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The Effect of Fragile Self-Esteem on Course Completion in Higher Education

**M. Dinter†, S. Grässle‡‡, M. Mosenhauer‡‡‡**

**Purpose:** Successful completion of higher education is a significant factor of both individual and national development. Self-esteem has been neglected in previous empirical research as a constraint in course completion. We investigate this factor as a basis to develop suitable interventions.

**Design/Method/Approach:** We use secondary, administrative data of course completion from fully accredited Bachelor- and Master-courses at an Austrian higher education institution.

**Findings:** Self-Esteem, using measures of social comparison and gender as proxies, lead to reductions of successful completion of higher education.

**Theoretical Implications:** Internal constraints, i.e. fragile self-esteem, impact course completion in higher education.

**Practical Implications:** National and educational institutions aiming at supporting students should focus on emotional support programs alongside professional support programs.

**Originality/Value:** We offer tentative first evidence of a novel theory on the impact of fragile self-esteem on intertemporal choices, applied to the context of higher education.

**Research Limitations/Future Research:** An empirical analysis of higher education performance based on a model unifying both ability and self-esteem constraints would provide an ambitious, but interesting avenue for further research.

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**Paper type:** Empirical

**Keywords:** Course Completion, Fragile Self-Esteem, Social Comparison, Gender.

**Reference** to this paper should be made as follows:

Вплив слабкої самооцінки на завершення курсу вищої освіти

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Мета роботи: Успішне завершення вищої освіти є вагомим фактором як індивідуального, так і національного розвитку. У попередніх емпіричних дослідженнях самооцінкою нехтували як перешкодою для завершення курсу. Ми досліджуємо цей фактор як основу для розробки відповідних заходів.

Дизайн / Метод / Підхід дослідження: Ми використовуємо вторинні адміністративні дані про завершення курсу з повністю акредитованих курсів бакалавра та магістра в австрійському вищому навчальному закладі.

Результати дослідження: Самооцінка з використанням показників соціального порівняння та статі як проксі призводить до зниження успішного завершення вищої освіти.

Теоретична цінність дослідження: Внутрішні обмеження, наприклад, хитка самооцінка, впливають на проходження курсу у вищій освіті.

Практична цінність дослідження: Національні та навчальні заклади, які мають на меті підтримку студентів, повинні зосередитися на програмах емоційної підтримки поряд з програмами професійної підтримки.

Оригіналість / Цінність дослідження: Ми пропонуємо попередній перший доказ нової теорії про вплив слабкої самооцінки на міжчасовий вибір, застосований до контексту вищої освіти.

Обмеження дослідження / Майбутні дослідження: Емпіричний аналіз ефективності вищої освіти на основі моделі, яка об’єднує обмеження здібностей і самооцінки, забезпечить амбітний, але цікавий шлях для подальших досліджень.

Тип статті: Емпіричний

Ключові слова: закінчення курсу, крихка самооцінка, соціальне порівняння, гендер.
1. Introduction

ducation is a highly robust and strong predictor of a person’s income across all levels of education (Psacharopoulos & Patrinos, 2018). Given the large expected pecuniary returns from each additional year spent in class, joining a higher education institution and completing their programs will therefore likely outweigh any opportunity costs from foregone incomes for most individuals and should be considered a sound investment for the vast majority. While not all students can be expected to graduate successfully from their programs, a surprisingly large amount of students voluntarily quit their studies rather than being forced out of them due to accumulated failures. As this behavior is hard to justify for purely rational, profit-maximizing agents, we propose an alternative explanation.

We use administrative data from a higher education institution to test this theory. We proxy variance in the negative effect of self-esteem on students in two ways. First, we propose that students evaluate their own self-esteem based on their own grades according to a social comparison. A certain misattribution may be less frustrating if peers tend to also struggle and more frustrating if others do well. This general effect is well-studied and documented in psychology/social research and is also known as Big-Fish-Little-Pond Effect (BFLE), which plays a special role in this context (see Section 3.1). To capture this effect in the realm of higher education, we regress students’ dropout decisions on the average grades in the respective students’ departments, while simultaneously controlling for the individual students’ grade averages. Second, we check for gender effects on dropout-decisions. Hence, our study examines the following research question: “Are self-esteem constraints, manifested via social comparisons and gender, relevant for course completion in higher education?”

Crucially, our data allows us to distinguish between different reasons for not successfully finishing study programs. Apart from observing, whether any given student has dropped out from a program, we can further distinguish, whether they failed a program (i.e. failing a maximum of three times for any given examination) or quit a program (i.e. voluntarily notifying the institution that they would not pursue the program any further). We hypothesize that the effect of self-esteem concerns on dropouts mainly materializes through students opting out of their respective programs, while failing is more strongly driven by lacking ability.

We find evidence of fragile self-esteem being an important factor in unsuccessful graduation with respect to both of our indicators. As intuition suggests, a student’s grade point average (GPA) is a highly robust predictor of program completion, both for failing and quitting students. While controlling for this effect, we further find that average department grades further predict successful completion, where worse average department grades increase the chance of successful completion. This effect, however, is entirely driven by quitting students among the dropouts, while the chance of failing actually increases with worse average grades. We interpret this as students potentially becoming discouraged by lackluster academic achievements, but low general achievements among their peers’ help mitigate overly harsh judgement on themselves. As students in such departments experience negative shocks to their self-esteem to be less impactful, they tend to quit their respective programs less.

We also argue that a student’s gender acts as a channel for the effect of fragile self-esteem on course completion. Several studies show that women score lower on established scales for measuring self-esteem than men (see Section 3.2). Our data is consistent with this notion. We find that female students are significantly less likely to successfully finish a study program than males. Importantly, this effect is entirely driven by females quitting instead of failing; in fact, female students are less likely to be dropped from their course due to successive failures. We take this as tentative evidence that while self-esteem is an important constraining factor for successful course completion, some groups, i.e. female students, are particularly vulnerable to its effects.

The paper is organized as follows: Section 2 provides theoretical context by looking especially at how other theoretical approaches have tried to explain underinvestment in terms of education. Section 3 lays out our theoretical reasoning for both the impact of self-esteem course completion in general as well as how it manifests in the drivers of social comparisons and gender. Section 4 explicitly formulates the resulting hypotheses. Section 5 elaborates on our methods, including a description of our data sample and our employed variables. Section 6 presents our results and Section 7 discusses their relevance, practical implications and limitations.

2. Literature Review

The return on investment arising from education has positive effects in the long run, the question arises why students quit their studies even though their GPA would allow them to continue, even if the grades achieved are only average. In this chapter we want to point out, which answers to this question previous research has provided.

A very prominent answer, especially in behavioral economics, is found in the assumption that course completion as a long-term goal is not motivating enough (Laveczia, Liu & Oreopoulos, 2003). If this would be the case, corresponding behavior such as ignoring or condoning long term consequences of underinvesting in education, e.g. loss of income in the future, could be explained properly.

In this context, Laveczia et al. (2003) identified partially overlapping mind-sets that may promote this corresponding behavior. These include the mindset of focusing too much on present circumstances (i.e. not thinking about a future that is considered uncertain); second, the mindset of orienting actions too strongly to known routines, which becomes problematic, when these routines have to be broken to achieve a given goal; third, the mindset of being focused too much on negative self-identities (i.e. using one’s own (negative) identity framework as the basis for future action, regardless of a long-term goal or current circumstances).

As a result, both major and minor decisions about educational behavior are made without considering a higher-level future goal, which can be dangerous as even minor decisions can have a negative effect in the long run. In all of these mindsets, it becomes clear that a long-term goal, especially one as far in the future as a college degree, is potentially less motivating than present circumstances. Although this perspective offers a superficially good explanation, it has not yet been substantiated. Numerous interventions based on this assumption, e.g. short-term motivational enhancements, did not necessarily have the effect of bridging the motivation of the long-term goal (Leuven, Oosterbeek & Van der Klaauw, 2010; Fryer, 2011). Thus, the theoretical approach offers only a limited explanation for why educational underinvestment occurs.

A perspective that also addresses motivation assumes that there are different mindsets regarding the trainability of one’s intelligence (Blackwell, Trzesniewski & Dweck, 2007). Intelligence is thus implicitly perceived as either malleable and trainable (i.e. having a growth mindset), or instead as fixed and unchangeable (i.e. having a fixed mindset). Numerous studies have found that individuals with a growth mindset perform better in academic contexts than individuals with a fixed mindset (Blackwell et al., 2007; Alan, Boneva & Erzag, 2019). This perspective is explained by the fact that under the belief of a trainable intelligence, a higher effort is automatically and naturally exerted, which results in good outcomes. This effort is even higher when affected individuals are experiencing a setback, which leads to the intention of making
even more of an effort - therefore, assuming a growth mindset, setbacks can potentially be useful (Adioto, 2015).

Against the background of this theory, however, it cannot be assumed that individuals with a growth mindset can experience a setback that results in discouragement, uncertainty and, ultimately, dropping out of a study program. One way to include this dimension is offered by Köszegi, Loewenstein, and Murooka (2021), which will be laid out in the following chapter.

3. Theoretical Background

When looking at how the question of dropping out of higher education can be tackled, there have already been numerous approaches. One of the most obvious is to access it via academic achievement. Indeed, GPA is one of the most informative factors when it comes to predicting drop-out, although this issue is always attributed a multidimensional basis (Araque, Roldán & Salguero, 2009). However, this assumption does not seem to apply easily to students who drop out of a study program at a certain point by their own decision. These students do not leave higher education institutions due to a deficient performance. Intuitively, it could be assumed that they would have no reason to take such a step because of their grades as they display sufficient and appropriate performance. Accordingly, the question arises as to whether additional factors play a greater role.

One of the larger aspects, sometimes understood to be at the core of any retention effort, is self-esteem, i.e. the value a person ascribes to him/herself in a given context based on feedback that is being received from others during social interaction (Martin-Albo et al., 2007). There appears to be strong evidence overall that high scores in self-esteem are associated with high academic performance (Rosli et al., 2012; Honicke & Broadbent, 2016). With self-esteem being an alterable dimension, which scores can change due to specific events and interpretations of these events, the questions of how self-esteem can change in the first place and how these changes affect academic performance arise.

Damage to self-esteem can occur primarily when initial expectations, in whatever respect, do not match real-world experiences (Casanova et al., 2021). Köszegi et al. (2021) have developed a model dealing with fragile self-esteem that will be applied in this study. Building on their theoretical results, we suggest that students take their own self-esteem into account when making decisions. Intermediate results throughout the course of the program, which are deemed unfavorable by students may cause them to become dejected and question their own self-worth. Functionally, this acts as a direct utility penalty. When deciding at any given point in time whether to quit or continue studying such students would trade-off the expected pecuniary benefits of graduating with the potential personal setbacks entailed with enrolment. If the perceived negative shock to self-esteem is high enough, students may choose to quit studying in order to shield themselves from further disappointment.

In the following paragraphs we will describe the core concepts of this model. The first core concept is self-esteem itself, which is dependent on the respective positive or negative interpretation of one's own memories, which in turn can lead to extremely different self-assessments.

The second core concept is the fragility of self-esteem, which arises primarily from an unjustified and contradictory assessment of the self, measured against the objective facts. This way of assessing the self is always problematic in principle. However, it is especially problematic when high fragility is paired with high self-esteem at the outset, which is termed “insecurity” (Köszegi et al. 2021, p. 2027). In this context it is assumed that easily shakable (i.e. fragile) and simultaneously high self-esteem can result in generally bad behavior, going so far as being self-destructive or even violent (Baumeister, Bushman & Campbell, 2000). The notion is connected to the thought that once high self-esteem is achieved, it must be defended not to be lost again, even if this defense results in otherwise counterproductive measures. Within this model, Köszegi et al. (2021) have drawn a direct relation between ability and the level of self-esteem: As self-esteem increases, ability is supposed to be a defense measure and therefore must also increase to avoid ending up in insecurity. This requirement exacerbates the problem, especially in higher education context, since academic competencies are naturally still underdeveloped at the beginning of an academic career but are simultaneously already demanded to a certain degree to function as a defense.

The third core concept are minor and major threats to self-esteem and the individuals’ reaction to them. A reaction is usually a defense mechanism of the psyche to avoid coping with any potential trauma coming with these threats (Campbell et al., 2003). Campbell et al. (2003) have termed these threats as “shocks” and “ego-shocks” (p. 84), respectively, the latter being particularly meaningful as experiencing ego-shocks increases the probability of damaging one's self-esteem in the long-term as recovery is especially difficult. As Köszegi et al. (2021) point out, the aforementioned fragility can influence the level of change of self-esteem after such a threat: The greater one's fragility the more impact the shock has on self-esteem. In this context fragility is particularly problematic, as it can lead individuals to being avoidant of taking further actions, because it is assumed that these actions could decrease self-esteem even further. Under certain circumstances, this aversion to take action can lead students (even at high self-esteem levels) to no longer finding access to actual studying and entering a downward spiral. The particular combination of high self-esteem and high fragility (insecurity) adds to this, as affected individuals are particularly prone to self-handicapping or self-sabotage, which adds even more possibilities for an unsuccessful completion of a study program.

Köszegi et al. (2021) relate these shocks, among other things, to the need for success that the individual attaches to the endeavor at hand, especially in this usually new stage of life represented by studying. The perceived control and thus the ability to predict indicators for success during that time, with all its conditions (Stupinsky et al., 2007; Martin & Pindyck, 2015) is particularly low and therefore provides a special breeding ground for such shocks. The scope of these breeding grounds can be diverse and include, among others, the perception of the curriculum in terms of usability or usefulness, or the (lack of) membership in a social group (Tinto, 2015). However, strong evidence is found that all of these aspects lead to lower academic engagement and are strong predictors of drop-out, if they are perceived negatively (Casanova et al., 2021).

One particular form of shock (Social Comparison) and another breeding ground for vulnerability to shock (Gender) will be considered in more detail below.

3.1. Social Comparison as a Channel of Self-Esteem

It can be assumed that people have a fundamental desire to assess their own abilities on a stable basis. Where this is only possible to a limited extent on the basis of objective criteria, comparison with other persons, i.e., social comparison, is a possible substitute (Festinger, 1954).

1 There is a different but closely related concept: self-efficacy (“the levels of confidence individuals have in their ability to execute certain courses of action, or achieve specific outcomes” (Lane, Lane & Kyriianou, 2004, p. 247)), which could be answering the question of why students drop out of university even though their grades would not give any indication for this action, especially in combination with the construct of self-esteem mentioned above (Tinto, 2015). The causal direction between the two constructs self-esteem and self-efficacy have not yet been explored more deeply.
Social Comparison Theory has received a great deal of attention over the past decades and has reached very different results in its investigations (Suls and Wheeler, 2000). What is common to all approaches is that comparison is functional, i.e. allowing the comparing individuals to self-improve or self-enhance or self-evaluate; furthermore, these comparisons, depending on the specific function, are usually provided with a direction, i.e., comparison is associated with individuals of lower, higher, or equal ability; lastly, depending on the direction of the comparison, it usually has an effect on certain behavioral patterns. In affective and cognitive domains, upward comparison tends to provide negative self-evaluation, whereas downward comparison tends to provide positive self-evaluation; I feel better, because others performed worse than I did or I feel worse, because others performed better than I did. In behavioral domains, the opposite seems to be the case. Upward comparison allows for an improvement of one’s own abilities, whereas downward comparison seems to be useless, as it cannot influence performance (Dijkstra et al., 2008): Looking at others who performed better than me, I can use them as a role model or looking at others who performed worse than me does not help me improving myself. Comparing with individuals who are at a similar ability level hardly seems to take place; not only do most individuals seem to prefer upward comparison, this preference even seems to be carried out unconsciously (Dijkstra et al., 2008). This aspect becomes all the more important as in most higher education contexts comparison is not deliberate but forced, because grades are usually published openly, even if anonymous.

Thus, it becomes important under which conditions the potential benefits of upward comparison (enhanced performance by creating a role model) balance out the potentially accompanying disadvantages (highlighting of one’s own shortcomings).

The Big-Fish-Little-Pond-Effect (BFLPE) plays a special role in this context. It describes that students of the same ability in different academic environments come to different, dependent evaluations regarding their own academic self-concept and, thus, to different evaluations of the self: The higher the average academic level, the lower the academic self-concept (Marsh et al., 2008). Students who are located in an environment with other less able students than themselves may develop a higher academic self-concept and a higher self-esteem. On the other hand, the same students would develop a low academic self-concept if they were located in an environment, in which there were more capable students than themselves. Thus, in terms of academic self-concept, it is more desirable to be a big fish in a small pond than the other way around.

The BFLPE addresses one of the most important criticisms of classical social comparison theory as well: “[...] the perceptions of the self cannot be adequately understood if the role of frames of references is ignored.” (Marsh et al., 2008, p. 321)

This can be seen as a contrasting effect based on the distinction between perceiving one’s own abilities and the abilities of others. This could lead to a negative evaluation of the self, rather than a more desirable assimilative effect (i.e. role model creation) based on an interpretive framework. Such an evaluation can be considered a shock according to the works of Köszegi et al. (2021). Given this background and assuming a high-ability environment, it would be reasonable to assume that the BFLPE exists and exerts an influence on students’ academic self-concept. This influence would remove the objectivity of a comparison between assigned grades as representation of one’s performance and would lead to decreased academic self-concept and, ultimately, self-esteem.

3.2 Gender as a Channel of Self-Esteem

Here are a number of theories why women are at higher risk for drop-out of university. Besides self-esteem Stoessel et al. (2015) found other reasons for women quitting a study program, e.g. a lack of social support or dissatisfaction with the program. However, this statement requires further research, as female students may have to face different challenges than male students while studying, e.g. motherhood. These challenges are not discussed in detail in this research. The gender-specific relationship between subjective well-being and academic achievement is also quite interesting. The findings indicate that women benefit from well-being and can use it as a personal resource for academic achievement. Men, on the other hand, seem to be less affected by well-being (Hadjer et al., 2014). We can assume that shocks to self-esteem should therefore have less impact on men than on women.

Earlier studies show that there are gender differences in the level of self-esteem (Kling et al., 1999; Robins & Trzesniewski, 2005; Damota et al., 2019). McMullin & Cairney (2004) confirm that in groups of higher age the level of self-esteem is lower for both, men and women. Furthermore, they show that self-esteem is generally lower among women in all age groups. The study by Taminí and Vallbéygi (2011) supports this for higher education: Female students’ overall scores of self-esteem were lower than male students. The results show that men with higher self-esteem are more likely to accept their positive evaluations than women with suspected lower self-esteem. In adulthood, the level of self-esteem may generally change as life events affect the development of self-esteem. Depending on how the individual reacts to these life events, self-esteem increases or decreases in adulthood (Robins & Trzesniewski, 2005).

Interestingly, children’s self-esteem is similar at a high level for boys and girls, the gender gap becomes only apparent in adolescence: Adolescent boys have higher self-esteem than adolescent girls. As this gender gap persists into adulthood, adult women are likely to have lower self-esteem than adult men. Numerous studies address the reasons why women’s self-esteem declines in adolescence (Kling et al., 1999; Robins & Trzesniewski, 2005). The following trend is shown: Self-esteem is high in childhood, drops during adolescence, rises throughout adulthood, and declines in old age.

According to Clemens and Bean (1990), the level of self-esteem is one of the most important factors influencing the learning processes and therefore performance in educational settings. Postiglione et al. (2003) confirm that positive experiences students have at school later impact their self-esteem and their plans for post-secondary education. Furthermore, the literature shows a correlation between self-esteem and academic achievement in higher education, too (Asakeréh & Yousofi, 2018). Taminí & Vallbéygi (2011) confirm that men find it easier to evaluate their abilities to a desirable level and for this reason are more capable to face academic challenges, because self-esteem is associated with academic performance. Women with lower self-esteem find this more difficult and their academic performance is therefore at greater risk. As Pearlín et al. (1981) point out, individuals who have a higher level of self-esteem are thought to cope better with stress. This could be one more reason why women are more likely to quit their studies.

4. Research Hypotheses

Based on the theory elaborated on in Section 3, we consider the following hypotheses:

- (Dejection) HA: Worse individual grades increase the likelihood of a student quitting their studies.
- (Social Comparison) HB: A worse grade average in the student’s department decreases the likelihood of a student quitting their studies.
- (Gender) HC: A student being female increases the likelihood of the student quitting their studies.

5. Methodology

Our data comprises all students that started their coursework in business studies and neighboring subjects at an Austrian university of applied sciences between 2009 and 2020. These courses include 3-year Bachelor-programs and 2-year Master-programs. In total, we have information on the study outcomes of
8648 students from 16 departments. In all analyses, a single student serves as our unit of observation.

In this article, we mainly attempt to explain whether students successfully finish their classes by obtaining the respective degree. To this end, we introduce the binary variable Dropout, coded to measure 0 if students have either graduated from their program or are still enrolled at the time of measurement and 1 otherwise. Moreover, our data allows us to add further nuance. We separate students that dropped out from their programs (Dropout=1) into two groups. First, students have three attempts to successfully pass any given class. If students do not reach a sufficient grade on the last attempt, possibly by subpar achievements or not handing in any solutions, they are unenrolled from their program and cannot participate in any further classes of their cohort. We introduce a new variable Fail that codes students dropping out from their studies through unsuccessful examinations as 1 and 0 for all other students. Second, students can be unenrolled from their studies by proactively approaching their department and stating that they wish to cease their studies. To indicate this, the variable Quit will measure 1 and 0 otherwise.

