the way information is presented can significantly impact individuals' choices [GD21]. The loss aversion heuristic refers to the tendency to feel the impact of losses more intensely than the satisfaction from gains [Tve81]. The interplay between framing and loss aversion can lead to flawed choices, where individuals prioritize avoiding potential losses over pursuing potential gains. This paper will present the "disinfectant shopping" hypothetical experiment of [Lab21] to illustrate how subtle presentation variations can influence people's decision-making. The status quo bias is defined as the tendency to choose the existing option or simply default option over unfamiliar alternatives because people tend to believe that the disadvantages of leaving the status quo outnumber the advantages [Kah91]. This bias has an undeniable influence on decision making of both parents and students who tend to cling to traditional educational pathways, even when new alternative options like Technical and Vocational Education and Training (TVET) programs offering high employability rates are present [(RP21]. The anchoring bias is a mental shortcut where people rely heavily on the first piece of information, known as the anchor, to make subsequent judgments [Lie17]. This initial information can actually be irrelevant to the actual decision being made but still profoundly influence choices. This paper will examine the concept of anchoring bias and its potential impact on job search and employment services in Rwanda.

## 1.1 Overview of Unemployment in Rwanda

Unemployment in Rwanda is a complex issue with deep historical roots. The devastating 1994 genocide against the Tutsi disrupted the country's economic and social sectors [Hod19] . This event led to widespread job losses, population displacement, and a decline in educational attainment. According to the National Institute of Statistics of Rwanda (NISR) 2021 Labour Force survey, the unemployment rate was 21.1 percent. Moreover, unemployment in sub-Saharan

Africa is higher among youths compared to adults and Rwanda is no exception; unemployment stands at 26.5 percent as compared to 17.1 percent among adults. Among the few employed persons, out of 10 nearly 9 work in the informal sector. Agriculture remains the major contributing sector — contributing to about 68 percent of total employment — which renders unemployment a highly urban phenomenon since agriculture is mostly practiced in rural regions of the country [Mwa17a].

Unemployment is mostly perpetuated by structural factors in Rwanda. One of critical challenges that occurs is skills mismatch, where job seekers do not possess the skills demanded by the evolving labor market. There is a lack of employable skills and limited foreign languages proficiency. Furthermore, population growth and inflation are also significant drivers of unemployment [Fel20]. In the year 2022, the inflation rate was 21.6 percent whilst the population growth rate was indeed 2.3 percent [oSoRN22c]. These two drivers constitute a demonstrable effect on the labor market because such an inflation rate can disrupt business operations, and diminish purchasing power thus reducing job creation. Meanwhile, high population growth strains resources and intensifies competition for few existing employment opportunities.

The government of Rwanda has prioritized cooperation between the public and private sector to remedy the alarming unemployment rate in the country. Entrepreneurship and job creation is one of the feasible solutions. The government aims to create 1.5 million decent jobs by 2024 as part of its National Strategy for Transformation. However, recent data shows concerning trends, with off-farm jobs decreasing by 16%, resulting in a significant net loss in years 2019 and 2021. Key sectors facing the job losses include trading activities, activities of households as employers, manufacturing, and accommodation and food services activities [oSoRN22a]. There is a need to create non-farm employment to solve the overdependence on agriculture for employability [Mus18]. This necessitates an efficient private sector, yet it is young and small. Of all Rwandan enterprises, 98 percent are Small Medium Enterprises, while 97.8 percent are microenterprises. Thus, more emphasis should be directed to MSMEs in order to create more jobs because they make up the bigger portion of the enterprises available in the country [Mwa17b].

In general, addressing unemployment requires a multifaceted approach which tackles structural issues posing setbacks to the unemployed individuals. These policies could include addressing the skills mismatch, proper delivery of employment services, and monitoring graduation from existing unemployment and poverty reduction schemes. It is not simple to navigate this solution for unemployed individuals, but behavioral economics offers insights into making well-thought-out decisions that could enhance the policies that are already underway.

### 1.1.1 Paper Outline

This paper has four more sections; Section 2 will discuss Framing and loss aversion biases and their impact on labor market policies. Section 3 details the status quo bias in relation to labor policies, and consequently Section 4 examines

anchoring bias and its effect on employment policy. Eventually, there is Section 5 which concludes the research paper.

