How to cite:
Correa-Herrejon, M. (2024) Santa Claus is coming! Do workers prefer to get Christmas present in December, or all year around? *Behanomics, 2,* 15-30.
DOI: https://doi.org/10.55223/bej.16

Behanomics
Year 2024
Volume 2

RESEARCH PAPER / ARTÍCULO DE INVESTIGACIÓN.

Santa Claus is coming! Do workers prefer to get Christmas present in December, or all year around? ¡Santa Claus Llego! ¿Qué prefieren los trabajadores, regalo navideño o regalos mensuales?

Mauricio Correa-Herrejon

Evidentia University of Behavioral & Forensic Sciences, Kissimee, Florida, USA.

Contact email: mcorreah@outlook.com

RESUMEN

El estudio compara el "bono fijo estacional" en México y España con las prácticas de pago en Estados Unidos y Canadá, explorando sesgos de racionalidad limitada. La Hipótesis 1 sugiere que trabajadores mexicanos/españoles pueden resistirse a un bono fijo anual, incluso para acceso anticipado a fondos. La Hipótesis 2 plantea que trabajadores estadounidenses/canadienses rechazarían un bono estacional si reduce pagos mensuales. Una competencia internacional evaluó la disposición a cambiar opciones de pago. Resultados indicaron preferencia por recompensas al final del ciclo entre mexicanos/españoles (Hipótesis 1), y por recompensas inmediatas entre estadounidenses/canadienses (Hipótesis 2). Análisis estadístico reveló diferencias significativas en México y España, mientras que en EE. UU. y Canadá, los resultados carecían de relevancia, sugiriendo influencia del sesgo de status quo y contabilidad mental en preferencias de pago.

ABSTRACT

The study examines the "seasonal fixed bonus" phenomenon in Mexico and Spain, contrasting it with payment practices in the United States and Canada. Two hypotheses explore biases arising from bounded rationality. Hypothesis 1 suggests Mexican/Spanish workers may resist opting for a fixed bonus spread throughout the year, even for earlier access to funds. Hypothesis 2 proposes American/Canadian workers may reject a seasonal bonus if it reduces monthly payments. An international competition tested participants' willingness to alter payout options. Results showed Mexican/Spanish preference for end-of-cycle rewards, supporting Hypothesis 1, while American/Canadian participants favored immediate rewards, partially supporting Hypothesis 2. Statistical analysis revealed significant differences in Mexico and Spain, indicating an end-of-cycle preference, while US/Canada results lacked significance, suggesting potential influence from status quo bias and mental accounting principles on payment preferences.

PAPER HISTORY
Received: 15-02-2024
Accepted: 23-03-2024

PALABRAS CLAVE
Bono fijo, Contabilidad mental, Status-quo, Experimentos.

KEYWORDS
Fix bonus, Mental accounting, Status-quo, Behavioral Experiments.

Agradecimientos y/o financiamiento

I express my gratitude to Dr. Rafael Lopez, PhD, for his invaluable intellectual guidance. Additionally, I thank Evidentia University for their financial support and Irving Garcia for his logistical assistance.

1. Behavioral Economics - Conceptual Framework

In this experiment, we aim to investigate the sentiments and behaviors of employees concerning the 'seasonal fixed bonus,' defined as the exceptional payment made by companies to their employees during the Christmas period. Our conceptual framework is grounded in behavioral economics, which endeavors to elucidate the decision-making processes of individuals, often deviating from the rational predictions posited by traditional economic models (Kahneman & Tversky, 1979). The phenomenon of bounded rationality inherent in individuals can exert a substantial influence on money management and financial decision-making (Chetty et al., 2014; Benartzi & Thaler, 2007). These deviations manifest as cognitive biases such as loss aversion, anchoring, confirmation bias, overconfidence, availability heuristic, herding behavior, status quo bias, and mental accounting (Shafir & Thaler, 2006; Dholakia, 2001)

Mental accounting, a psychological construct described by Thaler (1985), involves individuals assigning disparate values or significance to their money based on mental categorization or labeling, rather than objectively assessing its overall value. This psychological phenomenon assumes a pivotal role in salary management, where individuals may mentally segregate their income into distinct categories, potentially leading to suboptimal financial decisions (Benartzi & Thaler, 2001). For instance, individuals may allocate a substantial portion of their salary to discretionary spending while neglecting critical areas such as savings or debt reduction (Deaton & Muellbauer, 1980). Establishing mental budgets for various expense categories, known as psychological budgeting, further compounds this, as individuals allocate specific percentages of their salary to housing, gifts, or entertainment, fostering a psychological attachment to these budgeted amounts and rendering adjustments to spending patterns challenging (Mankiw & Zeldes, 1991).