We hypothesize that distinguishing between Fail and Quit as two different modes of unsuccessful course completion allows us to, on average, differentiate between inability and fragile self-esteem as determinants. Students who are more constrained by ability than by self-esteem may try to pass but fail. Hence, factors indicating low ability of students should correlate positively with Fail and but not with Quit. Conversely, students who are more constrained by self-esteem than ability should be more susceptible to cease their studies in order to avoid future disappointment although they would possess the capability to pass their exams. Therefore, factors indicating an increasing vulnerability of students should correlate positively with Quit but not with Fail.

We propose two proxies to capture shocks to the self-esteem of students. First, we hypothesize that students do not only determine their self-worth with regards to their own performance, but also how it relates to the performance of their peers. A bad grade will be less likely to cause a student to feel dejected, if many other students experienced a lackluster performance, too. Conversely, even a mediocre grade will cause negative feelings if many of their peers, on average, performed well (see Section 3.1 for a theoretical foundation). We use the average grade performance in the department of each student (Dep. Avg. Grade) to account for the effects of a social comparison on the self-esteem of students. Importantly, students in our sample are well aware of the average grades of their cohorts. The main software interface used in the school to communicate exam grades displays the class average alongside it. Grades in the institution are measured on a scale from 1 to 5, where increasing numbers correspond to worse performances and a 5 denotes an unsuccessful attempt. Accordingly, we expect a negative relationship between Dep. Avg. Grade and Quit: worse average grades (higher numbers of Dep. Avg. Grade) mitigate the shock any given individual performance of a student and thus decreases the likelihood that the student will quit the studies in order to avoid further disappointments in the future.

Second, we use the student’s gender as a proxy of vulnerability to self-esteem shocks. As discussed in Section 3.2, we expect females, ceteris paribus, to have a lower average level of self-esteem, increasing the likelihood for self-esteem to become a constraining factor for successfully finishing their higher education. We denote gender as a binary variable, named Female, measuring 1 if the student is female and 0 otherwise. Analogously to the previous paragraph, we expect that a stronger vulnerability to self-esteem shocks lead to an increased likelihood that students will forfeit their studies, resulting in a positive relationship between Female and Quit. To reiterate an earlier point: if female students would possess a higher (lower) intellectual ability than male students, our underlying model would suggest Female to have a negative (positive) effect on Fail. As these effects do not directly stem from the students’ self-esteem, these relations lie outside the scope of this article and we do not make claims on them.

A number of controls supplement our analysis. We account for the student’s overall average grade at the time of measurement, denoted Grade Average. As the previously mentioned Dep. Avg. Grade, grades are measured on a scale from 1 to 5, denoting best to worst performances. Moreover, we control for the student’s age as it has been identified as a robust determinant of successful study completion by the previous literature (e.g. Grässel, Mosenhauer & Pammer, 2022). Lastly, we add year dummies to reduce noise from any possible fluctuations of study success over time unrelated to our variables of main interest, leaving out the first registered year 2009 for comparison.

Tab. 1 provides the means, standard deviation (where applicable) and minimum and maximum realizations of key variables in our study. As can be seen, roughly 10% students do not finish their studies successfully, with students quitting their studies accounting for 58.8% of them. Both the gender ratio of 0.592 females and the average age of 22.78 suggest that the sample is representative of the general population of business students. Importantly, there are sizeable variations in average grades across departments, ranging from 1.84 to 2.52. This provides ample opportunity for different patterns in social comparison effects to arise and, therefore, to measure them.

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean (1)</th>
<th>Std. Dev. (2)</th>
<th>Min. (3)</th>
<th>Max. (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A: Study Outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropout</td>
<td>0.107 %</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Quit</td>
<td>0.063 %</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td>0.044 %</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Panel B: Predictor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dep. Avg. Grade</td>
<td>2.18</td>
<td>.203</td>
<td>1.84</td>
<td>2.52</td>
</tr>
<tr>
<td>Female</td>
<td>0.591 %</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Grade Average</td>
<td>2.17</td>
<td>.674</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>22.78</td>
<td>4.85</td>
<td>16</td>
<td>56</td>
</tr>
</tbody>
</table>

Notes: This table provides descriptive statistics within the sample for our key variables. All study outcomes are dummy variables, coded with 1 if the students leave the study program. Dep. Avg. Grade and Grade Average are measured on a scale from 1 to 5, best to worst. Female measures 1 for females and 0 otherwise. Age is the student’s age in years.

Source: Research results, 2022

6. Results

Underlying our analysis is the assumption that a lack of intellectual ability is the main binding constraint in unsuccessfully finishing their studies for students who Fail their studies, while fragile self-esteem is the main constraint for students who Quit their studies. We confirm that at the time of being excluded from their studies, students who Fail have a worse grade average (3.45) than students who Quit (2.84). A t-test reveals that this difference is highly significant (p < 0.001). Indeed, we find that, at the time of leaving the study program, 37.8% of students have a grade average better than 3, typically identified in German grading schemes with being a ‘good’ grade or better. Instead of insufficient cognitive ability, students Quit their studies to avoid further disappointments in the future. Fittingly, Fig. 1 shows that in
the early stages of study programs (semester 1 and 2), Dropouts consist mostly of Quits while thereafter the balance shifts consistently and continuously towards Fails. While this evidence aligns with our theory, we cannot exclude other possible explanations for the behavior. We consider further test to substantiate our hypothesized channels.

![Semester of Dropout by Type](image)

Figure 1: Relative frequency of time (semester) of dropping out for students who Quit and Fail.

Source: Research results, 2022

To find the effects of self-esteem on study completion, we run a regression. Our unit of observation is a single student. Letting \( i \) index students, \( j \) an academic department and \( t \) the cohort starting year, the regression equation can be written as follows:

\[
\text{Dropout}_i = \beta_0 + \beta_1 \cdot \text{Dep. Avg. Grade} + \beta_2 \cdot \text{Female} + \beta_3 \cdot \text{Grade Average} + \epsilon_i
\]

\( \epsilon_i \) denotes the student’s exposure to the environment. To find the effects of self-esteem on study completion, we run a linear probability regression with robust standard errors of Equation (1). Column (1) shows the effects of the independent variables on unsuccessful course completion in general. Column (2) and (3) add nuance to this inquiry by investigating the relations between the determinants and the two subcategories of unsuccessful course completion, namely repeatedly failing exams (Fail) and students voluntarily, proactively informing the school to rescind their enrolment (Quit), respectively.

### Table 2: Effects of Self-Esteem on Study Completion from a Linear Probability Regression

<table>
<thead>
<tr>
<th></th>
<th>(1) Dropout</th>
<th>(2) Fail</th>
<th>(3) Quit</th>
<th>(4) Quit</th>
<th>(5) Quit</th>
</tr>
</thead>
<tbody>
<tr>
<td>\text{Dep. Avg. Grade}</td>
<td>(-.0459^{* * *})</td>
<td>(-.0250^{* * *})</td>
<td>(-.0708^{* * *})</td>
<td>(.0998^{* * *})</td>
<td></td>
</tr>
<tr>
<td>\text{Female}</td>
<td>(-.0161^{* * *})</td>
<td>(-.00367^{* * *})</td>
<td>(-.0197^{* * *})</td>
<td>(.0209^{* * *})</td>
<td>(.0176^{* * *})</td>
</tr>
<tr>
<td>\text{Grade Average}</td>
<td>(+.221^{* * *})</td>
<td>(+.119^{* * *})</td>
<td>(+.102^{* * *})</td>
<td>(+.277^{* * *})</td>
<td></td>
</tr>
<tr>
<td>\text{Age}</td>
<td>(.00219^{* * *})</td>
<td>(.00204^{* * *})</td>
<td>(.000147^{* * *})</td>
<td>(.000247^{* * *})</td>
<td>(.000127^{* * *})</td>
</tr>
<tr>
<td>\text{Grade Interact.}</td>
<td>(-.0728^{* * *})</td>
<td>(+.101^{* * *})</td>
<td>(+.0176^{* * *})</td>
<td>(+.0176^{* * *})</td>
<td>(+.0176^{* * *})</td>
</tr>
<tr>
<td>\text{Comparat. Grade}</td>
<td>(+.339^{* * *})</td>
<td>(+.313^{* * *})</td>
<td>(+.0260^{* * *})</td>
<td>(+.409^{* * *})</td>
<td>(+.426^{* * *})</td>
</tr>
<tr>
<td>\text{Year F.E.}</td>
<td>(-.834^{* * *})</td>
<td>(-.102^{* * *})</td>
<td>(-.076^{* * *})</td>
<td>(-.323^{* * *})</td>
<td>(-.216^{* * *})</td>
</tr>
</tbody>
</table>

N: 8648

Notes: This table provides the coefficient estimates from a linear probability regression with robust standard errors of Equation (1). Column (1) shows the effects of the independent variables on unsuccessful course completion in general. Column (2) and (3) add nuance to this inquiry by investigating the relations between the determinants and the two subcategories of unsuccessful course completion, namely repeatedly failing exams (Fail) and students voluntarily, proactively informing the school to rescind their enrolment (Quit), respectively.

Source: Research results, 2022

As should be expected, Grade Average increases the chance of unsuccessful course completion in all regards. Worse grades (i.e., higher numbers of Grade Average) indicate a lower intellectual ability and therefore increases the likelihood that a student will Fail. Accordingly, we find that the coefficient is positive and highly robust (\( r = .19, p < .001 \)). Worse grades also, on average, increase the disappointment a student experiences from their own performance. Hence, we also find that worse grades increase the likelihood of students to Quit their studies (\( r = .02, p < .001 \)). As worsening grades increase both the likelihood of Fail and Quit, the overall effect on Dropout is unambiguous.

The effects of the grades of students’ peers on study completion, however, are more profiled. Column (3) shows that worse average grades in the department (higher numbers of Dep. Avg. Grade) decrease the chance of quitting (\( r = -.708, p < .001 \)). These findings are in line with our hypothesis that students measure their self-esteem not only by their individual performance, but also by how their performance compares to their environment. Bad performances weigh less heavy if the average peer performs worse. Interestingly,

---

1 Several departments include courses that finish and are graded before the end of the semester. Reasons for this include semesters that are split into three blocks of two courses each or classes held in a concentrated fashion over a few weekends. Such possibilities of receiving grades during the semesters explain the occurrence of both Quits and Fails in the first semester.
we see the opposite effect of peer grades on the likelihood of students failing their exams. We surmise that this relationship is indicative of more demanding programs with worse average grades and less demanding ones with better average grades. Students then have a higher chance of experience a Fail in more demanding programs. However, answering this question with rigor lies outside the scope of this article. Overall, we observe that effects from the Fail-channel dominates effects from the Fail-channel, so that total effect of the department average grade on course completion is negative. This means that, surprisingly, worse average grades in a department, ceteris paribus, increase the likelihood of course completion by curbing disappointment.

According to the specification in column (3), performance of peers affects a student’s self-esteem irrespective of the own performance. We consider two further specifications to explicitly model the mitigating effects of poorly performing peers for students with bad grades in particular. In column (4), we introduce the interaction between Grade Average and Dep. Avg. Grade. The resulting variable Grade Interact. then captures moderating effects between the two variables. The negative coefficient signifies that indeed the combination of bad grades with a bad average level of grades among peers reduces students quitting their studies (p < .01), despite this leading to a weakly positive direct effect of Dep. Avg. Grade that our theoretical model does not account for. In column (5), we consider the variable Comparat. Grade defined as the difference Grade Average – Dep. Avg. Grade. Again, our results confirm our hypotheses.

In Table 5, we analyse the combination of failing an exam with peers having lower grades, which increases the chance of failure to the extent that peer grades cluster at the department level instead of robust standard errors. As the combination of low grades and peer ratings is more likely to be an indicator of more demanding programs. However, answering this question with rigor lies outside the scope of this article. Overall, we observe that effects from the Fail-channel dominates effects from the Fail-channel, so that total effect of the department average grade on course completion is negative. This means that, surprisingly, worse average grades in a department, ceteris paribus, increase the likelihood of course completion by curbing disappointment.

### Table 3: Effects of Self-Esteem on Study Completion from a Linear Probability Regression with Clustered Standard Errors

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropout</td>
<td>Dep. Avg. Grade</td>
<td>.0459</td>
<td>.0250</td>
</tr>
<tr>
<td></td>
<td>(.145)</td>
<td>(.145)</td>
<td>(.218)</td>
</tr>
<tr>
<td>Fail</td>
<td>Female</td>
<td>.0161**</td>
<td>-.00367</td>
</tr>
<tr>
<td></td>
<td>(.227)</td>
<td>(.80)</td>
<td>(3.99)</td>
</tr>
<tr>
<td>Quit</td>
<td>Grade Average</td>
<td>.221***</td>
<td>.119***</td>
</tr>
<tr>
<td></td>
<td>(.71)</td>
<td>(.72)</td>
<td>(5.54)</td>
</tr>
<tr>
<td>Year F.E.</td>
<td>Age</td>
<td>.0029**</td>
<td>.00204**</td>
</tr>
<tr>
<td></td>
<td>(.79)</td>
<td>(.99)</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Constant</td>
<td>-.339***</td>
<td>-.313***</td>
<td>.0260</td>
</tr>
<tr>
<td></td>
<td>(.539)</td>
<td>(.538)</td>
<td>(.042)</td>
</tr>
<tr>
<td>N</td>
<td>8648</td>
<td>8648</td>
<td>8648</td>
</tr>
</tbody>
</table>

Notes: This table provides the coefficient estimates from a linear probability regression of our proxies for vulnerability to self-esteem shocks on the chance of successful study completion, while controlling for miscellaneous factors. Standard errors are clustered at the department level. Statistical significance is denoted as follows: *p < .10, **p < .05, ***p < .01.

### Source: Research results, 2022

### Table 4: Effects of Self-Esteem on Study Completion from a Logistic Regression

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropout</td>
<td>Dep. Avg. Grade</td>
<td>.041***</td>
<td>1.101***</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.17)</td>
<td>(.5)</td>
</tr>
<tr>
<td>Fail</td>
<td>Female</td>
<td>.221***</td>
<td>-.285**</td>
</tr>
<tr>
<td></td>
<td>(2.65)</td>
<td>(.215)</td>
<td>(3.59)</td>
</tr>
<tr>
<td>Quit</td>
<td>Grade Average</td>
<td>2.181***</td>
<td>2.229***</td>
</tr>
<tr>
<td></td>
<td>(.27)</td>
<td>(.52)</td>
<td>(18)</td>
</tr>
<tr>
<td>Year F.E.</td>
<td>Age</td>
<td>.050**</td>
<td>.0365**</td>
</tr>
<tr>
<td></td>
<td>(2.91)</td>
<td>(3.31)</td>
<td>(.21)</td>
</tr>
<tr>
<td>Constant</td>
<td>-.602***</td>
<td>-12.23**</td>
<td>-3.444**</td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.14)</td>
<td>(.70)</td>
</tr>
<tr>
<td>N</td>
<td>8648</td>
<td>8648</td>
<td>8648</td>
</tr>
</tbody>
</table>

Notes: This table provides the coefficient estimates from a logistic regression of our proxies for vulnerability to self-esteem shocks on the chance of successful study completion, while controlling for miscellaneous factors. t statistics in parentheses. Statistical significance is denoted as follows: *p < .10, **p < .05, ***p < .01.

### Source: Research results, 2022

Tab. 5 and Tab. 6 show coefficient estimates from a regression exercise analogue to Tab. 2 (regression equation (1) using a linear probability model with robust standard errors) with the samples restricted to Bachelor and Master students, respectively. Comparing the two groups, we find only minor differences in the results. Although the effect of Dep. Avg. Grade on Quit is slightly higher for Bachelor students, the effect Female on Quit is lower. For both groups, the direction of all effects are maintained and they are significant at least at the 5% level. Based on these findings, we suggest that self-esteem is an important factor for study success on all course levels.
are interested in protecting their self-esteem from collapsing, especially when they perceive it to be fragile. Third, a common way to do so, among others, is to avoid the threatening situation, e.g. by voluntarily withdrawing from studying any further (Crocker & Park, 2003). The Big-Pond-Little-Fish effect can be seen as a reflection of such a strategy as it enables students to compare their own perceived poor performance and to translate this comparison into an interpersonal relation and thus compensate for it (Wood, Giordano-Beech, & Ducharme, 1999).

These findings have implications for further action in Higher Education Institutions. Tinto (2006) states that faculty actions have a tremendous effect on student retention rates. Thus, the retention rate is dependent on the design of teaching and does not feed solely on the motivation and ability of students: “...successful student retention is at its root a reflection of successful student education. That is the job of the faculty.” (Tinto, 2006, p. 8). It is precisely this ability to influence that should be considered in the future, both on the operational level of individual lecturers and on the strategic level, e.g., in faculty assignment planning.

A key issue in this context is that fragility of self-esteem in academic contexts is fostered by students placing a one-sided focus on their GPA instead of deeming the actual goal of learning important (Crocker & Luhtanen, 2003). Thus, highlighting learning goals, clarifying their importance, and continuously working toward these goals during a course can be an adequate way to prevent fragility that may exist from taking hold in the first place. This can be achieved by discussing set learning goals with students in terms of personal meaning and professional usability before teaching starts. Furthermore, we suggest that on an institutional level a helpful way could be the implementation of support programs or contact persons to point out the existing connection between self-esteem and academic achievement to students on the one hand, and to help students in dealing with fragile self-esteem as well as with the accompanying stress. This type of psychological intervention has already proven effective (Ghosal et al., 2020).

Similarly, examination and evaluation methods need to be reconsidered in light of this. Grades are first and foremost a symbolic representation of academic achievement, but their rewarding is subject to clear dangers and they are typically not comparable in all circumstances (Sadler, 2009). A very intuitive approach to this problem would be restricting access to other students’ grades but social comparison takes place even if students are not graded at all (Fleischmann et al., 2021). Therefore, it seems to us all the more important that the contingency of assigned grades is made clear, e.g. by using different raters or even peer assessments (without basing the grade entirely on them) and that their abstractness is lowered by accompanying qualitative feedback.

To us, one of the core issues seems to be that higher education lecturers usually bring in the ways of teaching, assessing, and grading, which they have experienced during their own study programs. This happens mainly because they seem to be the only group of educators, which are not specifically trained for teaching (Tinto, 2006). Thus, on an institutional level this would mean that lecturers have to be trained more extensively in these ways of assessing and grading students, which would necessarily also include a reflection of their previously experienced ways. This could happen during their doctoral stage or at their respective current higher education institution.

Furthermore, we argue that our findings have a high economic relevance. The direct, individual benefits of education on income generation are well documented (Psacharopoulos and Patrinos, 2018). Moreover, higher education is a major constituent of the level of human capital in a given country. This national production factor has long been identified as a major drive of long-term economic growth and well-being (Mankiw, Romer & Weil, 1992). Understanding the reasons behind discontinuing education processes and finding suitable interventions to properly address them thus potentially carries far-reaching ramifications.

### Table 5: Effects of Self-Esteem on Bachelor Study Completion from a Linear Probability Regression

<table>
<thead>
<tr>
<th>(1)</th>
<th>Dropout</th>
<th>(2)</th>
<th>Fail</th>
<th>(3)</th>
<th>Quit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep. Avg. Grade</td>
<td>-1.09***</td>
<td>.0196</td>
<td>-1.26***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.00802</td>
<td>-.00972</td>
<td>.0177**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Average</td>
<td>.239***</td>
<td>.123***</td>
<td>.116***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.0232***</td>
<td>.02216***</td>
<td>.00105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-2.49***</td>
<td>-3.022***</td>
<td>-0.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year F.E.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: This table provides the coefficient estimates from a linear probability regression of our proxies for vulnerability to self-esteem shocks on the chance of successful study completion, while controlling for miscellaneous factors. * t statistics in parentheses. Statistical significance is denoted as follows: * p < .10, ** p < .05, *** p < .01.

Source: Research results, 2022

### Table 6: Effects of Self-Esteem on Master Study Completion from a Linear Probability Regression

<table>
<thead>
<tr>
<th>(1)</th>
<th>Dropout</th>
<th>(2)</th>
<th>Fail</th>
<th>(3)</th>
<th>Quit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep. Avg. Grade</td>
<td>-0.781***</td>
<td>.0226</td>
<td>-1.01***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.0306***</td>
<td>-.00942</td>
<td>.0206***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Average</td>
<td>.146***</td>
<td>.105***</td>
<td>.0409***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.0038***</td>
<td>.00293*</td>
<td>.00334***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-2.99***</td>
<td>-2.97***</td>
<td>-2.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year F.E.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: This table provides the coefficient estimates from a linear probability regression of our proxies for vulnerability to self-esteem shocks on the chance of successful study completion, while controlling for miscellaneous factors. * t statistics in parentheses. Statistical significance is denoted as follows: * p < .10, ** p < .05, *** p < .01.

Source: Research results, 2022

### 7. Discussion

Our study addressed the question whether social comparison or gender-based self-esteem constraints play a significant role in completing study programs. We hypothesized that voluntary dropout (i.e. quitting) is based on self-esteem constraints, whereas involuntary dropout (i.e. failing) happens mainly due to lack of skills. The results show that fragile self-esteem can indeed be considered a relevant factor for voluntary dropout. The academic performance of one’s environment plays a role in that it can influence whether one’s academic performance is evaluated positively or negatively in comparison. This evaluation can be the basis for a threat to one’s own self-esteem and thus reduce the self-esteem level if self-esteem is fragile. Furthermore, we could prove that females in particular are susceptible to this effect.