## 2 Framing Bias that Triggers Loss Aversion

The framing bias refers to the tendency of individuals to react differently to a particular choice depending on how it is presented. If an option is presented as a gain as opposed to a loss it entices the person choosing to accept it without considering what they already have, or the risk associated, as we will further discuss in detail. It is commonly known as loss aversion [GD21].

There are heuristics associated with positive and negative framing, as the Disinfectant Shopping hypothetical experiment by The Decision Lab shows. An individual named John goes to a shop to buy kitchen counter disinfectant. He is presented with two options which are 'bleach-ox' and 'bleach-it'. Both disinfectants are charged at the same price and contain similar wipe content. The only difference between the two items is that 'bleach-ox' shows that it kills 95 percent of the gems, while on the other hand, 'bleach-it' claims that only 5 percent of germs survive. This presentation compels the buyer to in the end choose 'bleach-ox' disinfectant. It can surely be inferred that John's decision to purchase one disinfectant over the other was altered by framing heuristic because both products literally offered the same potential to kill germs, only that they were presented in different ways [Lab21].

This hypothetical experiment clearly shows the loss aversion nature of decision makers. Loss aversion which arises due to the way information is presented and interpreted, pronounces the weight of loss which makes people avoid it without considering possible gains. It makes them tend to settle for guaranteed little compared to the probable massive [Lab21]. In Rwanda, the government employs public works as one of the policies to mitigate the negative effects of unemployment. This program adopted in 2007 is specifically known as the Vision Umurenge Program, and this paper focuses on its public works aspect in poverty alleviation administered under the local government structures. Under this program unemployed and lower class citizens are temporarily employed to work in off-farm activities i.e. public places such as road cleaning and school construction in exchange for little pay that can only enable them to meet basic living standards. The sole intent of the government in the first place was to occupy these people for a short period of time as they looked for employment opportunities or tried to save and invest to create their own jobs as they graduated from the program. [Ban12].

As one analyzes the productivity of this initiative, the limited mobility will become evident when the beneficiaries are reminded of graduation from the program. They tend to settle for little earnings from public works rather than seeking other job opportunities independent of the government. This portrays loss aversion given the fact that they are uncertain whether they will secure an occupation from the few and highly competitive jobs on the market. Instead, beneficiaries appear to be satisfied by the low pay, yet if they can choose to grad-

uate and compete there is a possibility of them obtaining jobs that guarantee greater pay.

Tackling the framing bias that triggers the loss-aversion bias is not simple because it occurs as a heuristic. One way to find a solution to this bias is by reversing the frame. This remedy calls the decision-maker to consider the frame from a different point of view. Taking the example of the previously mentioned hypothetical, if John had considered that 'Bleach ox' cannot kill 5 percent of the germs on his kitchen counter his mind would have thought of both potential loss and gain bound to purchasing that particular disinfectant. This is referred to as risk aversion as opposed to loss aversion; it allows an individual deciding to consider both positive and negative outcomes of the choice they are making [LC22].

In the context of public works as an unemployment policy, implementers should reverse the fact that this program offers the unemployed basic needs of life by the time they are unemployed and assist them envision the gain (finding better-paying jobs) in looking for job opportunities. If a participant in this scheme views the pay as little money to only meet the bare minimum, it will be a source of courage to accept graduation from the program and go on looking for a job to maximize the amount of money he or she can make in a month. Additionally, the role of the government in addressing this bias is to facilitate graduation from this scheme by facilitating and monitoring the effectiveness of its intervention as the policymaker.

# 3 Status Quo Bias

The status quo bias is defined as an irrational and biased preference for individuals to remain status quo or simply default because they believe leaving it has more disadvantages as compared to advantages [Kah91]. This heuristic affects people's decision making as they compare other available options to the status quo because it is comfortable and more familiar. Although the options to choose from may increase, the status quo is likely to be chosen [Sam88]. Hartman, Doane, and Woo performed a field setting Status Quo Bias test utilizing a survey on California electric power consumers. The consumers were asked about their preferences regarding service reliability and rates. They were informed that their answers would assist in determining company policy in the future. The respondents fell into two groups, one with much more reliable service than the other. Each group was asked to state a preference among six combinations of service reliabilities and rates, with one of the six combinations designated as the status quo. The results demonstrated a pronounced status quo bias. In the high-reliability group, 60.2 percent selected their status quo as their first choice, while only 5.7 percent expressed a preference for the low-reliability option currently being experienced by the other group, though it came with a 30 percent reduction in rates. The low-reliability group, however, quite liked their status quo, with 58.3 percent of them ranking it first. Only 5.8 percent of this group selected the high-reliability option at a proposed 30 percent increase