The intertwining of status quo bias and mental accounting in the realm of money management often leads individuals to exhibit a reluctance to alter their spending and saving behaviors, even when superior options are recognized (**Mas, 2006**). This is evidenced in the propensity to maintain existing, potentially underperforming financial portfolios due to a preference for preserving the status quo (**Jansson & Tullberg, 2013**). The status quo bias discourages individuals from engaging in financial planning or making necessary adjustments to their financial plans. It manifests in a resistance to review and update budgets, savings goals, or retirement plans, as individuals opt to maintain their current financial arrangements without considering potential improvements or changes.

A proactive approach, involving an active challenge to mental accounting biases, a questioning of the status quo, and the adoption of a proactive mindset, can empower individuals to make more informed decisions in

managing their salaries, thereby increasing the likelihood of achieving an optimal financial strategy. However, the question arises: do individuals possess the willpower or desire to embark on such a proactive endeavor?

The impact of these cognitive biases gains additional significance due to the crucial role of fixed income in various economies. Salaries, as a pivotal component, significantly influence individuals' livelihoods, financial security, and overall well-being (Carrera & Lacomba, 2012). Nearly 80% of Americans and Canadians received wages as their primary source of income (U.S. Bureau of Labor Statistics and Statistics Canada, 2023), and 65% of Spanish (Instituto Nacional de Estadistica, 2022) and 70% if Mexicans (Instituto Nacional de Estadistica, Geografia e Informatica, 2023).

The labor markets in these nations are characterized by unique complexities shaped by various factors, including labor laws, economic conditions, cultural norms, and historical contexts. The influence of culture and traditions is particularly pronounced across these countries.

In the case of the United States and Canada, characterized by a diverse population encompassing various cultural and religious traditions, the celebration of holidays during the winter season extends beyond Christmas. Americans partake in diverse festivities such as Hanukkah, Kwanzaa, or non-religious celebrations like New Year's Eve. This cultural diversity may contribute to the absence of a prevalent 'Christmas bonus' practice. Instead, employers in these countries commonly offer alternative forms of compensation and benefits throughout the year. These may include performance-based bonuses, profit-sharing arrangements, annual salary increases, or other incentive programs. Understanding the nuances of labor market segmentation in Spain and Mexico, as explored in research such as that by **Malo and Santacreu (2010)**, provides valuable insights into the specific employment structures and temporary labor dynamics prevalent in these regions.

In the United States and Canada, employment payment practices are largely discretionary, guided by employer preferences and prevailing market norms. The legal framework in the United States does not prescribe a specific Christmas bonus or dictate the timing and frequency of bonus payments. While some employers may choose to provide discretionary bonuses, such offerings are not mandated by law.

Conversely, the Mexican labor market features a fixed Christmas bonus, known as "Aguinaldo," in addition to the regular wage. In Spain, workers may receive up to two extra payments during the year—specifically, a summer bonus and a Christmas bonus. These practices highlight the contrast in compensation structures and the influence of cultural and legal frameworks on labor market dynamics (Rasmussen, 2012).

2. The Experiment Design

In this research, we investigate the sentiments and behaviors of employees concerning the "seasonal fixed bonus," defined as the exceptional payment made by companies to their employees during the Christmas period.

On one hand, seasonal fixed payments are deeply ingrained and, at times, a legal requirement. For instance, Mexican employees receive their "aguinaldo" in December, while in Spain, it is referred to as "pago extraordinario." This predetermined additional income assists families in coping with heightened winter expenses resulting from a sense of "moral obligation" to exchange gifts and/or take holidays.

On the other hand, countries like the United States or Canada do not necessarily adhere to this type of fixed payments, although they encounter similar extraordinary seasonal expenses.

In light of this context, two hypotheses were formulated and tested:

Hypothesis 1: Mexican and Spanish workers, if given the option to receive their seasonal fixed bonus payment in installments throughout the year—dividing the payment over established payroll periods—may choose "not" to opt for this alternative, even if it implies receiving their money earlier.