The results are consistent with previous research, which suggests, on the one hand, that not low self-esteem itself, but its instability is the basis for dropout in higher education (Crocker & Luhtanen, 2003; Kernis, 2003). Second, the literature suggests that individuals
Our study is subject to a number of limitations. Due to our sample consisting of historic administrative data, we do not have direct measurements of self-esteem levels. This would allow us to relate our arguments more closely and explicitly to the proposed channels, rather than finding indirect evidence for the proposed effects via proxies. Nevertheless, we argue that the consistency and depth of our results make our article a tentative, yet valuable contribution. As our data depicts field evidence from a high-stake process representing a serious time investment from the students, we believe that the elicited behavior is highly genuine. Marrying survey-tools, such as Rosenberg (1979)’s self-esteem scale, with administrative data could be an interesting avenue for further research.

Also, we cannot and do not claim that our study includes all relevant factors related successful course completion. Hence, our estimation likely suffers from omitted variable bias. Although this should not qualitatively affect our findings, it might affect the size of the discovered effects. In reality, the effect of lacking self-esteem on course completion is likely larger than stated in our study. A regression exercise based on a model encompassing both reason for Quitting and Failing studies may be an interesting avenue for future research. To provide a clean estimate of the relation between internal constraints and course completion in higher education, it would be desirable to exogenously manipulate self-esteem in a randomized fashion and measure its effects.

8. Funding

his study received no specific financial support.

9. Competing interests

he authors declare that they have no competing interests.

References


Analyzing Decision-Making Factors for Using Social Media: The Role of Trust and Information Sharing

M. Isti’anah†, U. Suhud‡, O. Usman‡‡

Purpose: This study is aimed at explaining the factors that influence a person to decide to use TikTok in the Jabodetabek (Jakarta-Bogor-Depok-Tangerang-Bekasi) area. This study also uses the variables of self-efficacy, utilitarian value, hedonic value, information sharing, trust, and decision-making.

Design/Method/Approach: Quantitative approaches and explanatory research are used in this study. Respondents were consumers who used the TikTok application in the Jabodetabek area to determine the number of samples. The present study uses non-probability sampling and convenience sampling techniques with 252 respondents. Data collection methods used questionnaires, and data were analyzed using Exploratory Factor Analysis (EFA) and the Structural Equation Modelling (SEM) method with the help of AMOS 24.

Findings: The findings of this study indicate that self-efficacy and hedonic value positively affect trust, and trust positively affects information sharing and decision-making. Nevertheless, the results of this study also explain that self-efficacy does not affect information sharing. The utilitarian value does not significantly affect trust, and information sharing does not affect decision-making.

Theoretical Implications: The study contributes to the existence literature on Social Media Use and Social Media Marketing especially about variables used in this study, wherein concludes that trust play an important role to use and activities of sharing information in social media.

Practical Implications: Social media service providers should focus on the influence of information sharing and decision-making in the TikTok application, namely trust. One example is making efforts to improve consumer trust by protecting the personal information which consumers provide on social networking sites and developing the TikTok application as advertising for business. This study can be used as a reference for advertisers when choosing advertising media in the TikTok application because hedonic values influence trust in the TikTok application. Advertisers are advised to promote products by providing hedonic value, such as TikTok dance.

Originality/Value: The use of the TikTok application is a trend that is currently popular. We tried to perform this research by using a dependent variable of decision-making that is not easy to find and is used in marketing studies.

Research Limitations/Future Research: For further research, it is recommended to modify the model using factors other than those used in this study, use similar research objects other than the TikTok application, with a broader scope of the study location.

Keywords: Decision-Making, Hedonic Value, Information Sharing, Self-Efficacy, Trust, Social Media, Utilitarian Value.

Reference to this paper should be made as follows:
Мета роботи: Це дослідження спрямоване на пояснення факторів, які впливають на прийняття рішення про використання TikTok в регіоні Джабодетабек (Джакарта-Богор-Депок-Тангеранг-Бекасі). У цьому дослідженні також використовуються змінні самоєфективності, утилітарної цінності, гедоністичної цінності, обміну інформацією, довіри та прийняття рішень.

Дизайн / Метод / Підхід дослідження: Це дослідження спрямоване на пояснення факторів, які впливають на прийняття рішення про використання TikTok в регіоні Джабодетабек. У цьому дослідженні також використовуються змінні самоєфективності, утилітарної цінності, гедоністичної цінності, обміну інформацією, довіри та прийняття рішень.

Результати дослідження: Результати цього дослідження вказують на те, що самоєфективність та гедоністичні цінності позитивно впливають на довіру, а довіра позитивно впливає на обмін інформацією та прийняття рішень. Разом з тим, результати дослідження також пояснюють, що самоєфективність не впливає на обмін інформацією. Утилітарна цінність суттєво не впливає на довіру, а обмін інформацією не впливає на прийняття рішень.

Теоретична цінність дослідження: Дослідження робить внесок в існуючу літературу щодо використання соціальних мереж та маркетингу соціальних мереж, особливо щодо змінних, використаних у цьому дослідженні, і робить висновок, що довіра відіграє важливу роль у використанні додатку TikTok.

Практична цінність дослідження: Постачальникам послуг соціальних мереж слід зосередити увагу на обмін інформацією та довірі, а також на впливі на додаток TikTok.

Оригінальність / Цінність дослідження: Використання додатку TikTok - це тренд, який наразі є популярним. Ми спробували провести це дослідження, використовуючи залежну змінну прийняття рішень, яку нелегко знайти і яка використовується в маркетингових дослідженнях.

Обмеження дослідження / Майбутні дослідження: Для подальших досліджень рекомендується модифікувати модель з використанням факторів, відмінних від тих, що були використані в даному дослідженні, використовувати аналогічні об'єкти дослідження, відмінні від додатку TikTok, і збільшити охопленням локації дослідження.

Тип статті: Емпіричний

Ключові слова: прийняття рішень, гедоністична цінність, обмін інформацією, самоєфективність, довіра, соціальні мережі, утилітарна цінність.
1. Introduction

The development of the world of technology and information is rising rapidly from year to year, making the internet a communication tool in great demand by the public. Therefore, there has been a shift in conventional communication to modern and all-digital. According to research results from the HootSuite site and marketing agency named We Are Social entitled “Digital 2021: Global Overview Reports” in January 2021, users who are active on social media in Indonesia will reach 170 million people (Kemp, 2021).

One of the most popular social media worldwide is TikTok. On September 27, 2021, through its official page, TikTok announced that TikTok had reached a billion monthly active users globally (TikTok, 2021). A survey by Sensor Tower (2021) showed that TikTok is the most downloaded non-gaming application globally in June 2021, with over 65 million installations. The country with the largest number of TikTok installations is China at 13%, followed by Indonesia at 12%.

The rapid growth of the number of TikTok users attracted our attention as a focal point for this study and examples of users of social networking sites in general. These findings are expected to provide beneficial insights into understanding users’ motives for making decisions to use social media. Understanding decision-making to use social media is essential in both academia and industry.

The TikTok application is not only used for fun or entertainment but can also be used to promote, sell, and advertise products or services. In marketing, online social platforms are becoming a tool used to advertise and promote products and services simply, cheaply, and continuously (Breitsohl et al., 2015). According to the analysis by The Content Factory, the average organization spends between $200 and $350 daily on social media marketing. This works to between $6,000 and $10,500 per month or between $72,000 and $126,000 per year (Yormark, 2021). Previous studies have found some interesting points, i.e., information or content shared through social media could influence consumer opinions and behaviour (Stephen, 2016). Fifty-two per cent of social media marketers believe social media positively influences their company’s revenue and sales (Reno, 2021).

Variable information sharing is a predictor that affects decision-making. According to Wasako and Faraj (2000), an essential element in social media is receiving and disseminating information, where social media has characteristics that support information-sharing activities. So that the increasing use of social media makes it a strong source of information, and information-sharing activities on social media are things that social media users pay attention to in determining the chosen social media platform. Moreover, trust is a predictor in determining information sharing and decision-making. Usu et al. (2011) postulated that trust is one of the main factors that affects the intensity of activities on social media and the intensity of information-sharing activities (Dwyer et al., 2007). When a consumer uses a product, the high level of trust the consumers have in the product or service is a valuable thing that must be considered.

When users trust a social media platform, they tend to share information and develop new relationships. This is because trust helps users reduce their perception of risk when dealing with other social media platforms (Van der Heijden et al., 2003). Such trust in a social media platform could make them more comfortable sharing their personal information. In general, the higher users’ trust in a social media platform, the more their willingness to share information on that social media to meet their needs.

The determinant predictor of trust and information sharing is self-efficacy. According to Chen and Cheng (2019), users’ psychological features, namely self-efficacy, can improve trust in the Facebook social media platform. Also, Kim et al. (2015) proved that there is a personal factor, namely self-efficacy, that can affect information sharing on social media. In information technology, self-efficacy is considered a determinant of individual behaviour and performance. Following the statements put forward by Compeau and Higgins (1995), self-efficacy is shown to understand an individual’s behaviour towards newly received information technology. Meanwhile, self-efficacy is shown to understand individual behaviour towards newly received information technology. Self-efficacy is related to the belief that we can take the expected action. Social media users who can influence situations and can use their skills well will improve trust and make users want to share information on social media.

Determining consumer trust in hedonic products and utilitarian value is a factor. Lee et al. (2015) mentioned that hedonic and utilitarian values are factors in fostering users’ trust on social media platforms. Blythe and Martin (2019) stated that Hedonic value is related to the fulfillment of pleasure or aesthetic aspects of a product where social media is a fun-oriented information system and the causes that influence a person’s use are related to the pleasure he/she feels. Meanwhile, utilitarian value is when consumers’ consumption is related to the function possessed by the product or service (Voss et al., 2003). The TikTok application provides several functional services, such as the ability to upload videos that offer various video editing features that can hone users’ creativity. Consumers could evaluate the functional dimensions they obtained.

Several researchers have studied decision-making. Most marketing, however, uses a purchase decision approach, such as the research conducted by Prasad et al. (2017) in India, Farmia (2017) in Indonesia, and also with a buying decision approach by Zolati et al. (2018) in Bahrain and Kitthndheachaoorn (2016) in Thailand. By far, the study on decision-making to use social media is still arduous to find, unlike previous studies. We used TikTok as the object of the current research. The present research was performed in Indonesia, using a dependent variable of decision-making to use TikTok to operate.

2. Theoretical Background

2.1. Decision-Making

Decision-making is the study based on the value of a person’s preference in identifying and choosing alternatives to make decisions (Davidaviene et al., 2020). Colquitt et al. (2011) declared that decision-making refers to the process of generating and choosing from a set of alternatives to solve a problem. It means that something cannot be categorized as decision-making without alternative options. Wang and Ruhe (2007) stated that decision-making is selecting which option is preferred or an action from a set of alternatives based on the benchmark or strategy given. According to Sadovskyh et al. (2015), there are five decision-making styles, i.e., rational, intuitive, dependent, avoidant, and spontaneous.

2.2. Information Sharing

Onsds-Raacke and Raacke (2010) defined information sharing as the extent to which a person has access to data from each other that is considered a common interest and benefit. Wu et al. (2015) explained that knowledge-sharing activities on social media in general also apply to information-sharing activities, such as when someone searches for information by sending messages on social media and then answering and sharing on social media.

Previous researchers have examined the effect of information sharing on decision-making (He et al., 2008; Xiao et al., 2016; Durmus, 2019; Yoo et al., 2019; Davidaviene et al., 2020). For example, David (2020) studied the factors that influence decision-making. With their research in the United Arab Emirates that involved virtual teams, they found that information sharing affects...
2.3. Trust

organ and Hunt (1994) defined trust as a party with confidence that the exchange partner has reliability and integrity. In virtual communities, trust is essential for exchanging information between fellow members and tends to rely on shared values and effective communication (Cyr et al., 2007). Gefen and Straub (2000) explained that trust on a website proves it can encourage the use of the website. The initial trust on the online site leads to the belief that the site can be useful.

Previous researchers have studied the effect of trust on decision-making. (Gao et al., 2005; Fadhillah & Farmania, 2017; Prasad et al., 2017; Vongurai et al., 2018; Davidaviciene et al., 2020). For example, Prasad et al. (2017) researched the factors influencing purchase decisions made in India involving online shopping consumers, and one of their research results is that trust affects purchase decisions. Based on those studies, the following hypothesis has been formulated:

H6: Trust positively affects decision-making when using TikTok.

Numerous researchers have studied the effect of trust on information sharing (Saleh et al., 2013; Chine & Chinomona, 2015, 2018; Gupta & Dhami, 2015). Chine and Chinomona (2015) found that trust affects information sharing. They researched the factors that affect firm performance conducted in Gauteng, South Africa, involving consumers who use social media. Thus, based on those studies, the following hypothesis has been formulated:

H5: Trust positively affects information sharing when using TikTok.

2.4. Hedonic Value

According to Overby and Lee (2006), hedonic value is defined as a consumer’s overall evaluation of benefits and costs of experience. In addition to that, Helander and Khalid (2005) stated that hedonic value could be obtained through individuals' emotional responses to users' behaviours and experiences with certain behaviours. Next, Alcu et al. (2019) stated that there are three emotional responses that represent hedonic value, i.e., happiness, pleasure, and enjoyment. Sledgianowski and Kuhlmann (2009) showed that social networking sites are pleasure-oriented information systems that are used to acquire joy and satisfaction for their users.

Previous researchers have investigated the effect of hedonic value on trust (Hanzee & Andervazh, 2012; Lee et al., 2015; Mosunmola et al., 2018, 2019; Olivier & Terblanche, 2016; Wongkitrungrueng & Assarut, 2020). For example, Wongkitrungrueng and Assarut (2020) researched the factors influencing customer engagement in Thailand by involving consumers who watched a live Facebook video selling fashion products, and they proved that hedonic value affects trust. Based on those studies, the following hypothesis has been formulated:

H4: Hedonic value positively affects trust when using TikTok.

2.5. Utilitarian Value

Utilitarian value is defined as a consumer’s overall evaluation of functional benefits and costs (Overby & Lee, 2006). Ryu et al. (2010) stated that utilitarian products are described as when consumers consume being goal-oriented, which is driven by a desire to meet basic needs or to complete functional tasks. Practical value is based on functions, indicating that the user can complete specific tasks, for example, with the help of mobile internet services (Kim et al., 2007).

Previous researchers have studied the effect of utilitarian value on trust (Dastan & Gecti, 2014; Lee et al., 2015; Mosunmola et al., 2018; Olivier & Terblanche, 2016; Wongkitrungrueng & Assarut, 2020). For example, Lee et al. (2015) studied the factors influencing continuing intention in South Korea by involving Facebook consumers. One of their findings is that utilitarian values affect trust. Based on those studies, the third hypothesis has been formulated as follows:

H3: Utilitarian value positively affects trust when using TikTok.

2.6. Self-efficacy

Andura (1997) argued that self-efficacy is an individual’s belief in a person’s ability to organize and perform actions to achieve something he/she wants. According to Lippke (2009), self-efficacy is a significant connecting factor that dramatically impacts the hope that changes in a person’s behaviour will be. Next, Pavlou and Pygenson (2006) explained that self-efficacy is the belief that a person can use technology.

Previous researchers have examined the effect of self-efficacy on information sharing (Kim et al., 2015; Shang et al., 2017; Yahayaa et al., 2018). For example, Cheng and Chen (2020) investigated the factors affecting the intensity of Facebook use by involving Facebook users in the United States. The study’s result showed that self-efficacy positively affects trust. Guided by these prior studies, the following hypothesis has been formulated:

H2: Self-efficacy positively affects trust when using TikTok.

Previous researchers have studied the effect of self-efficacy on information sharing (Kim et al., 2015; Shang et al., 2017; Yahayaa et al., 2018). For example, Kim et al. (2015) researched the factors influencing information-sharing behaviour by involving consumers using Facebook, Twitter, Google+, Instagram, and LinkedIn in the United States. One of their findings is that information self-efficacy affects information sharing. Guided by these previous studies, the following hypothesis has been formulated:

H1: Self-efficacy positively affects information sharing when using TikTok.

3. Research and Methodology

3.1. Conceptual Framework of the Research

Based on the background and formulation of the problem, a theoretical framework has been established in this study (Fig. 1).

This study used quantitative methods with explanatory research types and quantitative approaches by using survey and technical SEM data analysis (Structural Equation Modelling).

3.2. Participants, Data, and Methods

The sample in this study was TikTok application consumers living in the Jabodetabek area who have prior experience in spreading information through the TikTok application (at least once). Non-probability with convenience sampling as a technique to select models was employed in this current study. The number of samples taken in this population was estimated at 252 samples by considering the number of samples in the previous studies by Prasad (2017). The data collection techniques used questionnaires distributed through Microsoft 365. At first, there were a total of 311 respondents, but only 252 were eligible to participate. The spread of the questionnaire to the respondents was accomplished for about two weeks in January 2022.

3.3. Data Analysis

In this study, the Exploratory Factor Analysis (EFA) technique was utilized to find out the validity level of each indicator, while reliability tests using Cronbach’s alpha values were executed with the help of SPSS 25 software. The data analysis method in the analysis used SEM (Structural EquationModelling) techniques with the help of AMOS 24 application software.
In this study, a validity test was carried out using factor analysis (Exploratory Factor Analysis) to look at a group of items based on their similarity where the things had a high correlation. A sample of 200 conditions specified by an indicator can be valid, with the minimum loading factor number in the EFA being .40 (Hair et al., 2018). To ensure the accuracy and consistency of an instrument’s measurements over time, a reliability test was conducted with the standard Cronbach Alpha value > .60 (Sekaran & Bougie, 2016). The results can be seen in the following table (Tab. 1).

Items with low factor loading values (DM4) and indicators that cannot be grouped or cross-loading (IS2) were dropped during the analysis. Furthermore, according to the study’s results, two components make up utilitarian value, but the utilitarian value dimension 2 is unreliable. It does not meet the requirements because it is below .60 (namely UV1 and UV2, and they were also dropped during the analysis).

After a validity test through Exploratory Factor Analysis and reliability was carried out, the subsequent step was to test the validity through Confirmatory Factor Analysis (CFA) using AMOS 24 (Fig. 2).

Fig. 2 demonstrates that the error estimate value indicates symptoms of a Heywood case in one of the standardized regression weight values that should be < 1. According to Haryono and Wardoyo (2015), a way to overcome a Heywood case is by creating a model construct for those containing the term error value. Therefore, we agree on the relationship between trust and information sharing and self-efficacy and information sharing.

Based on Fig. 3 above, all standardized regression estimation values have shown the estimated value of < 1, meaning that the model is final and no longer contains a Heywood case. This also indicates that the Structural Equation Model that has been modified fits seven criteria or meets the goodness of fit requirements so that the model is declared feasible and can be analysed further. The results of the model can be seen in the following table (Tab. 2).

### Table 2: SEM Model Accuracy Measures

<table>
<thead>
<tr>
<th>Goodness (GOF) Index</th>
<th>Off-Fit</th>
<th>Cut of Value</th>
<th>Analysis Result</th>
<th>Evaluation Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>X²-Chi-square</td>
<td>Expected small</td>
<td>89.210</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>Sig Probability</td>
<td>≥ .05</td>
<td>.051</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤ .08</td>
<td>.034</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>≥ .90</td>
<td>.952</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ .90</td>
<td>.927</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>≤ 2.00</td>
<td>1.293</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>TLI</td>
<td>≥ .95</td>
<td>.976</td>
<td>Fit</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>≥ .95</td>
<td>.982</td>
<td>Fit</td>
<td></td>
</tr>
</tbody>
</table>

**Source**: Research results, 2022
5. Methodology

5.1. The Influence of Self-Efficacy on Information Sharing

The influence of self-efficacy on information sharing when using TikTok is indicated by a probability value (sig) below 5%, which is .000, and a critical ratio (C.R) value above 1.96 which is 8.544. This study's results align with the earlier studies by Kim et al. (2015) and Shang et al. (2017), which revealed the influence of self-efficacy on information sharing. Thus, the H1 hypothesis was proven in this analysis.

5.2. The Influence of Self-Efficacy on Trust

The influence of self-efficacy on trust when using TikTok is indicated by a probability value (sig) above 5%, which is .837, and a critical ratio (C.R) value below 1.96 is .131. This study's results do not match the results of the previous study by Kim et al. (2009) and Cheng and Chen (2020). Nevertheless, this study's results are in alignment with the earlier study by Sharif and Raza (2017), who found that there is no effect of self-efficacy on users' trust. Thus, the H2 hypothesis was not proven in this analysis.

5.3. The Influence of Utilitarian Value on Trust

The influence of utilitarian value does not positively affect users' trust when using TikTok. It is indicated by a probability value (sig) above 5%, which is .454, and a critical ratio (C.R) below 1.96 is .749. It is not in alignment with Lee et al. (2015) and Mosunmola et al. (2019), who stated the influence of utilitarian value on trust. However, the study's results are in line with the previous research by Ahmad et al. (2020), which displayed the absence of a practical value in trust. Thus, the H3 hypothesis was not proven in this analysis.