in rates [Kah91]. This study demonstrates how even the low-reliability group chose to stick to their status quo even though, in the actual sense, people like reliable service but prefer what they are accustomed to more.

Education training or simply job training is one of the major unemployment policies employed by several governments across the globe [Bab12]. In Africa, job training is done at the secondary school level, tertiary education level and administered to out-of-school individuals at career centers. [fETA22]. In Rwanda, it is offered as technical and vocational education and training, TVET. This academic program is aimed at facilitating students to acquire competence and employable skills required in the labor market. Students trained in this area of study go on to take up jobs in both formal and informal sectors. A tracer survey conducted by Rwanda Polytechnic underscores the fact that the scheme actually increases employability and job readiness. Out of 6,268 RP graduates, 52.3 percent said they were employed, 45.7 percent were not employed but had once been employed, while 1.9 percent had never been employed since graduation. The time taken searching for a job for the majority of unemployed graduates ranged between 3 and 12 months, while for the rest of employed graduates, it took them between 6 and 12 months to get their current job [(RP21]. The quality of education offered by these institutions is well appreciated by the demand side (employers). The survey shows that 8.9 percent were highly satisfied, 50.1 percent were satisfied, and 36.0 percent were moderately satisfied with the knowledge and understanding of graduates.

Despite the efficiency of TVET institutions as discussed above, there is still inadequate parental support for students who go to them [(RP21]. This can be attributed to the fact that many parents prefer white-collar jobs, yet TVET graduates occupy blue-collar jobs (technical jobs) [fETA22]. The prospective students see this study area as a 'fallback option' [fETA22]. They prefer to stick to traditional education, i.e. STEM and arts, because it has been there and promises a white-collar career [Ndi22]. This claim clearly indicates the status quo bias involved in study area choice that has hindered job training as a labor market policy. Both parents' and students' decisions are influenced by the power they accord to the default, which makes them reject an area of study that has proven to be highly productive in terms of employable skills training.

Inspired by the work of Johnson & Goldstein [Joh03], efforts to address status quo bias associated with traditional education can be solved by changing what a default major choice is for students, i.e. making TVET education seem like the default option. The National Examination and School Inspection Board (NESA), in charge of student placement, may place all ordinary-level secondary school students with passing grades in TVET schools for their advanced level (senior high school), [Lau24]. The NESA can do this whilst allowing students to opt out if they want to. This is going to make TVET Education more popular and increase the number of students who pursue it because it is going to cost them some cognitive effort to think about changing their area of study.

Subsequently, the concept of nudges by [Tha09] offers another significant solution to make students stick to the new default option. Highlighting the advantages of TVET programs counteracts the pressure to change TVET, which

may arise from student's parents. A way to nudge students into sticking to the TVET curriculum may be inviting people with whom they identify to share their experiences before students enroll into majors. If students hear the positive side of TVET programs more from alumni of their respective schools, they are likely to critically consider maintaining it since it is the default option. The principle of critical thinking helps remedy this heuristic [Kah13]. It encourages individuals to make informed decisions upon considering potential gains and comprehensive exploration of available alternatives. By implementing these strategies students can be nudged to look at TVET positively, ultimately increasing support for these valuable programs.

# 4 Anchoring Bias

Anchoring bias refers to the cognitive tendency where individuals rely too heavily on initial information, known as the anchor, when making decisions. This cognitive bias occurs when individuals arbitrarily utilize an initial piece of information to make a choice or make subsequent judgments. The anchor could be irrelevant to the decision at hand, yet it profoundly influences assessments or choices people make [Lie17].