Hypothesis 2: American and Canadian workers, if presented with the option of a seasonal fixed bonus payment—resulting in a decrease in their monthly salary payment but maintaining the same annual salary—may choose "not" to accept the option.

In essence, our analysis delves into the existence of behavioral biases such as mental accounting, status quo, money illusion, the denomination effect, and anchoring in the perception of salary payments.

Conceptual Framework: A/B Test

Testing has emerged as a robust tool for data-driven decision-making in the digital age. As articulated by **Kohavi et al. (2012**), A/B testing, also known as split testing, is a methodology employed to compare two or more variations of a specific element—be it a webpage, app, marketing campaign, or design element—to discern the one that performs better. The primary objective is to provide objective insights by conducting controlled experiments, gathering data, and analyzing results. Organizations or researchers, by simultaneously testing different versions of a particular element and scrutinizing user behavior, can make informed decisions to optimize their offerings.

In this experiment we will randomly divide the employees into two groups by country:

Mexico & Spain

- Control Group, which represents the current 13-month payment system with extra payments in December, and
- Testing Group, which represents the proposed 12-month salary payment system.

United Sates & Canada

- Control Group, representing the current 12-month salary payment system, and
- Testing Group, representing the proposed 14-month or 12-month payment system with extra payments in December and July.

Payment days may differ considerably among countries or even among the different companies in the same location. Some companies pay two times per month the 15 and the last day of the month, other pay every other week on a specific day of the week. We also found cases of weekly and monthly payroll payments. To simplify the language, we will refer to monthly payments in all cases.

3. Our Experiment

The proposed experiment constitutes a straightforward and engaging mental ability challenge meticulously crafted to scrutinize our specific hypothesis within the framework of behavioral economics. This challenge seeks to evaluate participants' decision-making patterns and ascertain whether they conform to the hypothesized behavioral scenario.

In order to test our hypothesis, we instituted a "utopic international competition" involving skill concentration and a game of skill, segmented into five distinct parts:

Part I: Participants are engaged in a skill and concentration challenge with the understanding that they are competing among countries of interest—Mexico, Spain, the United States, and Canada. Upon selecting a flag, it is assumed to represent the country where the participant resides and/or works.

Part II: As part of the A/B Test, we randomly assigned a payment scheme to each participant before commencing the competition's game. The game comprises three straightforward mental ability challenges.

Part III: After answering the initial three questions, participants have the option to modify the timing of their reward payments. They can either maintain their initial payment assignment (receiving the reward at the end of the competition, akin to "aguinaldo" or "pagos extraordinarios") or switch to a different temporality (getting paid after completing each question, as practiced in the United States and Canada).

Part IV: Once participants decide whether to continue or change their scheme, they must answer three additional simple puzzles.

Part V: Upon completing the six challenges, participants are asked to share their perspective on the payment arrangement in their respective countries. For instance, a Canadian participant is prompted with the following scenario: "Suppose you are an employee in Canada at an agricultural engineering company. Would you prefer a monthly deduction from your salary as forced savings, paid to you at the end of the year in December for your end-of-year gift expenses? Or would you prefer to be paid every month as usual?" Participants must choose between end-of-year and monthly payments.

Why are we asking this question?

In the context of fixed extraordinary payments, the terms "reported preference" and "revealed preference" denote distinct approaches to understanding how individuals make decisions regarding these payments.

Reported preference involves information obtained directly from individuals through surveys, questionnaires, interviews, or self-reporting. In the context of fixed extraordinary payments, individuals are asked about their preferences for receiving or utilizing the payments.

Revealed preference, on the other hand, stems from individuals' actual behavior and choices in real-life situations. Instead of asking about preferences directly, researchers observe how people behave when presented with different options, including fixed extraordinary payment arrangements.

The inclusion of socio-economic questions, such as gender, age, employment status, and whether participants receive fixed payments in December and/or summer, aims to facilitate additional analysis.

Evaluation and Analysis:

The collected data is subject to quantitative analysis utilizing simple statistical techniques and a qualitative approach. Results will be interpreted and compared against the initial hypotheses to determine their validity and illuminate the underlying behavioral dynamics.