To test the hypothesis, we used AMOS 24. The decision-making hypothesis test compared the critical ratio (C.R) of 1.96 and probability with the level of significance with a value of .05. The results of the hypothesis test (a total of seven) were tested. The results showed four accepted hypotheses, namely H1, H4, H5, and H7, while other ideas were rejected. The results can be seen in the following table (Tab. 3).

Table 1: EFA Test Results and Reliability

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Efficacy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE1 I am confident when I play TikTok</td>
<td>.816</td>
<td></td>
</tr>
<tr>
<td>SE2 I can play TikTok without the help of others</td>
<td>.612</td>
<td></td>
</tr>
<tr>
<td>SE3 I don't have much difficulty when playing TikTok</td>
<td>.724</td>
<td>.837</td>
</tr>
<tr>
<td>SE4 I can solve problems if they arise when I play TikTok</td>
<td>.756</td>
<td></td>
</tr>
<tr>
<td>SE5 If I am in trouble problem playing TikTok, I can usually think of a solution</td>
<td>.774</td>
<td></td>
</tr>
<tr>
<td>SE6 It is easy for me to stick to my aims and accomplish my goals when playing TikTok</td>
<td>.776</td>
<td></td>
</tr>
<tr>
<td><strong>Utilitarian Value</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UV3 I was always satisfied playing TikTok and I never had to use other social media for communication purposes</td>
<td>.796</td>
<td>.828</td>
</tr>
<tr>
<td>UV4 By playing TikTok, I could get what I really needed</td>
<td>.856</td>
<td></td>
</tr>
<tr>
<td>UV5 By playing TikTok, I accomplish just what I wanted to</td>
<td>.845</td>
<td></td>
</tr>
<tr>
<td>UV6 While playing TikTok, I found just everything, I was looking for</td>
<td>.791</td>
<td></td>
</tr>
<tr>
<td><strong>Hedonic Value</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HV1 I have fun interacting when playing TikTok</td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>HV2 Playing TikTok gives me a lot of enjoyment</td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>HV3 I enjoy playing TikTok</td>
<td>.786</td>
<td>.828</td>
</tr>
<tr>
<td>HV4 Playing TikTok is very exciting to me</td>
<td>.767</td>
<td></td>
</tr>
<tr>
<td>HV5 TikTok helps me to get access a lot of interesting posts</td>
<td>.639</td>
<td></td>
</tr>
<tr>
<td>HV6 It is a pleasure to search for my interest areas with Playing TikTok in my spare time</td>
<td>.709</td>
<td></td>
</tr>
<tr>
<td><strong>Information sharing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS1 The use of TikTok information sharing is good</td>
<td>.720</td>
<td></td>
</tr>
<tr>
<td>IS2 The use of TikTok information sharing is an enjoyable experience</td>
<td>.796</td>
<td>.828</td>
</tr>
<tr>
<td>IS3 The use of TikTok information sharing is valuable to me</td>
<td>.744</td>
<td></td>
</tr>
<tr>
<td>IS4 The use of TikTok information sharing in business is a wise move</td>
<td>.732</td>
<td></td>
</tr>
<tr>
<td><strong>Trust</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS1 TikTok has high integrity</td>
<td>.657</td>
<td></td>
</tr>
<tr>
<td>TS2 TikTok is a competent and knowledgeable service</td>
<td>.628</td>
<td></td>
</tr>
<tr>
<td>TS3 TikTok can be trusted at all times</td>
<td>.632</td>
<td>.774</td>
</tr>
<tr>
<td>TS4 TikTok can be relied on to keep its promises to stakeholders like me.</td>
<td>.722</td>
<td></td>
</tr>
<tr>
<td>TS5 I feel very confident about TikTok’s capabilities</td>
<td>.764</td>
<td></td>
</tr>
<tr>
<td>TS6 I believe that TikTok treats stakeholders like me fairly</td>
<td>.682</td>
<td></td>
</tr>
<tr>
<td><strong>Decision making</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM1 I double-check my information sources to be sure I have the right facts before making decisions to play TikTok</td>
<td>.536</td>
<td></td>
</tr>
<tr>
<td>DM2 When I make decisions to play TikTok, I tend to rely on my intuition</td>
<td>.720</td>
<td></td>
</tr>
<tr>
<td>DM3 When making a decision to play TikTok, I consider various options in terms of a specified goal</td>
<td>.654</td>
<td>.728</td>
</tr>
<tr>
<td>DM4 I make quick decisions. To play TikTok</td>
<td>.788</td>
<td></td>
</tr>
<tr>
<td>DM5 If I have the support of others, it is easier for me to make important decisions to play TikTok</td>
<td>.740</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research results, 2022
5.4. The Influence of Hedonic Value on Trust

H4: Hedonic value positively affects users’ trust when using TikTok. It is indicated by a probability value (sig) below 5%, which is .034, and a critical ratio (C.R) value above 1.96 of 2.120. The study’s results are in line with the results of the previous research by Lee et al. (2015) and Hanzaee and Andervazh (2012), which showed that hedonic value has a positive effect on users’ trust. Thus, the H4 hypothesis is evident in this analysis.
5.5. The Influence of Trust on Information Sharing

Trust positively affects information sharing when using TikTok. It is shown by a probability value (sig) below 5%, which is 0.000, and a critical ratio (C.R) value above 1.96 of 8.544. The study’s results align with the results of the earlier research by Chinje and Chinomona (2018) and Salehan et al. (2019), which revealed that trust positively affects information sharing. Hence, the H5 hypothesis is evident in this analysis.

5.6. The Influence of Information Sharing on Decision-Making

Information sharing does not have a positive effect on decision-making when using TikTok. It is indicated by a probability value (sig) above 5%, which is 0.083, and a critical ratio (C.R) value below 1.96 of 1.732. The results of this study do not match the results of the previous research by Davidaviciene et al. (2020) and Yoo et al. (2019), which confirmed the influence of information sharing on decision-making. Nevertheless, the study’s results align with the earlier research by Fadhila & Tricahyono (2020) that stated the absence of influence from information sharing on decision-making. Hence, it can be said that the H6 hypothesis was not proven in this analysis. This is because the information shared in the TikTok application does not always match what the user wants. TikTok recommends a video according to its algorithm on the main page of TikTok or “For Your Page”, which is not necessarily desired by its users.

5.7. The Influence of Trust on Decision-Making

Trust has a positive effect on decision-making when using TikTok. It is indicated by a probability value (sig) below 5%, which is 0.007, and a critical ratio (C.R) value above 1.96 of 2.705. This study is in alignment with the prior research by Davidaviciene et al. (2020) and Gao et al. (2005), which stated the influence of trust on decision-making. Therefore, the H7 hypothesis was proven in this analysis.

6. Conclusion

Based on the study’s results, it can be concluded that the results of the hypothesis are very diverse. The first hypothesis is that self-efficacy positively affects the information sharing of users when using TikTok. The higher person’s trust in using the TikTok application, the more the person will share information in the TikTok application. The second hypothesis is that self-efficacy does not affect users’ trust when using TikTok. A person’s belief in using the TikTok application does not necessarily influence him or her to believe in it.

The third hypothesis is that utilitarian value does not affect users’ trust when using TikTok. The benefits offered by TikTok are not the main thing that TikTok users want, and the benefits cannot affect users’ trust in the application. The fourth hypothesis is that hedonic value positively affects users’ trust when using TikTok. Hedonic value aspects, such as happiness, pleasure, and enjoyment through users’ experience when playing TikTok, could improve users’ trust in the TikTok application.

The fifth hypothesis is that trust positively affects information sharing using TikTok. The higher the level of trust that users of the TikTok application have, the higher their willingness to share information in the TikTok application, especially in business. The sixth hypothesis is that information sharing does not affect decision-making when using TikTok. Information sharing that someone does in the TikTok application does not result in users deciding to use TikTok. Meanwhile, the seventh hypothesis is that trust positively affects decision-making when using TikTok. The higher the level of trust that a TikTok application user has, the higher the tendency of that user to decide to use the TikTok application.

Based on the research results, social media service providers should focus on the influence of information sharing and decision-making in the TikTok application, namely trust. One example is making efforts to improve consumer confidence by protecting the personal information that consumers provide. Also, the research result indicated that the information sharing indicator “the use of TikTok for business is a wise step” obtained the highest average score. This implies that TikTok could improve and develop its application so that it is not only used for entertainment but could also be used as an advertising medium for business. The indicator “I double-check the sources of information I get to make sure that the information I have is correct, before making a decision to play TikTok obtained the highest average score. This shows that respondents in this study are dominated by a “rational” decision-making style.

The research results of the present study are expected to be used as a reference for advertisers when choosing advertising media in the TikTok application, as hedonic values influence trust in the TikTok application. Advertisers are advised to promote products by providing hedonic value, such as TikTok dance.

For further research, it is recommended to:

a. Modify the model using factors other than those used in this study, such as similarity, perceived ease of use, and others.
b. Use similar research objects but other than the TikTok application, such as Instagram, Twitter, Facebook, and others.
c. Include a broader scope of the study location. For instance, the study’s location is not only in the Jabodetabek area but can be expanded to other areas, such as other major cities on the island of Java.

7. Funding

This study received no specific financial support.

8. Competing interests

The authors declare that they have no competing interests.
References


What Made Me an Entrepreneur?

I. Canco‡

Purpose: The purpose of the paper is the presentation of creation and development of entrepreneurship by giving evidence on the influence of determining factors. In this context, the issues of this study can serve as motivation for young people to believe in their personal abilities and engage in entrepreneurial activities to influence economic growth in the country.

Design/Method/Approach: The study considers the previous studies for the entrepreneurship. The paper is based on a business-case study. Business activity is analyzed in some aspects based on data collected through questionnaires.

Findings: Some of the most important findings are an entrepreneur’s personality characteristics, his previous experience in the relevant field, the prominent initiative and high level of risk taking, his open-mindedness, the entrepreneur takes care of creation and preservation of business reputation under the slogan: Family, work, and satisfaction as important conditions for the establishment of good human relationships.

Theoretical Implications: From the theoretical point of view, the paper evidences the fact that entrepreneurship is a study field relatively new. Therefore, every study is important because they increase the number of theoretical studies in this field which is multidisciplinary.

Practical Implications: The paper reflects the successful path of an entrepreneur who, despite some hardships, realizes an individual vision and fills in the needs he sees in society bringing new products or services into the marketplace.

Originality/Value: The paper analyzes the birth, growth and development of a concrete enterprise in given conditions, and this emphasizes the deeply original character of the study.

Research Limitations/Future Research: The paper analyzes a concrete case, and it constitutes a limitation. However, it refers to a certain period of time, concretely the post-dictatorial period, with worsened macroeconomic parameters, which should be considered by future researchers.

The change of the socio-economic development strategy in Albania was reflected in the environment that creates opportunities and responsive perspectives for human resources with a long-term outlook. Engaging in long-term productive economies is a risky occupation. The risk is conditioned by time, individual effort, available information and space. This paper is based on the results generated from surveying the occupation of one of the most successful enterprises that started its activity in the first years of the change of the socio-economic system. Through a case study, the paper also discusses theoretical problems of entrepreneurship over the years, as well as possible methods of managing an enterprise. In conclusion, it shows how individuals who are creative and motivated to find new ways to enter a market are the main support to business success.

Paper type: Empirical

Keywords: Entrepreneurs, Entrepreneurial Activity, Entrepreneurship, Personality Features.

Reference to this paper should be made as follows:
Мета роботи: Метою статті є презентація створення та розвитку підприємництва через доказ впливу визначальних факторів. У цьому контексті проблематика статті може служити мотивацією для молоді повірити у власні здібності та займатися підприємницькою діяльністю, щоб впливати на економічне зростання в країні.

Дизайн / Метод / Підхід дослідження: Дослідження враховує попередні розробки у сфері підприємництва. У фокусі дослідження - бізнес-кейс. Ділова активність аналізується в окремих аспектах на основі даних, зібраних за допомогою анкетних опитувань.

Результати дослідження: Одними з найбільш важливих висновків є особистісні характеристики підприємця, попередній досвід роботи у відповідній сфері, яскраво виражена ініціативність та високий рівень прийняття ризику, його відкритість, підприємець дбає про створення та збереження ділової репутації під гаслом: Сім'я, робота, задоволення, як важливої умови налагодження добрих людських стосунків.

Теоретична цінність дослідження: З теоретичної точки зору, робота свідчить про те, що підприємництво є відносно новою сферою дослідження. Тому кожне дослідження є важливим, оскільки збільшує кількість теоретичних досліджень у цій галузі, яка є міждисциплінарною.

Практична цінність дослідження: У роботі відображено успішний шлях підприємця, який незважаючи на труднощі, реалізує індивідуальне бачення та задовольняє потреби, які бачить у суспільстві, виводячи на ринок нові продукти чи послуги.

Обмеження дослідження / Майбутні дослідження: У роботі проаналізовано конкретний випадок, що є певним обмеженням. Однак він стосується певного періоду часу, а саме постдиктаторського періоду, з погіршеними макроекономічними параметрами, що має бути враховано майбутніми дослідниками.

Зміна стратегії соціально-економічного розвитку в Албанії знайшла своє відображення в середовищі, яке створює можливості та чуйні перспективи для людських ресурсів з досягнення продовження та впровадження нової стратегії соціально-економічного розвитку.

Зміна стратегії соціально-економічного розвитку в Албанії знайшла своє відображення в середовищі, яке створює можливості та чуйні перспективи для людських ресурсів з досягнення продовження та впровадження нової стратегії соціально-економічного розвитку.

Тип статті: Емпіричний

Ключові слова: підприємці, підприємництва, підприємництво, риси особистості.
1. Introduction

After the ‘90, the transition from one development strategy to another, specifically, the transition from a highly centralized economy to a free market economy gave a green light to the development of the free initiative of the citizens to work and earn. This enabled Albanians to have access to new information, rates and values. In this context, entrepreneurship started their existence, as a developing alternative and an opportunity of welfare.

For many decades, Albanian mentality has considered the fact that everything was connected to the state. The created entrepreneurs the early ‘90 were of a great importance not only from the economic point of view but also from the psychological one. Treated in its complexity the entrepreneurship has both time and space dimensions.

From the macroeconomic point of view, the starting point of the market economy, in Albania was very difficult. It required courage and vision. The view of the entrepreneurship lets us recognize easily the fact that the country was in a total isolation, total collectivization, anarchy and lack of experience. At the beginning of the 90s, the changes in the political regime and the abandonment of centralized planning publicly evidenced the phenomenon of unemployment. Albania faced a large number of unemployed people as a result of these factors:

- Mass closure of enterprises that could not withstand the competition;
- The creation of “agricultural farms” with a small area that resulted from the division of agricultural land could not provide work for all members of the rural family;
- Reform in the army;
- The presence of a significant number of former political prisoners.

Albania was in a socio-economic crisis which was characterized by these economic parameters:

- Decrease of 40% of the industrial production in 1992 compared to 1991, a phenomenon that continued due to massive closure of many plants and factories. Over 80% of the agricultural land was uncultivated because of the agriculture enterprises bankruptcy;
- Aggravated economic situation reflected to deteriorating financial indicators. Approximately 60% of the state budget was covered by humanitarian aid;
- Over 500 million dollars was the external debt inherited by the communist government;
- Inflation increase rate with 230% and low level of the population income with 200 dollar/capita (IMF, 1994);
- The paralyzed economic life and as a result the country’s economy was in total collapse.

Thus for a period of 4 years the unemployment increased very quickly. In more concrete terms by the end of 1992 the unemployment was 25%. It increased 30% by the end of 1993, etc. In this condition self-employment constituted emergency. Santos et al. (2017) accept “... the choice of self-employment depends, to a large extent, on opportunity perception...”, While for Grigorescu, Pîrciog and Lincaru (2019): “The desirable scenario is that unemployment pushes the entrepreneurship increase, and the increase of the entrepreneurship causes unemployment decrease”.

This situation constituted an important environment for private entrepreneurship. Koellinger and Roy Thurik (2012) and a year later Fairlie (2013) express opinion that understanding the relationship between economic cycles and entrepreneurship is important for policy intervention in order to predict and generate more favorable conditions for firm creation.

2. Literature Review

Entrepreneurship is a very delicate engagement. Low and MacMillan (1988) accept that: “Entrepreneurship is a multifaceted phenomenon that cuts across many disciplinary boundaries”, which includes two kinds of conceptions in more concrete terms: theoretical and applicative conceptions. Theoretical conceptions are very important as they realize the necessary intellectual preparation and make it possible the prediction and the reduction of the market surprises. They start with the frames of defining the entrepreneur, and continue its compound elements, the factors that provide success etc. Success achievement is conditioned by the fact that the theoretical preparation should be sufficient.

The entrepreneurship is a judicial and economic notion. But, before being a judicial notion it is an economical one. Considered in its complexity the entrepreneurship is an economic activity professionally implemented which starts with the identification of the problems that need a solution in the market. On these bases the entrepreneurship is further engaged in finding appropriate solutions for the highlighted problems and this can be achieved through the delivery of the resources, aiming the value creation. All these aim the benefit that comes out from the commitment of the consumers by paying for this solved problems and created values.

The entrepreneurs are organized in the manufacturing, goods’ exchanging or service areas.

Theoretical treatments on the entrepreneurship start with the definitions, which belong to early and late periods. There have been many attempts to define it. According to Brown and Thornton (2001) was Cantillon, Saucier, & Thornton (1755) which is credited with the discovery of economic theory and was the first to fully consider the critical role of entrepreneurship in the economy. They acknowledge that “Cantillon described entrepreneurship as pervasive and endowed the entrepreneur with the most pivotal role”. While, Ahmad and Seymour (2008) have stated that: “Indeed, even the OECD itself has contributed to the confusion since virtually every study that has focus”. The following are the definitions of OECD considers three components: Entrepreneurs, Entrepreneurial Activity and Entrepreneurship.

- “Entrepreneurs are those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurial activity is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurship is the phenomenon associated with entrepreneurial activity” (Ahmad & Seymour, 2008).

There are many scientific researches at different times for the above three components. These studies clarify the problems that make up these components from different points of view.

“Entrepreneurs create new organizations through a dynamic process that involves such activities as obtaining equipment, establishing production processes, attracting employees and setting up legal entities” (Shane, 2003). For Gierre et al. (2020) it is commonly accepted that entrepreneurs are people who take action and engage in vigorous, persistent efforts to convert their ideas and visions into profitable, operating companies. Entrepreneurs should be careful to consider the value dimensions of the consumer. This is an early requirement of entrepreneurship theory. For this, Cantillon, Higgs and Jevons (1931) have highlighted that entrepreneur will buy the products of villages at a low price and will transport them to the Capital to be sold there at a higher price. Cantillon et al. (1931) emphasized the impact that supply has on Entrepreneur. Some researches admit that: “The Cantillon theory of the entrepreneur is distinctly supply-side” (Hébert & Link,
Entrepreneurial activity has a micro and macroeconomic impact. For Zellweger (2007) these show that differing levels of entrepreneurial activity explain approximately one half of the differences in economic growth among countries. “A thriving entrepreneurial mindset and supportive ecosystem is often put forth as a panacea for raising the prospects of poor and underdeveloped regions…” (Morris & Tucker, 2021). Development perspective refers to entrepreneurial skills. For this, Michelacci (2003) studies the functioning of entrepreneurial skills in bringing inventions to markets. Also, Körpsa (2021) admit: “One important elements in the process of shaping the company’s entrepreneurial behaviour are rational acts and entrepreneurial decisions aimed at gaining new knowledge and skills”. Some of the aspects of impact are business, employment, and family aspect. Song et al. (2011) admits that: “there can be work and family spillover and crossover effects”. Entrepreneur also has a psychological aspect. Wiklund et al. (2019) also address the psychological aspect of an entrepreneurial activity. They emphasize: “Adopting a broader view on well-being from a psychological perspective, we propose that both subjective and psychological well-being states are core components of entrepreneurial well-being, representing positive feelings and evaluations on the one hand, and positive psychological functioning on the other”. Soria-Ibarro et al. (2017) referring to other researchers in previous periods refers to entrepreneurial intention (EI) and considers it as a prerequisite. Specifically, they think that: “The entrepreneurial intention (EI) is the first step toward entrepreneurial behavior (Krueger & Carsrud, 1993) and it plays an important role in the decision to create a new firm” (Liñán & Chen, 2009).

Researchers agree that entrepreneurial consists of two phases. Specifically, González-Pernía et al. (2018) emphasize that: “Following an entrepreneurial process perspective and blending together its two phases (i.e., entrepreneurial opportunity perception and entrepreneurial action), we can approximate the indirect effect of the economic shockout on business creation via opportunity perception”7. Other researchers such as Mitchell et al. (2002) emphasized that the idea that entrepreneurial actions are preceded by intuition and opportunity perception.

While Ahmad and Seymour (2008): “Typically, entrepreneurial activities require the leveraging of resources and capabilities through innovation, but the opportunities themselves always relate to the identification of either new products, processes or markets”. Innovation constitutes an important element of entrepreneurial activity as well as a field of entrepreneurial orientation. Entrepreneurial orientation has actually emerged as one of the most studied constructs in entrepreneurship and management literature for more than three decades ago (Covin & Wales, 2019). Bujan (2020) emphasizes that “typical entrepreneurial orientation research areas are risk preference, innovation and proactiveness, while in a smaller number of papers autonomy, competitive aggression and locus of control have also been considered”. Despite the importance of entrepreneurial orientation, researchers admit that “however, how entrepreneurial orientation influences the creation and sustainability of competitive advantage has not been researched in detail” (Bujan, 2020).