The anchoring bias is a heuristic that affects a wide array of fields spanning financial management assets, evaluation psychology, and medicine, among many other sectors [Zon22]. In a National Library of Medicine Journal, [You20]presented a compelling case report which provides an illustration of the anchoring bias in clinical practice, particularly in the context of diagnosing patients with COVID-19 and neurological symptoms. The authors describe the case of a 20-year-old patient with dyspnea, fever, and neurological symptoms suggestive of meningoencephalitis. Despite the patient's clinical presentation and laboratory findings indicative of tuberculous meningitis, the initial diagnostic workup was anchored on the presumption of COVID-19. This anchoring bias led to a delay in considering alternative diagnoses and initiating appropriate treatment, resulting in potential harm to the patient. During the pandemic, the high prevalence of clinical presentations associated with COVID-19 increases the risk of anchoring biases among healthcare providers. The presence of dedicated healthcare facilities for managing COVID-19 patients may further force clinicians to anchor on the diagnosis of COVID-19 while potentially ignoring the consideration of alternative diagnoses. This phenomenon was amplified by the urgency and uncertainty surrounding the management of COVID-19 rising cases, which led to cognitive shortcuts (heuristics) in diagnostic reasoning conducted by medical personnel [You20].

This case report shows how the Anchoring Bias affects individuals' thinking in decision-making, particularly in the face of complex situations such as handling COVID-19 [You20]. It in the same way affects job search and employment services as one of the labor market policies put in place to counteract the consequences of unemployment.

Job search and employment services seek to assist unemployed people to

quickly obtain jobs and not only help them obtain occupations but also the best work that they like [Bab12]. These policies have also been effective channels in supporting job seekers with long-duration unemployment and lower education qualifications [Epp14]. The Public Employment Services (PES) in Rwanda directly supports national off-farm job creation. It does so by assisting job seekers to obtain decent work. This program is conducted by the public sector with the support of private organizations. Job seekers go to Employment Service Centers (ECS) for career guidance coaching, employable skills, and job search strategy training [Mwa17b]. This labor market policy has helped individuals secure jobs, but it is prone to various challenges and biases alike [Mwa17a]. In the job search process, individuals are likely to be influenced by Anchoring Bias regarding salary expectations [Bab12]. If a previously employed person is searching for jobs, they tend to hold their previous salary as an anchor in wage negotiation, which eventually determines the occupation they end up taking. Thus, it is necessary to acknowledge the fact that Anchoring Bias can influence the policy execution and actively seek to address it to mitigate the negative consequences of unemployment.

It is not easy to address this heuristic because it is the most common bias in human decision-making [Fur11]. However, wage loss insurance effectively mitigates anchoring bias in the job search process by providing financial stability. Fixating wage negotiations on previous salaries can prolong unemployment and limit job opportunities; thus, subsidizing the wage difference between past and new jobs through wage loss insurance helps job seekers accept reasonable offers more quickly. Moreover, wage loss insurance reduces the stress of accepting lower-paying jobs [Bab12]. For instance, an individual who previously earned 800,000 RWF per month might hesitate to accept a new job offer of 500,000 RWF. With wage loss insurance covering 50% of the wage difference, their effective income becomes 650,000 RWF, making the offer more attractive. This support helps individuals transition smoothly into new jobs and aligns their salary expectations with current market conditions. This approach can lessen the effect of anchoring bias, hence enabling successful implementation of Employment Services Centers in Rwanda.

# 5 Conclusion

In conclusion, this research paper explored three labor market policies that aim to mitigate the consequences of unemployment in Rwanda. Through an analysis of policies such as public works, education, and job training, and job search services, it underscored their effectiveness and the possible cognitive biases that can influence decision-making within these policies environments. Delving into behavioral economics, the paper demonstrated how biases like framing biases, loss aversion, status quo, and anchoring biases can significantly determine outcomes in labor market policies. The heuristics point out the need to understand human behavior when determining interventions to address unemployment. The paper also demonstrated both the potential and the challenges policies such as

the Vision Umurenge Program and TVET education face due to cognitive biases. Moving forward, labor policymakers should consider the integration of behavioral economics insights into policymaking to enhance effectiveness and support for those affected by unemployment in Rwanda. Further research is necessary into the way different heuristics interact with each other, and the particular ways in which different cultural contexts have their own specificities that interact with these heuristics.

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