4. The Contest and its Results

The Experiment:

Between July and September 2023, a behavioral economics experiment was undertaken, involving individuals residing in Mexico, Spain, the United States, and Canada. The study aimed to investigate the influence of different game mechanics and reward timing on participants' decision-making and payment preferences. Two

distinct tests were implemented to assess participants' decision-making processes in dynamic contexts. Additionally, a questionnaire, along with socio-demographic questions, was included to garner insights into participants' characteristics and payment preferences while hypothetically working for a well-known electronic company.

Test I: Immediate vs. Delayed Gratification

In Test I, participants were informed that they would receive their prize immediately after answering each question during the competition. However, a pivotal moment occurred midway through the competition when participants were presented with an alternative. They had to decide whether to continue receiving their prize immediately or change the game's mechanics to receive their prize at the end of the competition.

Test II: Delayed vs. Immediate Gratification.

Test II followed a contrasting approach. Participants were initially informed that they would receive their prize at the end of the competition. Nevertheless, during the competition, they encountered a similar pivotal moment, where they could opt to continue receiving their prize at the end of the competition or switch to receiving their prize immediately after each answer was completed.

On one hand, Test I, or immediate gratification, functioned as the Control Group for Canadian and American participants and as the research hypothesis to be examined in Spanish and Mexico citizens. On the other hand, Test II, or delayed reward mechanism, operated as the Control Group for Spanish and Mexico citizens and tested the hypothesis assumption in American and Canadian participants.

Upon the conclusion of both tests, participants were directly queried through a questionnaire about their payment preferences when hypothetically working in a well-known electronic company. The questionnaire specifically inquired whether participants would prefer a fixed payment at the end of the year or monthly payments. Socio-demographic questions played an integral role in gaining a deeper understanding of participants' characteristics. Factors such as age, gender, and working status were explored to provide valuable context for interpreting the results.

The behavioral economics experiment sought to illuminate the interplay between game mechanics, reward timing, and participants' choices in economic contexts. The results from Test I and Test II are expected to reveal preferences for immediate versus delayed rewards, offering valuable insights into the psychological factors influencing decision-making.

The Experiment Numbers: Our Universe

A total of 507 participants were recruited, comprising 321 (63%) from Mexico and Spain and 186 (37%) from the United States and Canada.

The Total Population:

The overall population demonstrates a balanced distribution between females and males, with a slight inclination towards the former, accounting for 52%. Adults aged between 40 to 60 years represent almost 55% of the contestants. In terms of their occupations, 50% of the participants identified as employees, and 31% mentioned owning their own business.

As anticipated, a substantial number of participants in countries such as the United States and Canada indicated that they do not receive any extraordinary fixed payments, with 22% of those who declared themselves as employees falling into this category. In contrast, nearly 80% of Mexican and Spanish employees reported receiving an extraordinary fixed income in December and/or the summer.

Mexico and Spain:

Background: Mexico and Spain provide seasonal fixed payments known as "aguinaldo" and "pago extraordinario." These additional income sources assist families in managing increased expenses during winter and summer, often associated with holiday gift-giving and vacations.

Hypothesis: Our hypothesis posits that if Mexican and Spanish workers were offered the option to receive their seasonal fixed bonus payment in monthly installments throughout the year, they might not choose this option, even if it means receiving the money earlier.

The total number of responses was 321, divided into two groups: Test I (135 participants) and Test II or the control group (186 participants).

In general, the groups were well-distributed, encompassing a representation of genders, with females constituting a higher participation at 54%, particularly prominent in Test I where it reached 60%. The mature population, aged 51 years and older, accounted for a substantial 61%. Paid workers and business owners collectively represented almost 80% of the participants. The distribution of individuals receiving extraordinary payments exhibited similarity in both groups.

Game Results: Revealed Preference -

The results of the game unveiled intriguing behaviors, as depicted in Table 1: The control group, receiving the prize at the end of the competition (analogous to the end-of-year fixed payment), exhibited a lower inclination to change their game payment method compared to the group that commenced the game with the premise

of receiving the prize after each competition. The disparity between the two groups was noteworthy, with 68% vs. 53%, indicating a 15-percentage point difference. in favor of maintaining their original payment method.