Success in Entrepreneurial activity increases when a combination of personal characteristics of the individual engaged in this activity, family support and previous experiences is achieved. The success of entrepreneurial activity considers entrepreneurial management. Based on Dorin & Galeaeva (2014) Drucker is one of the pioneers of entrepreneurial management. “Drucker’s idea of entrepreneurial management incorporates the concept of a strategic system of organisation management” (Dorin & Galeaeva, 2014). For Körpsa (2020): “… entrepreneurial management contributes to strengthening the capacity to implement innovations and to increased competitiveness of a given organization”. Further the author stress that “Modern entrepreneurial management is a business philosophy that is reflected in a constant pursuit of new opportunities, creating good climate for cooperation and trust in the organisation, encouraging employees to selffulfilment, innovation and teamwork” (Körpsa, 2020). For this, Shir, Nikolaev and Wincent, (2019) stressed: “As such, the nature of entrepreneurial work embodies the very process of self-actualizing one’s human potential through purposeful, authentic, and self-organized activities that can lead to a fulfilling and fully functioning life”. In this context, Wiklund et al. (2019) admit: “Even for those struggling to make ends meet, entrepreneurial work may offer much in terms of self-determination and personal fulfilment as it provides individuals with a level of freedom and control that allows them to work around their disabilities or turn a bad situation around”.

The entrepreneurial is an activity influenced by a number of factors. Reynolds et al. (2001) presents entrepreneurial activity schematically as follows (Fig. 1).

Source: Reynolds et al. (2001)

The concept of entrepreneurship derives from the combination of the presence of opportunities and the undertaking of precise actions to use opportunities efficiently. For Bruton; Ketchen and Ireland (2013): “Entrepreneurship is increasingly being leveraged as a vehicle for growth and prosperity around the globe”. Veggetti and Adáscaići (2017) think that “Entrepreneurship is understood as a process where opportunities are perceived, and actions are undertaken to exploit such opportunities via business formation”. Scholars as Feldman (2001) and Sternberg and Rocha (2007) admit that there are plenty of theoretical arguments and empirical evidence suggest that entrepreneurship is predominantly a “regional event” since major contextual factors shaping entrepreneurial behavior operate at a lower scale regional level. Phan, Zhou and Abrahamson (2010) stressed: “Entrepreneurship is a multifaceted phenomenon that involves human creativity, financial resources, and technological capital, fostering the discovery and establishment of new ways to organize production
Entrepreneurship delivers multiple developmental impacts. Based on Cardella, Hernández-Sánchez and Sanchez García (2020), “Entrepreneurship not only contributes to the economic and social growth of a nation, but also stimulates the development of knowledge (Shane, 2003); technological change (Acs & Varga, 2005), competitiveness and innovation (Blanco-González, Diez-Martín, & Prado-Román, 2014; Parker, 2018)”. Positive attitudes about entrepreneurship in an economy can indicate the propensity for people to engage in this activity (Kelley, Singer & Herrington, 2012).

Entrepreneurship represents the suitability of the individual with the conditions of the environment as well as development with the aim of well-being. Shir (2015) and then Stephan (2018) express: “Entrepreneurship is also a potential source of personal development, growth, and well-being”. Shir (2015) also acknowledges that “a broad and more direct measure of well-being in entrepreneurship is likely to better reflect individual experiences of well-being in this domain”.

3. Research Question and Hypothesis

The research questions are:

– How is the role of the personality related to the development of the business?
– Does initiative, creativity and risk-taking on the part of the entrepreneur constitute the conditions for successful entrepreneurship?
– Is the family environment an important factor in entrepreneurial commitment?
– Does previous experience constitute an incentive for entrepreneurial engagement?
– Is experience an influencing factor in the success of the entrepreneur?
– Why is the entrepreneur important for the success of the business?

Therefore, the hypothesis is:

Ht: There is a relation between the manager’s personality features and the success of the entrepreneurship.

4. Methodology

The methodology of study makes a logical and temporal division between theoretical and applied problems. It consists of two parts: (1) treatment of theoretical problems of entrepreneurship and (2) field study. The literature review provides the study with theoretical problems, the purpose of the research, research backgrounds and research questions and hypothesis. In the second phase, it provides an analysis of the activity of a business as well as the indicators for measuring comprehensive management. This work was made possible based on primary and secondary data. Secondary data refers to various publications in the field of entrepreneurship. The primary data is collected through interviews with business executives and staff in order to present a complete story of the whole business development and customers of this business as well. In addition, documents of the business were also used. Such triangulation of data sources and methods is an important strategy in qualitative research; it can strengthen validity and develop a more comprehensive understanding of phenomena Carter et al. (2014).

Collecting data from three different directions enables us to investigate the success of the business. For Rashid al et. (2019): “Qualitative case study methodology enables researchers to conduct an in-depth exploration of intricate phenomena within some specific context”. It was generally used the qualitative method regarding which McCombes (2019) states: “A case study research design usually involves qualitative methods, but quantitative methods are sometimes also used. Case studies are good for describing, comparing, evaluating and understanding different aspects of a research problem”. All the theoretical underpinnings above provide support to investigate the influence of background variables on entrepreneurial intention (Looi & Khoo-Lattimore, 2019). The case study is a specific research method because it refers factual evidence for a particular business.

The study focuses on a case study. According to Merriam-Webster’s dictionary (n.d.) the case study is defined: “An intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment”. A case study is not just an experience report. Further, a case study is a retrospective report of a remarkable experience.

Currently, there are very few papers (case study) on entrepreneurship in Albania. This paper can serve as a guide for everyone who will be involved in entrepreneurial activity. Also, the treatments of this paper will constitute a material to advance future studies of the complex field of entrepreneurship.

5. Case Study

Entrepreneurship has many aspects from business perspective, employment and family perspective. Stephan (2018) establishes that: “Factors such as spouse and family member work relationships, role relationships in the business, time commitments and the prior success of the business as a causal indicator will affect relationships and associated well-being for the family involved or uninvolved with the business”. Introdction

Entrepreneurship in Albania has been difficult. Difficulties have also been addressed by scholars of this field. Vesper (1983) calls them “barriers” for entrepreneurship. Among the most important Vesper (1983) lists lack of market knowledge, inability to delegate responsibility, lack of technical skills, lack of seed money. In addition, new firms are also at risk of bankruptcy in the early years. For this Stinchcombe (1965) argued that young organizations had a higher propensity to die than older ones.

The company considered in this case study was founded by the current entrepreneur in September 1999. It represents an entrepreneurship which has good results in the economic activity in which it is committed. The legal status of this business is Ltd.

Company overview

The company activity started after the entrepreneur K... returned from emigration in Greece. Ballesteros-Leiva; Poilpot-Rocaboy and SI-Onge (2017): “...expatriates experiencing negative work-life interference report diminution of subjective well-being”.

Headquarter of this entrepreneurship initially has been in Korça district, that is the place of birth and the early residence of the entrepreneur and his partners, with which he has strong familiar relations. The entrepreneurial intention refers to the intention of an individual to start a new business Engle et al. (2010). This venture has its origins as a family business. Based on Zellweger (2017) family firms are numerous among the smallest firms, but they are also found among the largest ones, and they exist in a wide variety of industries. Role models and family are conjectured to relate to the emergence of entrepreneurship (Brockhaus & Horvitz, 1986; Shapero & Sokol, 1982). Moreover, during the years the company has made a spatial reorientation and it currently operates in parallel with two other branches in Tirana.

“K...” company operates in the domain of production and trade of furniture and other industrial units, which come out of wood processing, with the right of import and export. The main raw suppliers such as wood, enamel and other accessories are some Greek companies. Its entrepreneur K... has inspired and still does the aggressive expansion in the country market as well as the regional one. Stephan (2018) admits that entrepreneurship is also a potential source of personal development, growth, and well-being.

The entrepreneur considers the market expansion as one of his potential source of personal development, growth, and well-being. The market share is a challenging decision making that derive...
from the entrepreneurial commitment based on the construction of a long-term strategy of development. He is visionary and he does not enough a small increase of the market share. Gradually, according to the tactic-plans designed by himself, he started to increase the number of products, in order to be in coherence with the increasing demand.\textsuperscript{1} of the market. Sexton & Bowman (1986) define that distinguish between entrepreneurs and managers are a high need for autonomy, dominance, independence combined with a low need support and conformity and capacity for endurance. Shih et al. (2010) admits that: “Entrepreneurship is a profession by which people direct one’s step in fulfilling essentials and desires through innovations and energetic handling of risks and critical situations.” While, Loeweve et al. (2014): “…that individual innovativeness is an antecedent of life satisfaction. That is, individuals with personality features that are conducive of innovativeness would be more likely to perceive their lives as fulfilling, particularly in terms of perceived quality of family life, career, and health”.

Currently, the company manufactures wall units, bedrooms, TV stands, libraries, kitchens, tables, chairs and office furniture. At the beginnings, “K...” company manufactured only three furniture products: bedrooms, TV stands and libraries. The company trades a small number of products imported from Greece such as “sofas and chairs and the tables as well. Recently, it is committed even to gathering and reconstructing of old and very old furniture, thus becoming a very important provider of these products in the most known fashion workshops in Albania and in the region. This is a novelty in the activity of this enterprise. The discovery of market opportunity is a focus of business.

“K...” company, is currently one of the most successful enterprises in the country, and leader in some directions of the activity where it operates. They identify and then select highlighted as well as the best ideas of this domain. An incentive for this has been the participation of the company directors in fashion exhibitions. “K...” company carefully follow the tendencies of the development of the product in the direction of the furniture fashion and the dynamic of its development. They have continuously attended the furniture fairs mainly in the neighboring countries (Italy and Greece). The participation in fairs is a factor in order to stay “up to date” with the technological developments.

The company work with the motto: “everything for a satisfied client”, which highlights the necessity of continuous connections with the consumer. This is one of the reasons that over 78% of the interviewed customers are satisfied with the company’s products. The company mostly deal with the contracting system or as the entrepreneur calls: “with the commissioner”. Staff evaluate that this connection has increased within the last 3 years with rtt.

This is dedicated to the professionalism and personality of the entrepreneur. The professionalism gives the opportunity to be independent and it enables the person to make fair decisions in stressful situations. That’s what makes him a central person in the company. His personality enables him to face challenges. He is risk taking.

\textit{Objective focused management}

The entrepreneur K... considers the moment of decision making involved in this entrepreneurship as the “most important moment of my life”. The entrepreneur takes special care of customers and consumers. He focuses on the customers and claims that happy customers make the company more valuable. Thus, the manager lives up to the company marketing promises.

The success of the company’s activity is conditioned by a series of priorities. Firstly, the most important is that the company works with the motto “one step ahead the others”. It is focused on the elite wood products. The entrepreneur K... says: “I concentrate on one idea, analyze it and consider it as an opportunity to develop”. Long experience in this kind of business makes the entrepreneur more confident in his abilities to present new ideas in the development of the successful entrepreneur.

“K...” company is an entrepreneurship with functional strategy oriented to the market, the efficiency, and the profit. The entrepreneur K... is attentive to the planned delivery of production tasks to not create stock of orderings and to elapse the time limits, which may create a difficulty in respecting the limits and the realization of the required quality. This has led him towards the operation according to a graphic plan.

Secondly, the managers and especially the entrepreneur K... are very fanatic to the necessity of a business plan. “This business plan is a written document that systematically, and in an orderly fashion, details a firm’s strategic and operative aspects, and should therefore allow for the assessment of a business project’s economic, financial, commercial and legal administrative viability” (Fernández-Guerrero, Revuelto-Taboada & Simón-Moya, 2012). Its quality is also important in the performance of the business. Fernández-Guerrero et al. (2012) admit that: “A good business plan implemented by an entrepreneur with adequate training, experience and motivation, with access to an initial stock of appropriate financial and human resources to compete in the chosen sector of activity, could very well have a much greater impact on the firm’s chances of survival”, but does not consider it as a means which would support the entrepreneurship to withdraw credit. While K... has a personal philosophy of how to do business according to which he avoids the credit as an opportunity to succeed. This is noticed during his activity. The entrepreneur evaluates the capital as a factor that conditions not only the initiation but also for the continuation of the entrepreneurship. K... has supported the availability of the necessary capital in any cases, through his own economic capital. He has continuously had the cooperation and the contribution of his partners. Burns (2016) stress: “Sometimes people imagine that going into business is a smooth trajectory from struggling start-up to fully fledged global brand. But that’s never really the case. Growing a company is all about overcoming endless challenges, big and small”. First moment of need for capital coincides with the time when the three partners, from working abroad could provide the necessary monetary fund to engage in this activity.

The expansion of the activity is conducted by using their own sources. The entrepreneur always repeats the same quotation “the business plan is a reflection of its creator”.

Thirdly, the entrepreneur K... is focused not only on sales but also on investments, which he calls the bases that provide support for the sales and success for the entrepreneurship. The favorite trend of the entrepreneur K... is the investments for machineries and equipment, which he chooses personally. This trend has resulted effective. The favorite market is the Greek equipment market.

The investment and sales dynamic (2015-2020) are reflected as follow (Fig. 2).

\textbf{Figure 2: Investment and sales dynamic}

\textbf{Source: “K...” Company}

The concentration on investments has in some cases been opposed by the partners or the staff, but K... is self-controlled, practical and determined in front of pressure. Permanently he has compared the results of the company with the projected
objectives. Fourthly, without rejecting the attention from what we said above, the entrepreneur considers cost as the basis of his activity and he tries to compensate the high cost of the qualitative products with the short time of transporting, loading and uploading and services after sale. Reducing the cost, is an object of continuous annual analyses. The company has generally had good results in this direction. We exclude here the period 2018-2020 when it was noticed a respective increase of the cost with 8%, 7%, 3.5%. This was a difficult period for the entire economy that this was caused by factors of the external environment. The total cost for a 6 year period (2015-2020) is reflected in Fig. 3.

Figure 3: Total cost, 2015-2020

Source: “K...” Company

The entrepreneur is currently 59 years old and he intends to manage his activity for many other years. He is persistent in the objectives set by himself and he makes every effort in order to achieve them at any cost. Therefore, he is attentive to the decision making process in order for it to be effective. The entrepreneur thinks that the management of entrepreneurship is perfect regarding the way it is organized. The managing method of this entrepreneurship considers this task division:

Work experience in manufacturing process. The entrepreneur has a prominent experience. He has worked in one of the best plants in Greece, for nearly 9 years. He has worked as a simple worker for 5 years and for the 4 last years he has been a production manager. Based on Looi and Khoo-Lattimore (2015): “Through work experience gained from employment, potential entrepreneurs develop and enhance their knowledge, skills and commercial awareness”.

Professional management. The other partner has finished the university studies at the Faculty of Economics, which gives possibility for a professional management of the entrepreneurship.

Besides the intellectual preparation, he has worked in manufacturing entrepreneurships mainly in the western countries. Collaboration with family members is obvious and valuable in this business because, moreover, in ongoing businesses, there can be work and family spread and crossover effects Song et al. (2011). This conclusion was reached by Chua, Chisham and Sharma (1999), who treats this activity as a determining factor. For Rogoff and Heck (2003) the transmission of entrepreneurial experiences, especially for children, is influential to be considered that together with human capital and education, as the oxygen that fuels the entrepreneurial fire. A German study by Chlosta et al. (2010) showed that parental role models increased the likelihood of individuals becoming self-employed. But the success of this business has also influenced other individuals to engage in entrepreneurial activities. Urbano, Toledo and Ribeiro-Soriano (2011) accept that instead, established that individuals with the same ethnicity can act as a model, encouraging other individuals in the community to create new businesses.

The intentions of the members of the next generation to undertake an entrepreneurial career requires a systemic analysis that also considers the behaviors of their parents and the perception that children have of this support (Nordqvist & Melin, 2010). The successor’s intention to continue their family’s business depends on whether their parents are willing to support them, contributing to the development and success of their family activities (De Masis et al., 2014). The final report on family businesses, by European Commission (2009) at European level, more than 60% of existing businesses are family-run. “Most SMEs (especially micro and small enterprises) are family businesses, and a large majority of family companies are SMEs”.

Towards Tirana market

Attending attentively the rhythm development of the economic activity of the entrepreneurship after the year 2000, the entrepreneur thought to make another spatial reorientation in another direction. Molinsky (2016): “…the real entrepreneurship happens internally – with the process of stepping up, having courage, and doing what you never thought you’d be able to do”. Creativity is an essential trait in entrepreneurship, helping individuals introduce innovative solutions to existing problems (Awwad & Al-Asser, 2021). The business success influenced by the innovation activities, information and creation of new ideas focused to upgrading processes and product design. Miller and Friesen (1982) introduced the characteristics of entrepreneurially orientated firms in three well-known dimensions, namely (1) to be innovative to explore new opportunities, (2) be proactive to market entry before rivals, and (3) be risk-taking to introduce new products. Based on Wang et al. (2016) personality features are suggested to be a more reliable influence on becoming an entrepreneur. While Yan et al. (2018) thinks that personality features will affect entrepreneurs’ recognition, choices, and judgment of opportunity. Zhao, Seibert and Lumpkin (2009) thinks that entrepreneurs are always ready to take the emotional and physical burden and move even in situations where other people could be discouraged by self-doubt.

For Thadea, Putra and Putra (2018): “A choleric has a dynamic soul and high motivation”. Further they accept: “The choleric type is the type that does not hesitate in deciding something and likes challenges”. While Yang and Ali (2019): “… showed differences in all five of the Big Five personality dimensions between self-employed and agro rural entrepreneurs”. For Salmony and Kanbach (2021): “Future research differentiating more between different entrepreneur types will likely reveal that the Big Five personality traits vary by business form, environment, and entrepreneur type”.

With the continuous proposition and insistence of the entrepreneurship ex 2005, the company extended its activity to two other branches. Thus, besides Biliçi, it settled in Tirana with no modification of name. This was made possible after one of the family members became fully involved in the business. Nordqvist & Melin (2010): “It is important to understand that the factors that influence the intentions of the members of the next generation to undertake an entrepreneurial career requires a systemic analysis that also considers the behaviors of their parents”. García et al. (2018) accepts the fact that it is also necessary the perception that children have of this support.

The entrepreneur pretends that a business should not be viewed as an object but as what its holistic idea and value represent. Instead, it is created through the products that it offers in many dimensions and the way that these products fulfill the customers’ claims and needs. Pridel, K... considers the extension of the activity in Tirana with two branches as entirely successful. Based on McMullen & Dimov (2013): “It is rare for entrepreneurial journeys to follow a smooth path”.

Tirana is the capital of Albania and the greatest economic trade and diplomatic center. It represents an administrative unit where more than 6% of the total number of active companies of the country operate. Nowadays, one-third of the population of the country lives in Tirana as a result of the new political orientation and internal migration. The establishment in Tirana made the entrepreneurship more known and as a result more successful than before.

“K...” company has continuously intended to increase the prestige
of the entrepreneurship by increasing its production, client satisfaction, possible reduces in cost and increase of the market share. Thus, settling in Tirana enabled the increase of the market share with 13% for a period of 4 years.

The entrepreneur is well-oriented towards new things, concretely, new products, new markets, new models to which the staff refers as “three news of K…”. Regarding this, the entrepreneur states that: “I have tried to do something that is entirely mine and this has been possible due to my experience!”. With the long experience in the business world, K… feels sure about his professional abilities and this makes him free in presenting the ideas, especially those which are an innovation for the entrepreneurship. In 2005, some months after settling the branches in Tirana, the entrepreneur ambitiously presented his previously thought idea. He claimed to start manufacturing office furniture. This surprised all the staff members. Therefore, his new idea confronted a strong resistance mainly from the other partner. However, the “big” K… did not withdraw. He has the motto “always towards the new”. He accompanied this with a detailed argument plan in support of his idea. As always, even in this case he acted proactively. This acting way has made the company have a good performance in the market. Settling in Tirana, made the company one of three most successful companies in this domain very quickly, increasing continuously the number of “big” contracts as they call them. He explains: “we have had many internal discussions which could make this thought doubtful. The intention is to serve the client and not to spread the responsibility. This enhanced our reputation”.

Concentrated in his ideas, K… does not avoid promotion. He applies discounts for different products in different periods in respect of multi-annual traditions of Albania. During this period, they create the most attractive advertisements for the products as well. Recently it was built a special environment, which serves as a lounge for the clients as well, where they exhibit the products and sketches.

“K…” company operates with delivery, important customers, contracting systems and takes care of the small customers through a chain of stores, which operate in some towns like Skhodra, Durres, Fier, Berat and Vlora. “K…” company has defined this strategy: retention of close links with buyers by providing them with continuous information. This philosophy of doing business is conforming to the idea that people want what other people want.

This is the reason why “K…” Company is a well-known company.

Human Resource Management

K… makes efforts for an effective implementation of each task, creating thus the profile of “the person who works”. “Managers are busy people. Their work is intense and in many different things” (Schermehron et al., 2010). Based on Parker (2018) exist the relationship between a strong entrepreneurial environment and subsequent job creation. “K…” company has employed a considerable number of employees. The entrepreneur is careful especially for the employees. He considers the ability for using the essential organizational functions. With this motto the attention is towards staff selection as well as the responsibilities towards the employees in the following periods. Fernández-Guerrero, et al. (2012) based on the scientific achievements of many other researchers have accepted that: “In terms of business characteristics, two of the most analyzed factors that have consistently shown a positive and relevant relation with success of new ventures are the number of employees (Dunne & Hughes, 1994; Argawal & Audretsch, 2001; Lopez-Encinas & Puente, 2006) and financial start-up capital (Brüderl, Preisendörfer, & Ziegler, 1992; Cooper, Gimeno-Gascón, & Woo, 1994; Schützens & Wever, 2000; Headd, 2001)”.