Table 1. *Analysis of the responses to tests I and II by Spanish-speaking countries.*

Mexico + Spain (321 Participants)		
TEST-I	Participants were informed that they would receive their prize "immediately" after answering each question during the competition	135
TEST-II (control)	Participants were initially informed that they would receive their prize at the "end of the competition"	186

1st Question			
A	Would you like to receive your prize until the end of the competition?	71	52.6%
B	Would you like to continue receiving your prize as soon as you answer each question?	64	47.4%
A	Would you like to continue receiving your prize as soon as you answer each question?	60	32.3%
B	Would you like to receive your prize until the end of the competition?	126	67.7%

2° Question: Suppose you are an employee of a well-known electronics company. Would you like a monthly part of your salary to be deducted as forced savings and given to you at the end of the year in December for your end-of-year for gift expenses? Or would you like to get paid every month?			
A	A. End of the year	17	23.9%
B	B. Every Month	54	76.1%
A	A. End of the year	22	34.4%
B	B. Every Month	42	65.6%
A	A. End of the year	11	18.3%
B	B. Every Month	49	81.7%
A	A. End of the year	30	23.8%
B	B. Every Month	96	76.2%

Conversely, when we directly queried contestants at the conclusion of the game, asking them to envision a hypothetical scenario as workers in an electronic company, their reported preference indicated that 75% of participants expressed a desire to receive their end-of-year fixed payment every month as a substitute for the December payment in both Test I and Test II.

The conceptual framework posited that revealed preferences are often deemed a more reliable method, reflecting individuals' choices when confronted with real consequences and trade-offs. This allows us to understand how individuals value different options based on their actual decision-making. Nevertheless, both approaches have their inherent strengths and weaknesses, and we contend that a combination of both methods assists in gaining a more comprehensive understanding of individual decision-making in the context of fixed extraordinary payments.

Overall, the results indicated that the dynamics mirror those in countries without a year-end bonus. Irrespective of their decisions in the game, individuals prefer to continue receiving their year-end bonus in real life. In this scenario, participants appear to align their daily finances with their monthly or bi-weekly earnings. Even though receiving a higher amount each month could be advantageous, they opt to maintain the year-end bonus, allocating it for additional expenses, savings, or indulgences.

The Anglo North American Countries:

Background: The United States and Canada operate within distinct legal and cultural environments compared to the rest of the continent. Unlike other countries that have additional seasonal income to cover Christmas expenses, the U.S. and Canada typically structure annual salary agreements and divide them into regular payment periods (bi-weekly or monthly).

We conducted a test to assess whether American and Canadian employees would be willing to reduce their monthly salary payments, receiving a larger amount at the end of the year to cover their Christmas expenses. This would entail a decrease (ranging between 6% to 8%) in their monthly cash flow from January to November, with the offset being the equivalent of two months' salary in December.

Hypothesis: Our hypothesis posits that American and Canadian workers may not accept the option of having a seasonal fixed bonus payment obtained by decreasing their monthly salary while maintaining the same annual salary. The same methodology employed for Mexican and Spanish participants was applied to American and Canadian participants, with contestants randomly distributed to ensure fair comparability of results.

The control group comprised 104 members, contrasting with the 82 individuals in Test II.

Demographic Distribution:

In both cases, the distribution by gender revealed a higher number of males (54%) compared to females (44%), with 7% not disclosing their gender. The majority of participants (55%) fell within the age range of 40 to 60 years, with only one participant older than 60 years. Nearly 60% identified themselves as employees, while 27% indicated ownership of a business. As expected, 80% of participants did not receive an extraordinary fixed payment during December or the summer, aligning with the labor legislation mentioned earlier.

Game Results:

The game results unveiled distinct patterns. The control group, receiving the prize immediately after answering each question, exhibited a higher inclination to persist in receiving their reward as soon as possible (47%) compared to the testing group. This latter group commenced receiving rewards at the end of the competition, with the option to receive it each time they participated (39%). Notably, the status quo bias seemed to anchor the Test II group participants, with 61% of them opting to continue receiving rewards at the end.

Table 2. *Analysis of responses to tests I and II by English-speaking countries.*

United States + Canada (186 Participants)		
TEST-I (control)	Participants were informed that they would receive their **prize "immediately" after answering** each question during the competition	104
TEST-II	Participants were initially informed that they would receive their prize **at the "end of the competition"**	82

1st Question			
A	Would you like to receive your prize until the end of the competition?	55	52.9%
B	Would you like to continue receiving your prize as soon as you answer each question?	49	47.1%
A	Would you like to continue receiving your prize as soon as you answer each question?	32	39.0%
B	Would you like to receive your prize until the end of the competition?	50	61.0%

2° Question: Suppose you are an employee of a well-known electronics company. Would you like a monthly part of your salary to be deducted as forced savings and given to you at the end of the year in December for your end-of-year for gift expenses? Or would you like to get paid every month?			
A	A. End of the year	13	23.6%
B	B. Every Month	42	76.4%
A	A. End of the year	16	32.7%
B	B. Every Month	33	67.3%
A	A. End of the year	13	40.6%
B	B. Every Month	19	59.4%
A	A. End of the year	23	46.0%
B	B. Every Month	27	54.0%

Reported Preference Analysis:

In the reported preference question (second question), where individuals were hypothetically queried about their inclination to receive an end-of-year fixed payment instead of monthly disbursements, intriguing results emerged. In the case of the control group participants - experiencing immediate gratification - 72% indicated a preference for monthly payments. Conversely, for the Test II group – those receiving rewards at the end – the figure dropped by 15 percentage points to 57%.

In essence, irrespective of the experimental conditions, individuals in these countries express a preference for retaining their monthly payments, possibly because they have come to rely on these regular incomes, and discontinuing them would present a challenge to their daily financial stability. Essentially, while the game suggests a desire for an additional year-end compensation, implementing such a practice would be impractical in real life.

Consolidated Results:

The aggregated results distribution (Table 3) indicates a prevailing inclination, regardless of citizenship, for participants to opt for rewards at the end of the game.

According to the findings presented in Table 4, discernible differences between the two groups are statistically significant exclusively within the context of Mexico and Spain, countries distinguished by the presence of an "Aguinaldo" (fixed bonus). A meticulous examination of the table reveals that the significance falls below the conventional threshold of 0.05 solely for these two nations. In essence, the predictive efficacy is constrained to Mexico and Spain. Therefore, it can be inferred for these countries that their populace manifests a

preference for end-of-cycle rewards, even at the potential cost of a strategic shift. This behavioral inclination contradicts the prevailing status quo bias and arguably aligns with the principles of mental accounting.

Table 3. *Statistical analysis of the study.*

	Mexico and Spain (Aguinaldo countries)			United Sates and Canada (NOT Aguinaldo countries)		
	Change Game Dynamic	NOT Change Game Dynamic	Total	Change Game Dynamic	NOT Change Game Dynamic	Total
Reward Each Partcipation						
# Participants	71	64	135	55	49	104
% with Reward	**52.6%**	47.4%	100.0%	**52.9%**	47.1%	100.0%
% with Change Dynamic	54.2%	33.7%	42.1%	63.2%	49.5%	55.9%
% of Total	22.1%	19.9%	42.0%	29.6%	26.3%	55.9%
Reward at the End						
# Participants	60	126	186	32	50	82
% with Reward	32.3%	**67.7%**	100.0%	39.0%	**61.0%**	100.0%
% with Change Dynamic	45.8%	66.3%	57.9%	36.8%	50.5%	44.1%
% of Total	18.7%	39.3%	58.0%	17.2%	26.9%	44.1%
Total						
# Participants	131	190	321	87	99	186
% of Total	40.8%	59.2%	100.0%	46.8%	53.2%	100.0%

Conversely, for the cohort encompassing the United States and Canada, nations devoid of a fixed bonus structure, the results, while indicating a similar directional trend, do not achieve statistical significance. This absence of statistical significance hinders the capacity for meaningful prediction in this context.