K… considers the activities regarding human capacities available which he particularly evaluates. For Schermehron et al. (2011): “At the heart of the matter managers help other people get important things done in timely, high-quality, and personally satisfying ways”. The attention towards the human resources is a permanent activity of the company managers. Pauwae, Wright & Guest (2013) admit: “One of the main goals of Human Resource Management (HRM) is to increase the performance of organizations”. Vermeeren et al. (2014) stressed: “An important theoretical issue that has dominated the field in the last decade concerns the precise nature of the mechanism linking HRM and performance outcomes”. In this context, one of the managers has to deal with the problems of human resources. The entrepreneur is careful in selecting the staff focusing on their personality. De Pauli & Bikos (2015) admit that “…employees tend to achieve higher levels of psychological well-being when the perceived organizational support from the host organizations is strong”. The conscientiousness was the most reliable personality indicator in employee performance across different professions (Barrick & Mount, 2000). The employees generally conduct specialized tasks. However, each employee is trained to conduct other tasks as well in order to ensure the continuity of the process. Moreover, the “oriented service” unit works as well. It supports the general activity of the employees when there is concentration on the time limits or a reduction of the work efficiency. The entrepreneurial claims can be involved under the motto: “To engage the appropriate people at the appropriate time”.

The company takes care of the creation and preservation of the reputation under the slogan: Family, work, satisfaction, as an important condition for the establishment of good human relationships. Focusing on work ensures reduction of social tension and stress and enhances problem solving. These factors generate economic and social well-being of the employees. The entrepreneur achieves this by setting priorities and clearly defining everybody’s roles.

There are responsibilities regarding the employees, including problems that are concerned with setting at their disposal the necessary technical information and acknowledging all their commitments. Another important aspect is the continuous highlights of everyone’s achievements and performance, respect for everyone’s personality and transparency in the establishment of good human relations. Keeping in continuous contact with information, enables him to make the necessary amendments conditioned by the environmental changes in time.

Operating all the time within his limits of abilities and authority to make decisions he thinks that he gives the best contribution for the entrepreneurship and its success. He takes care of the work conditions, interpersonal aspects of the organizational behavior such as motivation preserving the organizational balance in order to afford the difficult situations. Within the objectives, he makes all the efforts to avoid the obstacles, which harm the progress and the efficiency of employees work. He prefers team work, evaluates diversity within the team and promotes positive approaches of everyone highlighting them with elegance.

On one side, within the integrity of his activity, he properly understands, accepts and uses the influence and power in the human relationship. On the other side, he promotes their participation in finding a solution for problems and in decision making. From this point of view, the entrepreneur has created an ethical code at duty. The ethical behaviors represent an economic and social responsibility, which focuses on coordinated behavior with the aim to increase production, preserve the quality standards etc. This has to do with avoiding the mistakes in the way of acting cultivating acceptable behavior.

In this context there could be identified some aspects as permanent requirements in respecting the hierarchy, reporting and the request to develop the responsibility to the set tasks to the subordinates and to the institutions such as the contract institution etc. He considers all these in the external environment as a necessity for the entrepreneurship lead for the general profit by...
increasing the employment rate, fulfilling the needs etc. “K...” company pays all the dues according to the law.

It is clear that these are not so simple and represent multi-dimensional engagements for the entrepreneur, which constitute a challenge for him. In order for the entrepreneur to overcome these challenges he needs to seriously engage and work overtime, in order to set and preserve a stable balance between the individual requirements of the employees and the requirements of the entrepreneurship in general. All this represents the permanent conflict between the necessity to feel sure in his job and the constantly expressed uncertainty of the existence of a certain level of risk.

K... is continuously very attentive to the reactions of the environment where he operates, and on this basis, he modifies his behavior considering the circumstances. This has enabled him to continuously perfect himself learning from every mistake and every experience.

6. Conclusion

his case study, as historical memory, is an attempt to describe and explain the entrepreneurial activity of a successful business. This retrospective analysis leads us to the conclusion that engaging in entrepreneurial activity is a method to increase the employment rate through self-employment and economic growth. The study provides sufficient theoretical and practical arguments on how the personality characteristics of the entrepreneur have a significant impact on the commitment and success of the enterprise.

Entrepreneurship is and must always be an example of inspiration for young people, especially those educated in the field of economics in order to engage in entrepreneurial activities as an opportunity for career advancement and well-being.

Paper contributes to changing the inhibitory mentality for engaging in entrepreneurship that derives from Albania’s communist past. The detailed analysis of a concrete case study such as “K...” company in the focus of this paper aims to strengthen the confidence of Albanian citizens that “A firm is said to enter new entry when it introduces new products, services, technological innovations, markets, or business model innovations that did not exist before (Covin & Wales, 2019).

Policy making should be considered in order to support young people in the field of entrepreneurship. It should be seen as a promising perspective to reduce unemployment and avoid leaving the country for a better future. According to Biswas, Mäkelä & Anderson (2021): “On the personal level, expatriates and their dependents (e.g., spouses, children, and elderly family members) should be aware that relocation to a foreign country might affect their condition resources, which if diminished could threaten their well-being”.

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8. Competing interests

he author declares that she has no competing interests.

References


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Detecting Earnings Management Practices in European Insurance Sector: Purpose and Application of Accrual Modelling and Distribution of Earnings

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Purpose: The purpose of the present paper was to gauge the extent of the impact on earnings management derived from the adoption of International Financial Reporting Standards (IFRS) 17 as well as detecting whether the impact will be similar in different European “Insurance” and “Reinsurance” industries.

Design/Method/Approach: To provide empirical evidence that earnings management is more frequent in some countries and less frequent in others by means of a statistical analysis, a sample of European listed “Insurance” and “Reinsurance” companies in the period of 2018-2020 was observed. The Jones Model was applied.

Findings: This study concerns the implementation of a new principle, written to discipline the accountancy of insurances contracts, and its consequences must be carefully analyzed and monitored by regulators, as well as correctly adopted by managers, as the determined revenues could have an impact on the pre-existing earning management practices.

Theoretical Implications: The paper of the present research also concerns the predictions about the behavior of managers that can be foreseen considering the agency theory; therefore, knowing ex-ante in which industries earnings management has a high impact, provides the option to foresee the hypothetical moves of the managers in the implementation of IFRS 17.

Practical Implications: The analysis demonstrated that the “Insurance” industry is impacted by earnings management practices to a greater extent than the “Reinsurance” industry. These results should be analyzed simultaneously with the results from by the “Big Four” analysis concerning the impact of the introduction of IFRS 17.

Originality/Value: Specifically, companies belonging to two sectors were selected: “Insurance” and “Reinsurance”. The statistical analysis brought to light that earnings management practices are “commonly adopted” in the “Insurance” and “Reinsurance” industry, which is consequently highly impacted by the introduction of IFRS 17.

Research Limitations/Future Research: The total number of observations is high, all companies analyzed belong to only two industries. The analysis could be extended to a greater number of industries and companies in order to provide a more complete overview of the presence and the persistence of earnings management policies in different typologies of European financial listed companies.

Paper type: Empirical

Keywords: Accrual Modelling, Distribution of Earnings, Earnings Management Practices, Fair Value Relevance, Insurance and Reinsurance Industry.

Reference to this paper should be made as follows:
Виявлення практики управління доходами в європейському страховому секторі: мета та застосування моделювання нарахування та розподілу доходів

Мета роботи: Метою цієї роботи було оцінити ступінь впливу на управління прибутком від прийняття Міжнародних стандартів фінансової звітності (МСФЗ) 17, а також визначити, чи буде цей вплив однаковим у різних європейських галузях «Страхування» та «Перестрахування».

Дизайн / Метод / Підхід дослідження: Для надання емпіричних доказів того, що управління прибутком є більш поширеним в одних країнах і менш поширеним в інших, за допомогою статистичного аналізу було проведено спостереження за вибіркою європейських компаній, акції яких котируються на біржі, за період 2018-2020 роки. Застосовано модель Джонса.

Результати дослідження: Це дослідження стосується впровадження нового принципу, написаного для дисциплінування обліку договорів страхування, і його наслідки повинні бути ретельно проаналізовані та відстежені регуляторами, а також правильно прийняти менеджерами, оскільки визначені доходи можуть мати вплив на попередні практики управління доходами.

Теоретична цінність дослідження: Дане дослідження також стосується прогнозів щодо поведінки менеджерів, які можна передбачити урахуванням агентської теорії, тому, знаючи ex-ante, в яких галузях управління доходами має високий вплив, можна передбачити гіпотетичні кроки менеджерів при впровадженні МСФЗ 17.

Практична цінність дослідження: Аналіз показав, що на галузь "Страхування" практика управління доходами впливає більшою мірою, ніж на галузь "Перестрахування". Ці результати слід аналізувати однаково з результатами аналізу "Великої четвірки" щодо впливу впровадження МСФЗ 17.

Оригінальність / Цінність дослідження: Зокрема, були відбрані компанії, що належать до двох секторів: «Страхування» та «Перестрахування». Статистичний аналіз показав, що практика управління прибутком є "загальноприйняттою" в галузях "Страхування" та "Перестрахування", на які, відповідно, сильно впливає запровадження МСФЗ 17.

Обмеження дослідження / Майбутні дослідження: Загальна кількість спостережень є великою, всі проаналізовані компанії належать лише до двох галузей. Аналіз може бути поширений на більшу кількість галузей та компаній з метою надання більш повного огляду присутності та стійкості політик управління прибутком у різних типологіях європейських фінансових компаній, акції яких котируються на біржі.

Тип статті: Емпірічний

Ключові слова: моделювання нарахування, розподіл прибутку, практика управління прибутком, відповідність справедливій вартості, страхування та перестрахування.
1. Introduction

Since 1973, there has been a worldwide trend to standardize accounting principles. Over the last few years, the need to harmonize accounting rules has risen in Europe too. As a result, the European Commission started issuing directives to the member states. The objective of the European Union (EU) is to facilitate the development and efficiency of European financial markets. The adoption of different accounting standards in each Member State, in fact, in the past determined a low degree of comparability of financial reporting among the companies located in different European States, serving a deterrent to the development of these markets. The European accounting legislation (that is Directives n. IV and VII, respectively on the subject of annual financial statements and consolidated financial statements), which is applied differently in each member State, was no longer adequate to ensure this objective.

In this regard, the European Union Parliament decided to promote, and progressively to make mandatory, for the fiscal years starting after 1 January 2005, the adoption of International Accounting Standards (IAS/IFRS), elaborated by the International Accounting Standards Committee (IASC) – initially by a group of professional accountants, and subsequently by a board called the International Accounting Standards Board (IASB), which is an internal committee of the global organization for accountancy (International Federation of Accountants – IFAC). The European Union decided to focus its attention on IAS/IFRS as an answer to its previously set ideas, such as (Preface to IFRS, 2018):

1. “develop [...] high quality, understandable and enforceable global accounting standards [...] that require high quality, transparent and comparable information [...] to help participants on the world’s capital markets and other users [...]”;
2. “promote the use and rigorous application of those standards”;
3. “bring about convergence [...]”.

These are also the reasons why IAS/IFRS achieved such an extraordinary success persuading almost 100 Countries to adopt them. Moreover, many studies show that adopting IFRS, firms act optimally and promote financial reporting quality and investor interests. Other researches, some with empirical evidence, show that the adoption of IFRS reduces the level of earnings management since this set of standards limits management’s opportunistic discretion and, consequently, the adoption of IFRS decreases the use of discretionary accruals. In this scenario, the current, major change in the IAS/IFRS panorama is represented by the adoption of two new standards such as IFRS 9 “Financial Instruments” and IFRS 17 titled “Insurance contracts”. The present paper focuses on IFRS 17 because it can be considered one of the crucial issues for insurance companies, considering that revenues are both easily examined and one of the primary earnings subject to discretion. The aim of the present paper is to evaluate the impact of IFRS 17 on earnings management and question whether the level of impact will be different according to a European country.

Therefore, it seems useful to provide empirical evidence in specific industries where earnings management is more frequent, followed by an attempt to evaluate the benefits obtained from the correct and adequate introduction of IFRS 17. The paper is structured as follows. The next section reviews the first institutional settings and academic literature on the impact of IAS/IFRS adoption on earnings management and its possible future effects within different European insurance industries. The following section is dedicated to explaining the empirical research; in detail, the background research is presented, such as the literature and information necessary to create the basis for the research, the methodology used for the analysis is described, the variables, the sample and the regression used as well as the findings and an initial discussion about the results. The paper ends by reporting the main conclusions and explaining some limitations.

2. Institutional Settings of IFRS 17

FRAG has submitted its final opinion on the use in the EU of the International Accounting Standard for “Insurance Contracts” IFRS 17 to the European Commission, including the amendments in June 2020. IFRS 17 establishes the principles for recognition, evaluation, presentation, and disclosure of “insurance contracts”. The goal of the Accounting Standard is to ensure that an enterprise provides relevant information that faithfully represents such contracts. IFRS 17 must be applied for annual financial years starting from January 1, 2023, or later. If a company applies IFRS 17 before that date, it must give specific notice. Early adoption is allowed for entities that use IFRS 9 Financial Instruments on the date of initial application of IFRS 17 or before that date.

In May 2017, the board of the International Financial Reporting Standard, known as IFRS, published a new accounting requirement for insurance companies, effective from January 2023, after an amendment that moved its effective date from January 2021. The new Standard revolutionizes the insurance world by introducing an approach oriented towards the present value application of contracts.

This occurs through the calculation of the Contractual Service Margin, or CSM which represents the profit not yet calculated, from a group of contracts and calculated at initial recognition, when a group of contracts is recognized, and insurance coverage begins (Fig. 1). A first important development, from the point of view of the regulatory approach, concerns precisely the need not to have to evaluate contracts on an individual basis, but to have to aggregate them based on three different drivers:

- a. Types of risks emanating from the insured to the insurer.
- b. Contract length.
- c. Degree of profitability, for example, if a group is onerous and the recognition of a Loss Component is expected, or if it is inexpensive and you have CSM (Contractual Service Margin).

The IASB has outlined three possible approaches to measure the liabilities of a group of contracts (Fig. 2):

- a. The Building Block Approach, or BBA, the all-encompassing method that requires the calculation of LRC (Liability for Remaining Coverage), liabilities for future services, such as the present value of all cash flows, net of adjustment for non-insurance, plus expected future profits, and LCIs (Liability for Incurred Claims), the liabilities for those claims that have occurred but not yet settled;
- b. The Premium Allocation Approach, or PAA, is the simplified method that only requires the calculation of premiums not yet set aside as profits, net of expenses incurred (administrative, management and provisioning costs, etc.), whose application is only permitted if the final result in terms of recognized profits is equal to that of BBA, if the group is not onerous and if the contracts belonging to the group have a coverage of less than or equal to one year;
- c. The Variable Fee Approach, or VFA, is applicable only to those contracts in which the insurer shares the performance results of an underlying with the policyholder, typically these are life-death contracts.

As previously stated, this paper proposes a comparative analysis aimed at highlighting the number of discretionary accruals presented in two different industries with a different degree of sensitivity to IFRS 17 application: “Insurance” and “Reinsurance”. The objective of the analysis is to understand whether the application of IAS/IFRS could increase the quality of accounting information and decrease earnings management policies through the “Big Four” audit quality procedures (Fig. 3).
Figure 1: CSM (Contractual Service Margin) in IFRS 17

Source: developed by author

Figure 2: Evaluation Modelling in IFRS 17

Source: developed by author

Figure 3: “Big Four” approach to evaluate earnings management practices

Source: developed by author
In this regard the Agency Theory approach must be considered (Jensen & Meckling, 1976) in accordance with shareholders’ needs to delegate management considering specific skills and knowledge (Zanobio, 2012), showing that Agency Theory makes several predictions regarding managers’ behavior (Iatrídis, 2010). The need for this analysis arose observing the numerous changes made over the last few years by international standard setters aimed at improving the set of accounting standards whose continuous process of updating has led to the introduction of IFRS 17 (Barth & Clinch, 1998). The new accounting principle provides rules for insurance contracts recognition that are profoundly different from the ones provided by IFRS 4, regarding the definition of insurance contracts amount, contract costs and the timing of their recognition. The application of the new standard will have significant effects on the financial statement of entities adopting IFRS (Barth, 2010). The following analysis will be explained, being based on the earnings management model proposed by Jones (1991), it aims at identifying the status of European listed insurance companies until 2016. The analysis, concurrently with the analysis of the “Big-Four”, compares the “Insurance” and “Reinsurance” industries, respectively identified as highly sensitive and medium/low sensitive industries to the introduction of new IFRS 17 (Fig. 2).

The statistical activity focuses on the context analysis of new IFRS 17 adoption, albeit not considered as subject to manipulation, and is subordinate to the new principle and plays a fundamental role with regard to earnings management practices, as a proxy for the measurement of companies’ conditions (Barth & Taylor, 2010). Establishing the introduction of IFRS 17 and the potential impact on earnings management opportunities can provide indications to a large number of stakeholders (such as shareholders, policy makers, auditors, etc.) providing them with manipulation indications in the financial statements of specific industries (Tab. 1).

The term “creative accounting” refers to the use of flexibility in accounting principles in order to manipulate the presentation and/or valuation of financial statement items. Consequently, budget editors can show stakeholders whatever they find more convenient, hiding the company’s actual performance. Given that such practices rely on the interpretation of accounting principles, it remains very difficult to establish when they are bound to illegality (Fig. 4).

### Table 1. Tolerance Level of Misstatements for Accounting Section

<table>
<thead>
<tr>
<th>Section</th>
<th>Low</th>
<th>Low to medium</th>
<th>Medium</th>
<th>Medium to high</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>2%</td>
<td>1.75%</td>
<td>1.5%</td>
<td>1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Total Assets</td>
<td>2%</td>
<td>1.75%</td>
<td>1.5%</td>
<td>1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Net Assets/Equity</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Net Current Assets</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: our elaboration “Big Four” Survey 2019-2021

### Table 2: IFRS 17 and Impact on Financial Statement Quality: The “Big Four” Expectations

<table>
<thead>
<tr>
<th>Sector</th>
<th>KPMG</th>
<th>EY</th>
<th>Deloitte</th>
<th>PWC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Reinsurance</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Note:
1. Medium: from 30% to 60% of the risk-weighted Audit Performance Materiality.
2. Medium/Low: from 20% to 50% of the risk-weighted Audit Performance Materiality.
3. Medium/High: from 60% to 80% of the risk-weighted Audit Performance Materiality.
4. High: from 80% to 100% of the risk-weighted Audit Performance Materiality.

Source: our elaboration “Big Four” Survey 2019-2021

### Table 3: IFRS 17 and Distortion Risks of Financial Statement Quality

<table>
<thead>
<tr>
<th>European Areas</th>
<th>Overall</th>
<th>Assets/Equity</th>
<th>Profit and Loss Smoothing</th>
<th>Impression Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>England and Island</td>
<td>Medium/High</td>
<td>Medium</td>
<td>High</td>
<td>Medium / High</td>
</tr>
<tr>
<td>Northern Europe</td>
<td>Medium/Low</td>
<td>Medium</td>
<td>Low</td>
<td>Medium / Low</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium / High</td>
</tr>
<tr>
<td>Southwestern Europe</td>
<td>Medium/High</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Note:
1. Level of Conservatism: Fiction Creative Accounting.
2. Level of Cash-Fraud Evidence: Real Creative Accounting.
3. Level of Misrepresentation: Narrative and Graphs.

Source: our elaboration “Big Four” Survey 2019-2021

### 3. Literature Review

The adoption of accrual-based accounting is considered necessary because it is able to provide a complete picture of the financial transactions of businesses, recording all period transactions (Baker & Griffith, 2007). The system, being based on a complete record of the financial matter, discloses correct profits or losses for a specific period; above all when compared to a cash-based system, in which transactions are recorded only when cash is received or paid, accrual accounting could be considered less vulnerable in a real management practices perspective since systems of monetary flows are easier to manage (Barth, 1994). This is one of the reasons why IFRS are based on accrual accounting.

The latter point is widely agreed upon in the main literature. Goldman and Brashes (1991) believe that a full-accrual accounting system emphasizes the transparency of financial statements and allows a faithful representation of corporate performance; similarly, Vinnari and Näsä (2008), argue that the adoption of an accrued-based system, such as the IAS/IFRS system, is able to limit the use of creative accounting.

The term “creative accounting” refers to the use of flexibility in accounting principles in order to manipulate the presentation and/or valuation of financial statement items. Consequently, budget editors can show stakeholders whatever they find more convenient, hiding the company’s actual performance. Given that such practices rely on the interpretation of accounting principles, it remains very difficult to establish when they are bound to illegality (Fig. 4).

Considering that IFRS are standards elaborated on an accrual basis, the adoption of these principles is widely supported by mainstream literature, even though each author provides a different reason. Corsi and Mancini (2010) highlight its superiority over, for example, the Generally Accepted Accounting Principles (GAAP), which are not “rigorous” enough, leaving high degrees of freedom in implementing earnings management policies. Jeanjean and Stolowy (2008) assert that implementing IFRS simplifies the comparison of companies’ financial performance across different countries (Fig. 4). Focusing on earnings management has brought to light the ongoing debate in literature started in 1980s, when many authors started developing models to highlight the persistence of the phenomenon (Healy, 1985; De Angelo, 1986; Jones, 1991; Dechow et al., 1995; Dechow & Dichev, 2002; Tutino & Pompili, 2017). Two main earnings management categories can be identified:

1. Accrual management, related to the possibilities offered by accounting standards (professional judgments), aiming at “obscuring” or “masking” true economic performance (Dechow & Skinner, 2000).
2) Real activities manipulation that occurs when managers undertake actions that change the timing or structuring of an operation, investment, and/or financing transactions in an effort to influence the output of an accounting system (Gründl, Post, & Schulze, 2006).

### Classification of Earnings Quality Studies

| Studies on accrual accounts to measure the quality of earnings | Studies focused on earnings continuity and predictability as one of the characteristics of earnings quality | Studies concerned with measuring earnings quality using financial reporting information | Studies on the relationship of earnings quality and corporate governance |

**Figure 4: Classification of earnings quality studies**

**Source:** developed by author

By relating IAS/IFRS and earnings management, some authors have realized that the quality that would place IAS/IFRS above local GAAP is cost reduction for investors to assess the quality of the information reported in IFRS compliant financial statements. In fact, the greater comparability of financial statements would make it possible to identify any earnings management actions in a timely manner, reducing the possibility of opportunistic behavior by managers (Ballotta, Esposito & Haberman, 2006).

Mechelli and Cimini (2012) highlight the ability of IAS/IFRS to fill in local legislative gaps relating to particular events that must be reported in financial statements. For example, the presence of “gaps” in enforcement mechanisms could weaken, or even nullify, the positive effects of new standards (Beaver, McNichols, & Nelson, 2003).

Other authors such as Leuz and Verrecchia (1999), Ashbaugh and Pincus (2001), Leuz (2003) point out that greater disclosure required while applying IFRS for the preparation of financial statements would result in reduction in opportunistic behavior (Browne, Yu-Luen Ma, & Ping Wang, 2006). Nevertheless, different and conflicting conclusions are made in many investigations carried out in this specific field. Barth et al. (2008), observing the quality of “budget numbers” before and after the adoption of IFRS on a sample of 327 companies that opted for voluntary implementation between 1994 and 2003, points out lower earnings management along with greater value relevance and timely recognition of losses following the introduction of international accounting standards, translating into higher quality financial statements than those prepared in accordance with local GAAP.

Daske et al. (2008) examining the economic consequences of adopting IFRS on a sample of 3,800 first-time adopters in 26 different countries, find out a positive correlation between the introduction of IFRS, market liquidity and market valuation. Differently, Armstrong et al. (2010) analyze the potential impact on stock market price with the adoption of IFRS. The results show a positive correlation underlying a positive (negative) market reaction with the increase (decrease) in the probability of IFRS adoption. The combination of these results shows that, at least for early adopters, companies could benefit from the adoption of IFRS. Iatridis (2010) draws similar conclusions observing a sample of listed companies in the UK: the adoption of IFRS is able to reduce the possibilities of earnings management as it leads to timely and value relevant recognition of losses. While with the exact opposite idea, Capkun et al. (2016) show that early adopters of IFRS had incentives to increase the transparency of their reporting in order to attract outside capital, and, therefore, earnings management (smoothing) went down after voluntary IFRS adoption, while those firms that waited until IFRS reporting became mandatory in EU countries lacked in incentives for transparent reporting, leading to increases in earnings management (smoothing) after mandatory IFRS adoption.

Meaning that IAS/IFRS standards, which went into effect in 2005, permit greater flexibility in application and thus contribute to greater earnings management. A similar conclusion can also be found in Ugrin et al. (2017) where the authors demonstrate that a uniform association between IFRS adoption and earnings management across countries does not exist, in fact, sometimes, IFRS create an environment that allows for financial manipulation. Similarly, another contribution elaborated by Ewert and Wagenerhofer (2005) deals with a significant increase in income-increasing earnings management after IFRS adoption amongst firms based in countries that are more power distant, uncertainty avoidant, individualistic, short-term oriented, and indulgent (Grace, 1990).

Therefore, from a theoretical point of view, there are no doubts about the benefits of IAS/IFRS adoption. Following the same path of the literature, an attempt is made to find any evidence of the potential different impact of IAS/IFRS observing different industries. The rationale for the investigation emerges following the voluntary early adoption, starting from 1 January 2018, of a specific accounting standard related to the valuation of insurance contracts: IFRS 17.

After 20 years of work, the new IFRS for the accounting of insurance contracts was officially published on May 18, 2017, and the date of entry into force was set first on January 1st, 2021, and after moved on January 1st, 2023. In the transitional period, insurance companies have the option to continue applying accounting principles envisaged by IFRS 4 or to adopt IFRS 17 in advance with the application context of IFRS 9 (Financial instruments) and of IFRS 15 (Revenue from contracts).

### 4. Research Design

#### 4.1. Previous Studies

A number of studies deal with some issues related to the expected impact of applying IFRS 17 on several variables, and many studies focus on the quality of financial reports as a dependent variable for the application of financial reporting standards in general, but there is a scarcity of studies - according to the researchers’ knowledge - that link the expected impact to apply the standard to the quality of financial reporting (Grace & Levytoy, 2005).

The study by Clark et al. (2020) examines the expected impact of applying IFRS 17 on expected profits to be distributed by insurance companies in a number of European countries. It is unlikely that the requirements will change due to the adoption of Financial Reporting Standard 17 regarding the flow of distributable profits for new businesses with low profitability and / or high capital
requirements. However, the standard may constitute a constraint on the timing of dividend distribution in the case of products that have high profitability and / or low capital requirements (Hoyt, Robert & McCullough, 2005).

The study by Al-Mashhadani (2020) deals with the challenges of applying the standard in the Iraqi environment. This study that uses the questionnaire as a measuring tool finds that there are fundamental differences between accounting requirements for insurance contracts according to the unified accounting system used in banks and insurance companies and the requirements of IFRS 17, and that the most prominent challenges facing Iraqi insurance companies are summarized in choosing the method used for initial and subsequent measurement of insurance contracts, estimating future cash flows of contracts and choosing appropriate discount rates, in addition to determining the contractual service margin for insurance contracts (Petroni, 1992).

As for the study by Longoni (2019), that links IFRS 17 applications to the value of the company, the researcher conducted a survey of the impact of 50 potential events that could result from applying the standard to investors, and then the researcher analyzed adjusted market returns for the most of 16 events affected by standard application. In general, the study found that the application of the standard leads to reducing the value of the company, and that the negative impact on the value of the company was greater for large insurance companies with low growth opportunities (Petroni, Kathy & Besley, 1996).

Sotona (2018) focuses on assessing risks, especially mortality risks, in relation to IFRS 17, and concludes that risk assessment in general and mortality risks in particular will be more transparent within disclosures in financial statements according to Standard 17, but this requires doing a change in accounting and actuarial policies with respect to risk, and modification of existing actuarial models for pricing, development, control and accounting for risks (Petroni, Kathy & Shuckford, 1999).

Yanik and Bas (2017) provide a general evaluation of IFRS 17 and conclude, following a set of methods, including case studies and interviews with investors and employees of insurance companies, that the standard will be beneficial to investors and insurance companies alike by providing disclosure requirements (Petroni, Ryan & Wahlen, 2000).

Many international organizations, especially those related to auditing, have presented some studies on IFRS 17, where AON Plc (2020) studied the effect of applying the standard to performance indicators through the use of experts. It is concluded that the adoption will increase transparency and understanding of financial statements. It also concludes that credit rating agencies do not expect that moving to implement IFRS 17 will have a direct impact on insurance companies’ rating. Also, the study indicates that it is important at the beginning of the application to pay attention to the disclosures related to the regulatory capital and adjusted returns on equity at a discount rate. Furthermore, financial leverage will be affected as a result of application, so analysts must rely on other indicators. It also points out the importance of including disclosures in tables that include how to generate operating profits from ongoing, new, and discontinued businesses.

In the study by Price Waterhouse Coopers (PwC, 2019), which deals with the impact of applying IFRS 17 on the performance of European insurance companies by analyzing the expected performance indicators of the 20 largest European insurance companies, it is found that the transition to IFRS 17 will work on abolishing the profit in the beginning by reducing initial returns for some types of new insurance, and the recognition of profits will be postponed for some insurance products other than life insurance, which in turn will lead to early recognition of losses.

As for Swiss Re (2018), in cooperation with Deloitte, KPMG and IFB, it indicates that IFRS 17 application will bring benefits related to providing detailed information about the performance of investment and underwriting, in addition to that, the revenues and expenses of underwriting are recognized over time in a way that allows comparison.

The study by Peña and Franco (2016) adds that the size of the company plays a positive role in the relationship between the adoption of compulsory financial reporting standards and the quality of financial reports in Britain. But in France, there was no effect between the adoption of financial reporting standards and the quality of financial reports, as the study followed the quantitative approach to arrive at results by identifying discriminatory risks of share returns and using profit management models to measure the quality of financial reports.

4.2. Data Sampling

The study relies as a first step on the exploratory approach, and this approach is useful in case of planning to explain the nature of the problem or phenomenon and helps in how to deal with it, especially in case of uncertainty (the expected effect of a standard that has not yet been applied). The second step is to rely on the descriptive (analytical) approach to explain the researched phenomenon, relying on all facts and data, classifying them, and then processing the data and analyzing it to extract its significance and arrive at conclusions or generalizations about the phenomenon or problem (Sekaran & Bougie, 2016: 103).

The initial sample, which has been taken from EIOPA site (Tab. 4), consists of 120 European listed companies, operating in 2 different sectors “Insurance” and “Reinsurance”, being observed during the period of 2018-2020 (Fig. 5). The sectors chosen for the analysis were selected from the studies carried out by the “Big Four” on voluntary early adoption of IFRS 17. A specific analysis focused on industries mostly affected by the new IFRS in terms of measurement, recognition and disclosure of insurance contracts rules (Tab. 5).

Table 4: Sample of European “Insurance” and “Reinsurance” listed companies

<table>
<thead>
<tr>
<th>European Areas</th>
<th>Companies</th>
<th>Insurance</th>
<th>Reinsurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK and Islands</td>
<td>44</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>Northern Europe</td>
<td>38</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>21</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>South Europe</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>85</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Taken from EIOPA site and tested by Big Four IFRS 17 first adoption Reports

Figure 5: Distribution of sample in European Areas

Source: developed by author
The previous subdivision of total accruals, in agreement with De Angelo (1986), is based on the assumption that change of non-discretionary accrual is almost non-existent; therefore, the difference in total accruals is exclusively due to changes in discretionary accrual levels.

The Jones model, therefore, is based on the assumption that, at the period “t”, there is no earnings management and, therefore, the difference in total accruals between the period “t-1” and the period “t”, is necessarily due to the existence of non-discretionary accruals, showing a potential presence of earnings manipulation. In order to verify the relationship between the economic conditions of companies and the level of accruals, Jones (1999) introduces the following equation (3):

\[
TA_{it} = \alpha_i \left(1/A_{it}\right) + \beta_1 \left(\Delta REV_{it}/A_{it}\right) + \beta_2 \left(PPE_{it}/A_{it}\right) + \varepsilon_{it}
\]

Where

- \(TA_{it}\) – Total Accrual at the time “t” for company “i”;
- \(A_{it}\) – Total Asset at the time “t” for company “i”;
- \(REV_{it}\) – Revenues at the time “t” minus revenues at the time “t-1” for company “i”;
- \(PPE_{it}\) – Gross Property, Plant and Equipment at the time “t” per company “i”;
- \(\varepsilon_{it}\) = Error term in year “t” for firm “i”;
- \(\alpha, \beta\) – Statistical coefficient for independent variables;
- \(i = 1, ..., N\) firm index and \(t = 1, ..., T\) year index for the years included in the estimation period for firm “i”.

The inserted dependent variables have the following meanings:

- a. PPE are included in order to monitor the non-accural quota derived from the recognition of discretionary write-downs; furthermore, depreciation is included in the calculation of total accruals;
- b. Revenues are mainly included as an indicator of the economic conditions of companies. Furthermore, as for PPE, the manipulation of revenues is linked to the change in non-cash working capital used to calculate total accruals.

The error term obtained by the regression of Equation (3) can be explained as follows:

\[
\varepsilon_{it} = TA_{it}/A_{it} - \left[\alpha_i \left(1/A_{it}\right) + \beta_1 \left(\Delta REV_{it}/A_{it}\right) + \beta_2 \left(PPE_{it}/A_{it}\right)\right]
\]

The Equation (4) expresses the level of discretionary accruals for each year “\(p\)” and is used to determine their amount in the companies in the observed insurance and reinsurance industries.

4.4. Hypothesis and Distributions of Earnings

Dependence on literature reviews and previous studies, researchers formulated the main hypotheses of the study, which is this:

\(H_0\): There is no expected statistically significant impact at the level of \(p = 0.05\) for applying IFRS 17 on the relevance of financial reports of European “Insurance” and “Reinsurance” companies.

It is divided into the sub-hypotheses (Tab.6).

The following Fig. 6 shows all the variables observed for each company and used in order to define the discretionary level of accruals using Equation 4. \(\varepsilon\) is a proxy or earnings quality measurement; in Modified Johns Model \(\varepsilon \sim i.i.d.\)

Hypothesis testing (Tab. 6) uses the following research model:

\[
\varepsilon_{ip} = \beta_1 + \beta_2 \left(FVR\right) + \beta_3 \left(FR\right) + \beta_4 \left(Comp\right) + \beta_5 \left(Under\right) + \beta_6 \left(Audit\right) + \beta_7 \left(Time\right) + \xi
\]
5. Result of Multivariate Analysis

Statistical tests were conducted with the support of “GRETEL” software to investigate the existence of a significant difference between the extent of discretionary accruals for the companies in the “Insurance” industry compared with those operating in the “Reinsurance” industry.

First of all, Equation 4 was regressed (OLS) introducing an intercept for a statistical purpose, and the results were utilized to estimate the discretionary portion of accruals.

Tab. 7 deals with the framework of an independent variable made to represent the extent and distribution of the total and discretionary accruals in the two industries within the considered period.

Tab. 8 synthesizes the results of the analysis.

The research model is significant (p value .01 level), R² is .68 and F Value 4.56.

The independent variable that has a significant result (level .01) is understandability. The independent variable that has a significant result (level .05) is fair value relevance and faithful representation.

6. Conclusion and Discussion

It was found that the expected impact of applying International Financial Reporting Standard 17 to insurance contracts on the quality of financial reports is significant and positive, especially on the comparability of financial reports, faithful representation and relevance. It was also found, by reviewing the answers of the study sample that received the highest averages, that IFRS 17 application by unifying the software to investigate the existence of a significant difference between the extent of discretionary accruals for the companies in the “Insurance” industry compared with those operating in the “Reinsurance” industry.

As can be seen from the reported results in Tab. 9, the difference between the averages of the two industries is very significant (p value < .05) meaning that the discretionary accruals show a higher average impact in the “Insurance” industry compared with the value reported for the “Reinsurance” sector. Given these results, it is possible to affirm that the “insurance” industry is more affected by earnings management behavior than the “Reinsurance” industry. This must be taken into account together with the analysis made by the Big four in order to better analyze and understand the possible impact related to IFRS 17 application.

Source: developed by author

Table 6: Audit Assertions Criteria for applying IFRS 17

<table>
<thead>
<tr>
<th>Sub-hypotheses</th>
<th>Audit Assertions Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀⁻¹</td>
<td>Fair value relevance (FVR)</td>
<td>There is a positive association between fair value relevance and earnings quality.</td>
</tr>
<tr>
<td>H₀⁻²</td>
<td>Faithful Representation (FR)</td>
<td>There is a positive association between faithful representation and earnings quality.</td>
</tr>
<tr>
<td>H₀⁻³</td>
<td>Comparability (Comp)</td>
<td>There is a positive association between comparability and earnings quality.</td>
</tr>
<tr>
<td>H₀⁻⁴</td>
<td>Understandability (Under)</td>
<td>There is a negative association between understandability and earnings quality.</td>
</tr>
<tr>
<td>H₀⁻⁵</td>
<td>Auditability (Audit)</td>
<td>There is a negative association between auditability and earnings quality.</td>
</tr>
<tr>
<td>H₀⁻⁶</td>
<td>Timeliness (Time)</td>
<td>There is a negative association between timeliness and earnings quality.</td>
</tr>
</tbody>
</table>

Source: developed by author

Table 7: Framework of Independent Variable

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Proxy of Audit Assertion Criteria</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVR</td>
<td>Market Value</td>
<td>1.88</td>
<td>2.22</td>
<td>.22</td>
<td>4.22</td>
</tr>
<tr>
<td></td>
<td>Book Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>Fair Value Best Estimate</td>
<td>1.66</td>
<td>3.56</td>
<td>.17</td>
<td>5.77</td>
</tr>
<tr>
<td></td>
<td>Cost model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp</td>
<td>Insurance Asset</td>
<td>1.22</td>
<td>2.88</td>
<td>.11</td>
<td>3.24</td>
</tr>
<tr>
<td></td>
<td>Reinsurance Asset</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under</td>
<td>Number of Audit Issues</td>
<td>.64</td>
<td>.22</td>
<td>.31</td>
<td>1.88</td>
</tr>
<tr>
<td></td>
<td>Auditing Meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit</td>
<td>Audit Fees</td>
<td>.23</td>
<td>.66</td>
<td>.17</td>
<td>1.78</td>
</tr>
<tr>
<td></td>
<td>Performance Materiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Audit Fees X Time of Engagement</td>
<td>2.22</td>
<td>.98</td>
<td>1.22</td>
<td>2.58</td>
</tr>
<tr>
<td></td>
<td>Performance Materiality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: developed by author

Table 8: Multivariate Analysis

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>T Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.88</td>
<td>-1.56***</td>
</tr>
<tr>
<td>FVR</td>
<td>2.88</td>
<td>-2.88**</td>
</tr>
<tr>
<td>FR</td>
<td>3.77</td>
<td>4.26**</td>
</tr>
<tr>
<td>Comp</td>
<td>2.22</td>
<td>-3.77***</td>
</tr>
<tr>
<td>Under</td>
<td>-1.64</td>
<td>-1.22</td>
</tr>
<tr>
<td>Audit</td>
<td>-1.23</td>
<td>1.66</td>
</tr>
<tr>
<td>Time</td>
<td>-2.55</td>
<td>1.98</td>
</tr>
<tr>
<td>R²</td>
<td>.66</td>
<td>4.56</td>
</tr>
</tbody>
</table>

Source: developed by author

Table 9: Summary of results

<table>
<thead>
<tr>
<th>Test</th>
<th>Insurance</th>
<th>Reinsurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.13</td>
<td>.03</td>
</tr>
<tr>
<td>T</td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td>DF</td>
<td>350.22</td>
<td></td>
</tr>
<tr>
<td>P Value</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>

Source: developed by author

As can be seen from the reported results in Tab. 9, the difference between the averages of the two industries is very significant (p value < .05) meaning that the discretionary accruals show a higher average impact in the “Insurance” industry compared with the value reported for the “Reinsurance” sector. Given these results, it is possible to affirm that the “insurance” industry is more affected by earnings management behavior than the “Reinsurance” industry. This must be taken into account together with the
revenues and expenses will provide the possibility of comparison between “Insurance” and “Reinsurance” activities. Researchers recommend working on creating appropriate conditions for implementation of the standard by training and qualifying workers, in addition to preparing the systems and software necessary to implement the standard. Moreover, they suggest that insurance companies conduct a simulation related to applying the standard by classifying existing insurance contracts according to the classifications of the new standard and studying the impact of the application presumed on accounts as well as by various entries, and the need to follow objective assumptions from the company’s management to estimate cash flows when applying the standard (Tab. 10).

Table 10: Distribution of earnings quality error in selected sample

<table>
<thead>
<tr>
<th>Country</th>
<th>Insurance earnings Quality Error</th>
<th>Reinsurance earnings Quality Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Ireland</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Germany</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>France</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Spain</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Italy</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Poland</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Romania</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Hungary</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: developed by author

The results show that within the industries influenced by the introduction of IFRS 17, the “Insurance” one is more impacted by earnings management practices than the “Reinsurance”. The different levels of earnings management within the diverse industries are confirmed by the papers found in the literature.

These results must also be analyzed simultaneously with the results carried out by the “Big-Four” reports on the impact of IFRS 17 in order to draw appropriate conclusions for stakeholders, and the policy makers’ perspective must be taken into consideration. As stated above, the “Big Four” analysis shows that the “Insurance” industry presents some areas that are highly impacted by the advent of IFRS 17 and given the results obtained from the analysis it is possible to affirm that these aspects could be responsible for the level of earnings management.

High quality accounting standards have been introduced by IASB and FASB in order to improve worldwide quality of financial reporting. Existing evidence allows assertion that these accounting standards are able to reduce the level of earnings management (Cai et al., 2008; Rudra & Bhattacharjee, 2019; Mechelli & Cinini, 2012) and, consequently, decrease the use of discretionary accruals (Guenther et al., 2009). Given this scenario, the present study, starting from the introduction of IFRS 17 “Insurance Contracts”, looked for evidence of earnings management in a sample of European public firms and, specifically, knowing that the possible effects of IFRS 17 introduction could be different in each “Insurance” and “Reinsurance” industry. The present study considers the “Insurance” industry as highly influenced by IFRS 17, and “Reinsurance” industry is considered an industry with low impact.