Table 4. *Statistical analysis of the study.*

	Value	Asymptotic Significance (2-slided)	Exact Significance (2-slided)	Exact Significance (1-slided)
Mexico and Spain (Aguinaldo countries)				
Pearson Chi-Square	13.390[a]	0.000		
Continuity Correction[b]	12.562	0.000		
Likelihood Ratio	13.394	0.000		
Fisher´s Exact Test			0.000	0.000
N of Valid Cases	321			
United Sates and Canada (NOT Aguinaldo countries)				
Pearson Chi-Square	3.538[c]	0.060		
Continuity Correction[b]	3.003	0.083		
Likelihood Ratio	3.555	0.059		
Fisher´s Exact Test			0.076	0.041
N of Valid Cases	186			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 55.09
b. Computed only for a 2x2 table.
c. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 38.35

For these compelling reasons, Hypothesis 1 is affirmed for Mexico and Spain. Individuals hailing from countries with a tradition of receiving a year-end fixed bonus exhibit a predilection for a game strategy that results in rewards at the conclusion of the competition. In simpler terms, if the reward is distributed for each participation, there is an inclination to seek change; however, when the reward is consolidated at the end, a preference to maintain the existing arrangement emerges.

Conversely, in the case of the United States and Canada—countries devoid of a fixed year-end bonus—Hypothesis 2 is refuted due to the absence of significant differences between the two groups (those receiving rewards after each participation and those receiving rewards at the end). Despite the lack of statistically significant differences, the data suggests a preference for end-of-cycle rewards, indicating a proclivity aligned with the mental accounting bias. Participants may be contemplating the utility of this consolidated amount for supplementary expenses or indulgences without disrupting their day-to-day economic activities.

5. Discussions and Conclusions

The behavioral economics experiment, conducted between July and August 2023, involved nearly 500 participants from Mexico, Spain, the United States, and Canada. The experiment comprised two distinct tests, Test I and Test II, aimed at exploring the impact of different game mechanics on participants' choices regarding prize delivery.

As highlighted in the document, the experiment methodology was divided into two tests, allowing for the application of A/B testing. In Test I, participants were initially informed that they would receive their prize immediately after answering each question. Midway through the competition, participants were offered an alternative: they could either continue receiving their prize immediately after answering each question or switch to receiving their prize at the end of the competition.

In Test II, participants were initially informed that they would receive their prize at the end of the competition. However, midway through the competition, they were presented with the option to change the game's mechanic. They could choose between continuing to receive their prize at the end of the competition or receiving their prize after each answer was completed. Interestingly, a significant proportion of participants opted for immediate rewards, indicating a preference for instant gratification over delayed rewards.

As part of the methodology, Test I operated as the control group for Canadian and American citizens, and Test II served the same purpose for the Mexican and Spanish population. We also asked a direct question regarding fixed payment compensation once the game was finished, minimizing any impact on the game. The idea of the game or experiment is aligned with the concept of revealed preference, and the direct question is intended to gain an understanding of participants' reported preferences.

The experiment results—revealed preference—and the direct question reported preference gave interesting insights.

Hypothesis 1: If Mexican and Spanish workers were offered the option to receive their seasonal fixed bonus payment in installments throughout the year, dividing the payroll payment into established periods, they may "not" take this option, even if it implies receiving their money earlier.

The game results revealed intriguing patterns in participants' preferences:

The control group, which received the prize at the end of the competition (similar to the end-of-year fixed payment), showed less interest in changing their game payment method compared to the group that entered the game with the premise of receiving the prize each time they competed. The difference between the two groups was 20 percentage points, with 68% of the control group choosing to maintain the status quo, while 48% of the other group opted to change their payment method.

Additionally, our statistical analysis discerned significant distinctions between Mexico and Spain, countries distinguished by the institutionalized provision of an "Aguinaldo" (fixed bonus). Upon meticulous scrutiny of the data presented in the table, it becomes evident that the level of significance falls below the conventional threshold of 0.05 solely for these nations. Consequently, prognostic efficacy is confined to the demographic comprising Mexico and Spain.

As a corollary, it can be surmised that the denizens of these countries exhibit a predilection for end-of-cycle rewards, even when such a preference necessitates a strategic departure. This behavioral inclination stands in stark contradiction to the prevalent status quo bias and plausibly aligns with the theoretical underpinnings of mental accounting principles.

Regarding the United States and Canada, nations lacking a predetermined year-end bonus, the second hypothesis (H2) is refuted due to the absence of statistically significant distinctions between the two subgroups—those receiving a reward per participation and those receiving a reward at the culmination of the cycle. Notwithstanding the absence of statistical significance, the data implies a proclivity for the end-of-cycle reward, indicating a predisposition aligned with the mental accounting bias. Participants in these countries may be contemplating the utility of this amount for supplementary expenditures or indulgences without encroaching upon their routine economic activities.

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