The analysis demonstrates that the “Insurance” industry is impacted by earnings management practices to a greater extent than the “Reinsurance” industry. These results should be analyzed simultaneously with the results of the “Big Four” analysis concerning the impact of IFRS 17 introduction.

As previously mentioned, the scientific contribution of the present research concerns the possibility to predict managers’ behavior by considering Agency Theory (Iatridis, 2010); therefore, knowing ex-ante, which industries have highly influenced earnings management, makes it possible to predict the hypothetical moves by managers in the implementation of IFRS 17.

The total number of observations is high, all companies analyzed belong to only two industries. The analysis could be extended to a greater number of industries and companies in order to provide a more complete overview of the presence and the persistence of earnings management policies in different European financial companies’ typologies.

7. Funding

This study received no specific financial support.

8. Competing interests

The author declares that he has no competing interests.

References


Purpose: To generalize a taxonomy of responsible investment strategies based on assessing the main trends in the development of SRI at the global level and by major geographical regions. Analyse the types of existing SRI strategies and rank them according to their leading positions and active use in different geographical regions.

Design/Method/Approach: System-structural in order to generalize approaches to the typology of socially responsible investment strategies in accordance with the current assets structure managed by investment managers, including by geographical regions; systematic analysis to identify current trends and patterns in the investment processes in line with the Sustainable Development Goals (SDGs); statistical and graphical methods for quantitative and visual presentation of analysis results.

Findings: The current mechanism of socially responsible investments distribution in comparison with traditional assets is characterized; global trends in the field of SRI are assessed; the taxonomy of SRI strategies in accordance with general scientific approaches and classifications of international investment organizations aimed at achieving the Sustainable Development Goals at the global level has been formed and generalized.

Theoretical Implications: A comprehensive assessment of global investment processes is carried out in the context of responsible investment and achievement of the Sustainable Development Goals; the most optimal approaches to the RI strategies typology have been determined based on its current trends, the level of attraction of them in different regions in order to apply them in the impact investments programs, developing the country's profile as an investment donor.

Research Limitations/Future Research: The obtained results will be used in the further study of the transformation of the stock market in Ukraine based on the responsible trajectory and fractal analysis. Also, identified responsible investment strategies can serve as a basis for developing the investment profile of the impact investment donor country, as well as for highlighting priority areas for attracting investments to restore the country's economy after crises, military conflicts and other macroeconomic destabilization factors.

The study was performed within the state budget research “Fractal model of the stock market transformation in Ukraine: socially responsible investment to achieve the Sustainable Development Goals” № 0121U100473

Paper type: Empirical

Keywords: Socially Responsible Investing, ESG-criteria, Investment Strategy, Sustainable Development, Sustainable Development Goals.
1. Вступ

Посіченою рисою інвестиційних процесів є проведення оцінки отриманих результатів прийнятих рішень з подальшим співставленням ризиків та вигід. Традиційний підхід передбачає використання різних прийомів, наприклад, рентабельність інвестицій, строк окупності, дохідність. Втім в сучасних умовах актуальним є також використання різних фінансових критеріїв.

Це в свою чергу вимагає пошуку нових інструментів по безпечно використанні інвестицій, які б відповідно відображали рівень фінансової стабільності та ефективності інвестицій. Одним із таких прийомів є так зване “інвестиційне управління” (Investment Management), що базується на використанні фінансових моделей та аналізі ризиків.

У якості інвестиційних моделей можуть бути використані різні стратегії, що залежать від конкретної ситуації, але основним пунктом є вивчення стану ринків та впливу економічних факторів на інвестиції. У цьому контексті особливу увагу заслуговує аналіз екологічних та соціальних аспекти інвестицій.

2. Літературний огляд

У “Міжнародні ініціативи щодо поширення принципів відповідального інвестування” (Principles for Responsible Investment) зазначається, що відмінною рисою відповідального інвестування є те, що воно тільки до максимізації фінансового результату з урахуванням екологічних, соціальних та управлінських факторів (ESG – environmental, social and governance).

Тобто, переходячи на відповідне інвестування інвестори приймають на себе обов’язки по сприянню прийняття кращих інвестиційних рішень через інтеграцію саме ESG-факторів, та руху до сталого майбутнього.

Світове призначення концепції сталого розвитку як магістральної вимоги включає пошуку нових шляхів та ресурсів для досягнення встановлених сімнадцяти Цілей сталого розвитку та 169 завдань до 2030 року. За узагальненою оцінкою ООН, для цього, при цьому для країн з низьким та середнім рівнем доходу, вони потрібно здійснити вкладі в інші форми інфраструктури, наприклад, в енергетику.

Також використання конкретних стратегій, які включають критерії ESG в інвестиційні стратегії має стати частиною загального аналізу ризиків, спрямованого на забезпечення стабільного прибутку у майбутньому. Усередині виникає потреба виводити інвестиції з таких секторів, як гідроенергетика, нафтодобування, вугільна галузь та інші.

У рамках дослідження автори перевірили, що за потребами ринку інвестиції мають бути здатними забезпечувати стабільний прибуток у майбутньому. Тому все більше інвесторів мають звернуті увагу на фактори ESG у своїх інвестиційних стратегіях.


Головним принципом соціально відповідального інвестування є інтеграція соціальних та екологічних критеріїв в інвестиційні рішення. Таким чином, SRI є стратегією, що вимагає врахування ризиків та вигід у структурі інвестиційного портфелю. Отже, як бачимо, SRI є стратегією, що використовується у різних сферах економіки, включаючи інвестиції в нерухомість, зокрема у галузі здравоохоронних, освітніх та інших секторів.
та формування універсальної класифікації. Для досягнення цього были поставлені наступні завдання:

– здійснити мапування існуючих принципів та стандартів сталого інвестування, поширених практик та ідей;
– обґрунтувати основні можливості та ризики врахування принципів сталого розвитку в інвестиційних процесах;
– провести моніторинг існуючих підходів до типологізації стратегій ВІ;
– дослідити основні тенденції розвитку обсягів ВІ в цілому по світу та по основним географічним регіонам;
– проаналізувати та узагальнити видовий розподіл існуючих стратегій ВІ.

4. Методи та інформаційні джерела дослідження


5. Результати дослідження


– продовольство та сільське господарство;
– міста;
– енергетична галузь;
– здоров’я та добробут.

Іншою подібною інвестиційною спільнотою є альянс “Глобальних інвесторів задля сталого розвитку” (Global Investors for Sustainable Development), що включає 30 найбільших фінансових установ та корпорацій з усього світу (GISD, 2021). Її діяльність спрямована на мобілізацію фінансів та інвестицій, їх розширення в довгострокові перспективи та створення позитивного імпакту у зв’язку з досягненням Цілей сталого розвитку. Для цього вони надають інформаційну підтримку, що має форму навігатора для трьох основних груп учасників інвестиційного процесу (Рис. 1), шляхом мапування існуючих принципів та стандартів сталого інвестування, поширених практик та ідей.

Відповідно до ідей альянсу, залучені інвестори мають змогу переорієнтувати власні інвестиційні стратегії з врахуванням принципів відповідального інвестування, фінансів позитивного імпакту для підальшого впровадження їх в інвестиційні процеси. Натомість, фінансові установи використовують інкорпорації принципів сталого розвитку у власні банківські процеси, у тому числі процеси прийняття рішень щодо кредитування. Корпорації на основі підтримки попередніх двох груп мають змогу переорієнтувати існуючі бізнес-моделі на такі, що враховують принципи сталого розвитку у власній діяльності.

Важливу роль у процесі залучення інвесторів до фінансування досягнення Цілей сталого розвитку відіграє “Глобальний альянс сталого інвестування” (Global Sustainable Investment Alliance) (GSIA, 2021). Він є колаборацією міжнародних організацій, місією яких є поглиблення впливу та видимості діяльності інвестиційних організацій, спрямованих на досягнення Цілей сталого розвитку, на глобальному рівні. Завдяки цьому, альянс забезпечує потужну інформаційну базу за даною тематикою, результати якої публікуються у вигляді періодичних звітів (GSIA, 2020).


Відмітимо, що врахування принципів сталого розвитку в інвестиційних процесах має ряд як переваг, так і загроз для потенційних інвесторів, основні з них на базі інформації платформи PRI наведені у Табл. 1 (PRI Association, 2021a).

<table>
<thead>
<tr>
<th>Рівень</th>
<th>Можливості</th>
<th>Ризики</th>
</tr>
</thead>
<tbody>
<tr>
<td>Основні</td>
<td>За оцінками експертів, досягнення Цілей сталого розвитку є одним із основних ризиків глобального економічного зростання, а отже і прибуткової діяльності бізнесу</td>
<td>Невиконання Цілей сталого розвитку матиме глобальний вплив як на країни, так і на сектори економіки, створюючи макрофінансові ризики</td>
</tr>
<tr>
<td>Макрорівень</td>
<td>Перехід до сталого бізнес-моделей, процесів виробництва товарів та надання послуг сприяє виникненню більшої кількості можливостей для інвестування</td>
<td>Більш диверсифіковані інвестиційні портфелі піддаються більш кількості глобальних ризиків</td>
</tr>
<tr>
<td>Мікрорівень</td>
<td>Існує можливість виникнення специфічних регуляторних, етнічних та операційних ризиків, що є фінансово сутивними для різних галузей промисловості, компаній, регіонів та країн</td>
<td></td>
</tr>
</tbody>
</table>

Джерело: складено авторами за даними Міжнародної ініціативи відповідального інвестування (PRI Association, 2021a)
Тобто, за сучасних обставин компанії та інституційні інвестори зазначаються до активної участі в процесах досягнення Цілей сталого розвитку, прийняття інвестиційних рішень та формування відповідної інвестиційної політики (MSCI, 2021). Врахування питань сталого розвитку в процесах інвестування дуже досить послідовно викладені за підходом відповідного інвестування, що є процесом врахування ESG-факторів, завдань та таргетів Цілей сталого розвитку в інвестиційних рішеннях та діяльності повідомлень.

Відповідно, що переходи на відповідне інвестування інвестори приймають фінансові обов’язки, що повинні сприяти прийняттю кращих інвестиційних рішень через інтеграцію ESG-факторів, та руху до сталого майбутнього (PRI Association, 2020a).

Реалізація ВІ відбувається за рахунок відповідних інвестиційних стратегій, що потребують додаткового дослідження. Розглядаючи змістовний аналіз періодичної дійсності «інвестиційна стратегія» у наукових працях Blink та Hulyayeva (2003), Dankeleva (2020), Kaut та Dunyachuk (2018), слід відмітити наступні найбільш характерні риси:

− тривалість: довгостроковий характер;
− спрямованість: на реалізацію інвестиційної політики суб’єкта господарювання;
− мета: формування основних фондів / портфелю цінних паперів;
− специфіка: визначення напрямів, форм та цілей інвестування, джерел фінансування та їх систематичність, розрахунок рентабельності та меж інвестиційної активності тощо.

Всі ці загальні ознаки характерні і для стратегій ВІ, враховуючи наступні найбільш характерні риси:

− спрямованість інвестицій на досягнення цільового позитивного екологічного впливу, інвестування громади є стратегією цільового інвестування представників вразливих суб’єктів господарювання з чіткими соціальними або екологічними цілями (GSIA, 2020).

Відповідно до інших відомих підходів кількість стратегій ВІ включає: імпакт інвестування та інвестування громади – стратегії, що спрямована на досягнення позитивного, соціального та екологічного впливу, інвестування громади є стратегією цільового інвестування представників вразливих верств населення, чи громад з низьким розвитком, а також суб’єктам господарювання з чіткими соціальними або екологічними цілями (GSIA, 2020).

Для сучасного етапу розвитку стратегій ВІ класифікація EUROISF є релевантною. Проте на нашу думку, найбільш доцільно використати універсальний підхід GSIA, який, як в цілому співпадає з европейським аналогом щодо кількості стратегій, він включає:

− ESG-інтеграцію – стратегій, що передбачає систематичне і повне включення екологічних, соціальних та управлінських (ESG) факторів в ході фінансового аналізу;
− корпоративне залучення та взаємодія зі стейкхолдерами (може проявлятися у прямому залученні корпорації, подачі пропозицій, безпосередньому голосуванні акціонерами з урахуванням ESG-критеріїв);
− скринінг, що базується на нормах – стратегія, що передбачає скринінг щодо відповідності мінімальних стандартів бізнесу або практики на основі міжнародних норм (наприклад, ООН, МОП, ОЕСР тощо);
− негативний скринінг (виключення) – стратегія, що передбачає виключення певних секторів, компаній, країн і інших елементів, діяльність яких не відповідає визначеним нормам і цінностям (наприклад, виробництво такої продукції як зброя, пітюно, або ж практики компанії щодо корупції, порушення прав людини тощо);
− позитивний скринінг (найкращий у своєму класі) – стратегія, що передбачає цільове спрямування інвестицій, враховуючи позитивні ESG-критерії та мають високі рейтингові позиції щодо аналогів в галузі;
− тематичне або стале тематичне інвестування – стратегія, що спрямовує інвестиції в визначену тематику, що відповідає досягненням Цілей сталого розвитку (наприклад, стійке сільське господарство, зелені будівлі, гендерна рівність, різноманітність);

Відповідно до інших відомих підходів кількість стратегій ВІ може змінюватися, що пов’язано з постійним розвитком даного ринку, об’єднанням окремих стратегій шляхом взаємодоповнення, проте в цілому спостерігається постійний приріст прийнятих класифікацій. Наприклад, для таких регіонів як Європа та Австралія характерна комбінація таких стратегій ВІ як негативний скринінг, ESG-інтеграція, корпоративне залучення (GSIA, 2020).

У контексті подальшого дослідження тенденції поширення основних стратегій ВІ запропоновано також використовувати класифікацію «Глобального альянсу сталого інвестування» (GSIA). Окрім того, в якості інформаційної бази обрано статистичні дані звітів даного екологічного ринку, що дозволяє по-перше, дослідити основні тенденції розвитку обсягів ВІ в цілому по світу та на основі географічних регіонів; по-друге, проаналізувати видовий розподіл інших стратегій ВІ.
Таблиця 2: Динаміка частки активів ВІ у загальному обсязі активів, що знаходяться в управлінні інвестиційними менеджерами у світі за 2016-2020 рр.

<table>
<thead>
<tr>
<th>Показник</th>
<th>2016</th>
<th>2018</th>
<th>2020</th>
</tr>
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<tbody>
<tr>
<td>Загальний обсяг активів, що знаходяться в управлінні інвестиційними менеджерами, трлн дол. США</td>
<td>81,948</td>
<td>91,828</td>
<td>98,416</td>
</tr>
<tr>
<td>Загальний обсяг активів ВІ, що знаходяться в управлінні інвестиційними менеджерами, трлн дол. США</td>
<td>22,872</td>
<td>30,683</td>
<td>35,301</td>
</tr>
<tr>
<td>Частка активів ВІ, %</td>
<td>27,9%</td>
<td>33,4%</td>
<td>35,9%</td>
</tr>
</tbody>
</table>

Абсолютний приріст активів ВІ до попереднього періоду, %


Перейдемо до аналізу динаміки обсягів поширення ВІ. За даними GSIA (2020), обсяг активів відповідального інвестування в цілому у світі за 2012-2020 роки мав тенденцію до динамічного зростання – середній темп приросту ВІ у світі складав 137,2%, що становить на 2020 рік абсолютне вирішення у розмірі 35,3 трлн дол. США. Розглянемо динаміку розвитку глобальних активів ВІ за основними географічними регіонами світу на Рис. 3.

У 2020 році лідером за часткою активів ВІ стає США (понад 17 млрд дол. США), що відтіснило Європу на друге місце (понад 12 млрд дол. США) (GSIA, 2020). Відображена зменшення частки активів ВІ в Європі пояснюється зміною методології їх визначення та розрахунку відповідно до законодавства ЄС. В інших країнах також спостерігається зниження динаміка, відмітимо, що в Азії розвиток ринку ВІ має найбільш динамічний характер, адже зростання відбулася понад 24%.

Спостерігається стійке зростання частки активів ВІ у загальному обсязі активів, що знаходяться в управлінні інвестиційними менеджерами, впродовж аналізованого періоду для Азії (до 24,3%), Канади (до 61,8%) та США (до 33,2%) (GSIA, 2020). Щодо Австралії та Європи, в яких частка активів ВІ у 2020 році зменшилася на 25,3% та 7,2%, то в звіті GSIA відмічається, що спадні тенденції пов’язані зі змінами на законодавчому рівні відносно нормативного регулювання операцій відповідального інвестування.

У 2020 рр. на підтримку частки активів ВІ стає США (понад 17 млрд дол. США), що відтіснило Європу на друге місце (понад 12 млрд дол. США) (GSIA, 2020). Відображена зменшення частки активів ВІ в Європі пояснюється зміною методології їх визначення та розрахунку відповідно до законодавства ЄС. В інших країнах також спостерігається знизка динаміка.


У 2020 році зміни частки активів ВІ стосуються до відповідального інвестування в цілому у світі за 2012-2020 роки зростуть понад 24%. У різних регіонах частки ВІ зросли у частому впродовж 2012-2020 рр. у активах ВІ на Рис. 5.

Для регіону Європи спостерігається знизка динаміка, зокрема в Канаді (до 61,8%), США (до 33,2%) та Європі (до 61,8%)

Розглянемо розподіл регіонів частки ВІ зростання за 2012-2020 рр.

Наведені дані свідчать про зміну лідерів серед інвестиційних стратегій відповідального інвестування. Зокрема, станом на 2020 р. у світі найбільший обсяг активів ВІ характерний для стратегії ESG-інтеграції з 25,1 трлн дол. США, середній темп приросту якої за аналізованій період зріс в 4,3 рази. На другому місці знаходиться інвестиційна стратегія негативного скринінгу з 15,0 трлн дол. США, на третьому – стратегія корпоративного залучення (10,5 трлн дол. США). Їхні середні темпи приросту складали 2,4 та 2,1 разів відповідно.

Наступним кроком розглянемо розподіл частки стратегій ВІ у розрізі географічних регіонів у 2020 році на Рис. 7.

Рисунок 3: Динаміка глобальних активів ВІ за географічними регіонами світу, 2012-2020 рр., млрд доларів США


Рисунок 4: Динаміка частки активів ВІ за географічними регіонами, 2012-2020 рр., %

Рисунок 5: Частка інституційних і роздрібних інвесторів у глобальних активах, що знаходяться у ВІ у 2012–2021 рр., %

Рисунок 6: Динаміка ВІ за стратегіями у 2012–2020 рр., світові дані, млрд дол. США

Рисунок 7: Регіональні частки стратегій ВІ за вагою активів в управлінні інвестиційними менеджерами за стратегіями ВІ, 2020 р., %
Джерело: складено авторами за даними «Глобального альянсу сталого інвестування» (GSIA, 2020)
На основі наведених даних можна стверджувати, що в Європі домінуючими за вагою активів відповідального інвестування є стратегії скринінгу, що базується на нормах (74%) та негативного скринінгу та корпоративного залучення (61%). Натомість у США найбільш часту серед стратегій ВІ складали стала тематичне інвестування (86%), ESG інтеграції (62%) та імпакт інвестування (60%). Серед стратегій ВІ в Канаді найбільшою можна вважати скринінг, що базується на нормах, корпоративному залученні та взаємодії зі стейкхолдерами (частки складають по 19%). Частки стратегій ВІ в Австралії / Новій Зеландії та Японії є найменшими серед аналізованих географічних регіонів. При цьому, можна простежити домінуючі види для даних двох регіонів - стратегія корпоративного залучення та взаємодії зі стейкхолдерами для Японії (17%) та імпакт інвестування для Австралії / Новій Зеландії (57%) (GSIA, 2020).

Отже, вище проаналізованого можна зробити висновок, що у світі спостерігається зростання динаміки обсягів активів ВІ як у відносному, так і в абсолютному вираженні. За географічними регіонами найбільше активів ВІ зосереджено в Європі та США. Такий стан речей передбачає залучення численних інституційних та роздільних інвесторів, при цьому спостерігається тренд до поступового зростання останніх.

6. Висновки

Як висновок, слід відмітити, що у світі спостерігається зростання динаміки зростання обсягів активів ВІ як у відносному, так і в абсолютному вираженні. За географічними регіонами найбільше активів ВІ зосереджено в Європі та США. Такий стан речей передбачає залучення численних інституційних та роздільних інвесторів, при цьому спостерігається тренд до поступового зростання останніх.

Компаративний аналіз ключових стратегій ВІ дозволив виділити наступні стратегії-лідери у світі: стратегія ESG інтеграції, негативного скринінгу та корпоративного залучення. Дослідження регіональних часток стратегій ВІ дозволив сформувати уявлення про їх розподіл за географічними регіонами, зокрема, виявив відповідність між регіоном Європи, в якому переважають стратегії скринінгу (негативні, зосереджені на нормах) та США, в якому переважають стратегії тематичного інвестування, ESG інтеграції та імпакт інвестування.

7. Фінансування

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8. Конкурючі інтереси

втори заявляють, що у них немає конкурючих інтересів.

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